RISC-V Vector Extension Intrinsic API Reference Manual

1. Preface

These builtins targets on rvv 1.0-draft and trying to document rvv_intrinsics programming model.

This document is based on rvv-intrinsic-doc, with a number of detailed modifications and finishing touches.

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The RISC-V Vector Extension Intrinsic Document is

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2. Design Decisions and philosophy

Please see RISC-V "V" Vector Extension Intrinsics

3. None

Keep this chapter none to aligned to riscv-v-spec chapters

4. None

Keep this chapter none to aligned to riscv-v-spec chapters

5. General Naming Rules

Please see Naming Rules

6. Configuration-Setting and Utility Functions

Instructions

- vsetvli

- vsetivli
- vsetvl

6.1. Set vl and vtype Functions

Intrinsics function list

6.2. Set vl to VLMAX with specific vtype

Intrinsic functions list

6.3. Reinterpret Cast Conversion Functions

Reinterpret the contents of a data as a different type, without changing any bits and generating any RVV instructions.

Intrinsic functions list

6.4. Vector Initialization Functions

Intrinsic functions list

6.5. Vector LMUL Extension and Truncation Functions

These utility functions help users to truncate or extent current LMUL under same SEW regardless of vl, it won't change content of vl register.

Intrinsic functions list

6.6. Read/Write URW vector CSRs

```
enum RVV_CSR {
  RVV_VSTART = 0,
  RVV_VXSAT,
  RVV_VXRM,
  RVV_VCSR,
};

unsigned long vread_csr(enum RVV_CSR csr);
void vwrite_csr(enum RVV_CSR csr, unsigned long value);
```

7. Vector Loads and Stores

7.1. Vector Unit-Stride Operations

Instructions

- vle<eew>.v

- vse<eew>.v

Load Intrinsic functions list

Store Intrinsic functions list

Mask Load/Store Intrinsic functions list

7.2. Vector Strided Load/Store Operations

Instructions

- vlse<eew>.v
- vsse<eew>.v

Load Intrinsic functions list

Store Intrinsic functions list

7.3. Vector Indexed Load/Store Operations

Instructions

- vloxei<eew>.v
- vluxei<eew>.v
- vsoxei<eew>.v
- vsuxei<eew>.v

Load Intrinsic functions list

Store Intrinsic functions list

7.4. Unit-stride Fault-Only-First Loads Operations

Instructions

- vle<eew>ff.v

Intrinsic functions list

Notes

- The unit-stride fault-only-first load instruction is used to vectorize loops with data-dependent exit conditions (while loops). These instructions execute as a regular load except that they will only take a trap on element 0. If an element > 0 raises an exception, that element and all following elements in the destination vector register are not modified, and the vector length vl is reduced to the number of elements processed without a trap.

7.5. Vector Load/Store Segment Operations (Zvlsseg)

7.5.1. Vector Unit-Stride Segment Loads and Stores

Instructions

- vlsege<eew>.v
- vssege<eew>.v

Load Intrinsic functions list

Store Intrinsic functions list

7.5.2. Vector Strided Segment Loads and Stores

Instructions

- vlssege<eew>.v
- vsssege<eew>.v

Load Intrinsic functions list

Store Intrinsic functions list

7.5.3. Vector Indexed Segment Loads and Stores

Instructions

- vloxsegei<eew>.v
- vluxsegei<eew>.v
- vsoxsegei<eew>.v
- vsuxsegei<eew>.v

Load Intrinsic functions list

Store Intrinsic functions list

8. Vector AMO Operations (Zvamo)

Instructions

- vamoswapei<eew>.v
- vamoaddei<eew>.v
- vamoxorei<eew>.v
- vamoandei<eew>.v
- vamoorei<eew>.v
- vamominei<eew>.v
- vamomaxei<eew>.v

- vamominuei<eew>.v
- vamomaxuei<eew>.v

Intrinsic functions list

9. None

Keep this chapter none to aligned to riscv-v-spec chapters

10. None

Keep this chapter none to aligned to riscv-v-spec chapters

11. None

Keep this chapter none to aligned to riscv-v-spec chapters

12. Vector Integer Arithmetic Operations

12.1. Vector Single-Width Integer Add and Subtract

Instructions

- vadd.{vv,vx,vi}
- vsub.{vv,vx}
- vrsub.{vx,vi}
- vneg.v

Intrinsic functions list

12.2. Vector Widening Integer Add/Subtract Operations

Instructions

- vwaddu.{vv,vx,wv,wx}
- vwsubu.{vv,vx,wv,wx}
- vwadd.{vv,vx,wv,wx}
- vwsub.{vv,vx,wv,wx}
- vwcvt.x.x.v
- vwcvtu.x.x.v

Intrinsic functions list

12.3 Vector Integer Extension

Instructions

- vzext.vf{2,4,8}
- vsext.vf{2,4,8} #### Intrinsic functions list

12.4. Vector Integer Add-with-Carry / Subtract-with-Borrow Operations

Instructions

- vadc.{vvm,vxm,vim}
- vmadc.{vvm,vxm,vim}
- vmadc.{vv,vx,vi}
- vsbc.{vvm,vxm}
- vmsbc.{vvm,vxm}
- vmsbc.{vv,vx}

Intrinsic functions list

12.5. Vector Bitwise Logical Operations

Instructions

- vand.{vv,vx,vi}
- vxor.{vv,vx,vi}
- vor.{vv,vx,vi}
- vnot.v

Intrinsic functions list

12.6. Vector Single-Width Bit Shift Operations

Instructions

- vsll.{vv,vx,vi}
- vsrl.{vv,vx,vi}
- vsra.{vv,vx,vi}

Intrinsic functions list

Notes

- A full complement of vector shift instructions are provided, including logical shift left, and logical (zero-extending) and arithmetic (sign-extending) shift right.

12.7. Vector Narrowing Integer Right Shift Operations

Instructions

- vnsra.{wv,wx,wi}
- vnsrl.{wv,wx,wi}
- vncvt.x.x.w

Intrinsic functions list

12.8. Vector Integer Comparison Operations

Instructions

- vmseq.{vv,vx,vi}
- vmsne.{vv,vx,vi}
- vmsltu.{vv,vx,vi}
- vmslt.{vv,vx,vi}
- vmsleu.{vv,vx,vi}
- vmsle.{vv,vx,vi}
- vmsgtu.{vv.vx,vi}
- vmsgt.{vv.vx,vi}

12.9. Vector Integer Min/Max Operations

Instructions

- vminu.{vv,vx}
- vmin.{vv,vx}
- vmaxu.{vv,vx}
- vmax.{vv,vx}

12.10. Vector Single-Width Integer Multiply Operations

Instructions

- vmul.{vv,vx}
- vmulh.{vv,vx}
- vmulhu.{vv,vx}
- vmulhsu.{vv,vx}

12.11. Vector Integer Divide Operations

Instructions

- vdivu.{vv,vx}
- vdiv.{vv,vx}
- vremu.{vv,vx}
- vrem.{vv,vx}

Intrinsic functions list

12.12. Vector Widening Integer Multiply Operations

Instructions

- vwmul.{vv,vx}
- vwmulu.{vv,vx}
- vwmulsu.{vv,vx}

Intrinsic functions list

12.13. Vector Single-Width Integer Multiply-Add Operations

Instructions

- vmacc.{vv,vx}
- vnmsac.{vv,vx}
- vmadd.{vv,vx}
- vnmsub.{vv,vx}

Intrinsic functions list

12.14. Vector Widening Integer Multiply-Add Operations

Instructions

- vwmaccu.{vv,vx}
- vwmacc.{vv,vx}
- vwmaccsu.{vv,vx}
- vwmaccus.{vv,vx}

Intrinsic functions list

12.15. Vector Integer Merge Operations

Instructions

- vmerge.{vvm,vxm,vim}

Intrinsic functions list

12.16. Vector Integer Move Operations

Instructions

- vmv.v.v
- vmv.v.x
- vmv.v.i

Intrinsic functions list

13. Vector Fixed-Point Arithmetic Operations

13.1. Vector Single-Width Saturating Add and Subtract

Instructions

- vsaddu.{vv,vx,vi}
- vsadd.{vv,vx,vi}
- vssubu.{vv,vx}
- vssub.{vv,vx}

Intrinsic functions list

13.2. Vector Single-Width Averaging Add and Subtract

Instructions

- vaadd.{vv,vx}
- vaaddu.{vv,vx}
- vasub.{vv,vx}
- vasubu.{vv,vx}

Intrinsic functions list

13.3. Vector Single-Width Fractional Multiply with Rounding and Saturation

Instructions

- vsmul.{vv,vx}

Intrinsic functions list

13.4. Vector Single-Width Scaling Shift Operations

Instructions

- vssrl.{vv,vx,vi}
- vssra.{vv,vx,vi}

Intrinsic functions list

13.5. Vector Narrowing Fixed-Point Clip Operations

Instructions

- vnclipu.{wx,wv,wi}
- vnclip.{wx,wv,wi}

Intrinsic functions list

14. Vector Floating-Point Operations

14.1. Vector Single-Width Floating-Point Add/Subtract Operations

Instructions

- vfadd.{vv,vf}
- vfsub.{vv,vf}
- vfrsub.vf

Intrinsic functions list

14.2. Vector Widening Floating-Point Add/Subtract Operations

Instructions

- vfwadd.{vv,vf,wv,wf}
- vfwsub.{vv,vf,wv,wf}

Intrinsic functions list

14.3. Vector Single-Width Floating-Point Multiply/Divide Operations

Instructions

- vfmul.{vv,vf}
- vfdiv.{vv,vf}
- vfrdiv.vf

Intrinsic functions list

14.4. Vector Widening Floating-Point Multiply Operations

Instructions

- vfwmul.{vv,vf}

Intrinsic functions list

14.5. Vector Single-Width Floating-Point Fused Multiply-Add Operations

Instructions

- vfmacc.{vv,vf}
- vfnmacc.{vv,vf}
- vfmsac.{vv,vf}

- vfnmsac.{vv,vf}
- vfmadd.{vv,vf}
- vfnmadd.{vv,vf}
- vfmsub.{vv,vf}
- vfnmsub.{vv,vf}

Intrinsic functions list

14.6. Vector Widening Floating-Point Fused Multiply-Add Operations

Instructions

- vfwmacc.{vv,vf}
- vfwnmacc.{vv,vf}
- vfwmsac.{vv,vf}
- vfwnmsac.{vv,vf}

Intrinsic functions list

14.7. Vector Floating-Point Square-Root Operations

Instructions

- vfsqrt.v

Intrinsic functions list

14.8. Vector Floating-Point Reciprocal Square-Root Estimate Operations

- vfrsqrt7.v

Intrinsic functions list

14.9. Vector Floating-Point Reciprocal Estimate Operations

- vfrec7.v

Intrinsic functions list

14.10. Vector Floating-Point MIN/MAX Operations

- vfmin.{vv,vf}
- vfmax.{vv,vf}

Intrinsic functions list

14.11. Vector Floating-Point Sign-Injection Operations

Instructions

- vfsgnj.{vv,vf}
- vfsgnjn.{vv,vf}
- vfsgnjx.{vv,vf}
- vfneg.v
- vfabs.v

Intrinsic functions list

14.12. Vector Floating-Point Compare Operations

Instructions

- vmfeq.{vv,vf}
- vmfne.{vv,vf}
- vmflt.{vv,vf}
- vmfle.{vv,vf}
- vmfgt.{vv,vf}
- vmfge.{vv,vf}

Intrinsic functions list

14.13. Vector Floating-Point Classify Operations

Instructions

- vfclass.v

Intrinsic functions list

14.14. Vector Floating-Point Merge Operations

Instructions

- vfmerge.vfm

Intrinsic functions list

14.15. Vector Floating-Point Move Operations

Instructions

- vfmv.v.f

Intrinsic functions list

14.16. Single-Width Floating-Point/Integer Type-Convert Operations

Instructions

- vfcvt.xu.f.v
- vfcvt.x.f.v
- vfcvt.rtz.xu.f.v
- vfcvt.rtz.x.f.v
- vfcvt.f.xu.v
- vfcvt.f.x.v

Intrinsic functions list

14.17. Widening Floating-Point/Integer Type-Convert Operations

Instructions

- vfwcvt.xu.f.v
- vfwcvt.x.f.v
- vfwcvt.rtz.xu.f.v
- vfwcvt.rtz.x.f.v
- vfwcvt.f.xu.v
- vfwcvt.f.x.v
- vfwcvt.f.f.v

Intrinsic functions list

14.18. Narrowing Floating-Point/Integer Type-Convert Operations

Instructions

- vfncvt.xu.f.w
- vfncvt.x.f.w
- vfncvt.rtz.xu.f.w
- vfncvt.rtz.x.f.w
- vfncvt.f.xu.w
- vfncvt.f.x.w
- vfncvt.f.f.w
- vfncvt.rod.f.f.w

Intrinsic functions list

15. Vector Reduction Operations

15.1. Vector Single-Width Integer Reduction Operations

Instructions

- vredsum.vs

- vredmaxu.vs
- vredmax.vs
- vredminu.vs
- vredmin.vs
- vredand.vs
- vredor.vs
- vredxor.vs

Intrinsic functions list

Notes

- Reduction intrinsics will generate code using tail undisturbed policy unless vundefined() is passed to the dest argument.

15.2. Vector Widening Integer Reduction Operations

Instructions

- vwredsumu.vs
- vwredsum.vs

Intrinsic functions list

Notes

- Reduction intrinsics will generate code using tail undisturbed policy unless vundefined() is passed to the dest argument.

15.3. Vector Single-Width Floating-Point Reduction Operations

Instructions

- vfredosum.vs
- vfredsum.vs
- vfredmax.vs
- vfredmin.vs

Intrinsic functions list

Notes

- Reduction intrinsics will generate code using tail undisturbed policy unless vundefined() is passed to the dest argument.

15.4. Vector Widening Floating-Point Reduction Operations

Instructions

- vfwredosum.vs
- vfwredsum.vs

Intrinsic functions list

Notes

- Reduction intrinsics will generate code using tail undisturbed policy unless vundefined() is passed to the dest argument.

16. Vector Mask Instructions

16.1. Vector Mask-Register Logical Operations

Instructions

- vmand.mm
- vmnand.mm
- vmandnot.mm
- vmxor.mm
- vmor.mm
- vmnor.mm
- vmornot.mm
- vmxnor.mm
- vmmv.m
- vmclr.m
- vmset.m
- vmnot.m

Intrinsic functions list

16.2. Vector mask population count vpopc

Instructions

- vpopc.m

Intrinsic functions list

16.3. vfirst find-first-set mask bit

Instructions

- vfirst.m

Intrinsic functions list

16.4. vmsbf.m set-before-first mask bit

Instructions

- vmsbf.m

Intrinsic functions list

16.5. vmsif.m set-including-first mask bit

Instructions

- vmsif.m

Intrinsic functions list

16.6. vmsof.m set-only-first mask bit

Instructions

- vmsof.m

Intrinsic functions list

16.8. Vector Iota Operations

Instructions

- viota.m

Intrinsic functions list

16.9. Vector Element Index Operations

Instructions

- vid.v

Intrinsic functions list

17. Vector Permutation Operations

17.1. Integer Scalar Move Operations

Instructions

- vmv.s.x
- vmv.x.s

Intrinsic functions list

Notes

- vmv.s.x intrinsic will generate code using tail undisturbed policy unless vundefined() is passed to the dest argument.

17.2. Floating-Point Scalar Move Operations

Instructions

- vfmv.f.s
- vfmv.s.f

Intrinsic functions list

Notes

- vfmv.s.f intrinsic will generate code using tail undisturbed policy unless vundefined() is passed to the dest argument.

17.3. Vector Slide Operations

Instructions

- vslideup.{vx,vi}
- vslidedown.{vx,vi}
- vslide1up.vx
- vslide1down.vx
- vfslide1up.vf
- vfslide1down.vf

Intrinsic functions list

Notes

- Unmasked vslideup and vslidedown intrinsics will generate code using tail undisturbed policy unless vundefined() is passed to the dst argument.

17.4. Vector Register Gather Operations

Instructions

- vrgather.{vv,vx,vi}
- vrgatherei16.vv

Intrinsic functions list

17.5. Vector Compress Operations

Instructions

- vcompress.vm

Intrinsic functions list

Notes

- vcompress intrinsics will generate code using tail undisturbed policy unless vundefined() is passed to the dest argument.

18. None

Keep this chapter none to aligned to riscv-v-spec chapters

19. Divided Element Extension ('Zvediv')

19.1. Vector Integer Dot-Product Operations

Instructions

- vdotu.vv
- vdot.vv

Intrinsic functions list

TODO

19.2. Vector Floating-Point Dot Product Operations

Instructions

- vfdotu.vv

Intrinsic functions list

TODO

20. RVV Intrinsic Examples

- sgemm
- saxpy

RISC-V "V" Vector Extension Intrinsics

Introduction

This document introduces the intrinsics for RISC-V vector programming, including the design decision we take, the type system, the general naming rules for intrinsics, and facilities for vector users. It does not list all available intrinsics for vector programming. The full set of intrinsics will be written in another document.

Type System

Data Types

Encode `SEW` and `LMUL` into data types. We enforce the constraint `LMUL` $\geq$ `SEW/ELEN` in the implementation. There are the following data types for `ELEN` = 64.

Types	LMUL = 1	LMUL = 2	LMUL = 4	LMUL = 8	LMUL = 1/2	LMUL = 1/4	LMUL = 1/8
int64_t	vint64m1_t	vint64m2_t	vint64m4_t	vint64m8_t	N/A	N/A	N/A
uint64_t	vuint64m1_t	vuint64m2_t	vuint64m4_t	vuint64m8_t	N/A	N/A	N/A
int32_t	vint32m1_t	vint32m2_t	vint32m4_t	vint32m8_t	vint32mf2_t	N/A	N/A
uint32_t	vuint32m1_t	vuint32m2_t	vuint32m4_t	vuint32m8_t	vuint32mf2_t	N/A	N/A
int16_t	vint16m1_t	vint16m2_t	vint16m4_t	vint16m8_t	vint16mf2_t	vint16mf4_t	N/A
uint16_t	vuint16m1_t	vuint16m2_t	vuint16m4_t	vuint16m8_t	vuint16mf2_t	vuint16mf4_t	N/A
int8_t	vint8m1_t	vint8m2_t	vint8m4_t	vint8m8_t	vint8mf2_t	vint8mf4_t	vint8mf8_t
uint8_t	vuint8m1_t	vuint8m2_t	vuint8m4_t	vuint8m8_t	vuint8mf2_t	vuint8mf4_t	vuint8mf8_t
vfloat64	vfloat64m1_t	vfloat64m2_t	vfloat64m4_t	vfloat64m8_t	N/A	N/A	N/A
vfloat32	vfloat32m1_t	vfloat32m2_t	vfloat32m4_t	vfloat32m8_t	vfloat32mf2_t	N/A	N/A
vfloat16	vfloat16m1_t	vfloat16m2_t	vfloat16m4_t	vfloat16m8_t	vfloat16mf2_t	vfloat16mf4_t	N/A

There are the following data types for `ELEN` = 32.

Types	LMUL = 1	LMUL = 2	LMUL = 4	LMUL = 8	LMUL = 1/2	LMUL = 1/4	LMUL = 1/8
int32_t	vint32m1_t	vint32m2_t	vint32m4_t	vint32m8_t	vint32mf2_t	N/A	N/A
uint32_t	vuint32m1_t	vuint32m2_t	vuint32m4_t	vuint32m8_t	vuint32mf2_t	N/A	N/A
int16_t	vint16m1_t	vint16m2_t	vint16m4_t	vint16m8_t	vint16mf2_t	vint16mf4_t	N/A
uint16_t	vuint16m1_t	vuint16m2_t	vuint16m4_t	vuint16m8_t	vuint16mf2_t	vuint16mf4_t	N/A
int8_t	vint8m1_t	vint8m2_t	vint8m4_t	vint8m8_t	vint8mf2_t	vint8mf4_t	vint8mf8_t
uint8_t	vuint8m1_t	vuint8m2_t	vuint8m4_t	vuint8m8_t	vuint8mf2_t	vuint8mf4_t	vuint8mf8_t
vfloat32	vfloat32m1_t	vfloat32m2_t	vfloat32m4_t	vfloat32m8_t	vfloat32mf2_t	N/A	N/A
vfloat16	vfloat16m1_t	vfloat16m2_t	vfloat16m4_t	vfloat16m8_t	vfloat16mf2_t	vfloat16mf4_t	N/A

Mask Types

Encode the ratio of `SEW/LMUL` into the mask types. There are the following mask types.

n = `SEW/LMUL`

Types	n = 1	n = 2	n = 4	n = 8	n = 16	n = 32	n = 64
bool	vbool1_t	vbool2_t	vbool4_t	vbool8_t	vbool16_t	vbool32_t	vbool64_t

Types for Segment Load/Store

Under the constraint LMUL * NR ≤ 8.

```
SEGMENT_TYPE ::= 'v' TYPE LMUL 'x' NR '_t'
TYPE ::= ( 'int8' | 'int16' | 'int32' | 'int64' |
           'uint8' | 'uint16' | 'uint32' | 'uint64' |
           'float16' | 'float32' | 'float64' )
LMUL ::= ( m1 | m2 | m4 | m8 | mf2 | mf4 | mf8 )
NR ::= ( 2 | 3 | 4 | 5 | 6 | 7 | 8 )
```

int8_t:

NF LMUL	LMUL = 1/8	LMUL = 1/4	LMUL = 1/2	LMUL = 1	LMUL = 2	LMUL = 4	LMUL = 8
2	vint8mf8x2_t	vint8mf4x2_t	vint8mf2x2_t	vint8m1x2_t	vint8m2x2_t	vint8m4x2_t	N/A
3	vint8mf8x3_t	vint8mf4x3_t	vint8mf2x3_t	vint8m1x3_t	vint8m2x3_t	N/A	N/A
4	vint8mf8x4_t	vint8mf4x4_t	vint8mf2x4_t	vint8m1x4_t	vint8m2x4_t	N/A	N/A
5	vint8mf8x5_t	vint8mf4x5_t	vint8mf2x5_t	vint8m1x5_t	N/A	N/A	N/A
6	vint8mf8x6_t	vint8mf4x6_t	vint8mf2x6_t	vint8m1x6_t	N/A	N/A	N/A
7	vint8mf8x7_t	vint8mf4x7_t	vint8mf2x7_t	vint8m1x7_t	N/A	N/A	N/A
8	vint8mf8x8_t	vint8mf4x8_t	vint8mf2x8_t	vint8m1x8_t	N/A	N/A	N/A

uint8_t:

NF LMUL	LMUL = 1/8	LMUL = 1/4	LMUL = 1/2	LMUL = 1	LMUL = 2	LMUL = 4	LMUL = 8
2	vuint8mf8x2_t	vuint8mf4x2_t	vuint8mf2x2_t	vuint8m1x2_t	vuint8m2x2_t	vuint8m4x2_t	N/A
3	vuint8mf8x3_t	vuint8mf4x3_t	vuint8mf2x3_t	vuint8m1x3_t	vuint8m2x3_t	N/A	N/A
4	vuint8mf8x4_t	vuint8mf4x4_t	vuint8mf2x4_t	vuint8m1x4_t	vuint8m2x4_t	N/A	N/A
5	vuint8mf8x5_t	vuint8mf4x5_t	vuint8mf2x5_t	vuint8m1x5_t	N/A	N/A	N/A
6	vuint8mf8x6_t	vuint8mf4x6_t	vuint8mf2x6_t	vuint8m1x6_t	N/A	N/A	N/A
7	vuint8mf8x7_t	vuint8mf4x7_t	vuint8mf2x7_t	vuint8m1x7_t	N/A	N/A	N/A
8	vuint8mf8x8_t	vuint8mf4x8_t	vuint8mf2x8_t	vuint8m1x8_t	N/A	N/A	N/A

int16_t:

NF LMUL	LMUL = 1/8	LMUL = 1/4	LMUL = 1/2	LMUL = 1	LMUL = 2	LMUL = 4
2	N/A	vint16mf4x2_t	vint16mf2x2_t	vint16m1x2_t	vint16m2x2_t	vint16m4x
3	N/A	vint16mf4x3_t	vint16mf2x3_t	vint16m1x3_t	vint16m2x3_t	N/A
4	N/A	vint16mf4x4_t	vint16mf2x4_t	vint16m1x4_t	vint16m2x4_t	N/A
5	N/A	vint16mf4x5_t	vint16mf2x5_t	vint16m1x5_t	N/A	N/A
6	N/A	vint16mf4x6_t	vint16mf2x6_t	vint16m1x6_t	N/A	N/A
7	N/A	vint16mf4x7_t	vint16mf2x7_t	vint16m1x7_t	N/A	N/A
8	N/A	vint16mf4x8_t	vint16mf2x8_t	vint16m1x8_t	N/A	N/A

uint16_t:

NF LMUL	LMUL = 1/8	LMUL = 1/4	LMUL = 1/2	LMUL = 1	LMUL = 2	LMUL = 4	LMUL = 8
2	N/A	vuint16mf4x2_t	vuint16mf2x2_t	vuint16m1x2_t	vuint16m2x2_t	vuint16m4x2_t	N/A
3	N/A	vuint16mf4x3_t	vuint16mf2x3_t	vuint16m1x3_t	vuint16m2x3_t	N/A	N/A
4	N/A	vuint16mf4x4_t	vuint16mf2x4_t	vuint16m1x4_t	vuint16m2x4_t	N/A	N/A
5	N/A	vuint16mf4x5_t	vuint16mf2x5_t	vuint16m1x5_t	N/A	N/A	N/A
6	N/A	vuint16mf4x6_t	vuint16mf2x6_t	vuint16m1x6_t	N/A	N/A	N/A
7	N/A	vuint16mf4x7_t	vuint16mf2x7_t	vuint16m1x7_t	N/A	N/A	N/A
8	N/A	vuint16mf4x8_t	vuint16mf2x8_t	vuint16m1x8_t	N/A	N/A	N/A

int32_t:

NF LMUL	LMUL = 1/8	LMUL = 1/4	LMUL = 1/2	LMUL = 1	LMUL = 2	LMUL = 4
2	N/A	N/A	vint32mf2x2_t	vint32m1x2_t	vint32m2x2_t	vint32m4x2
3	N/A	N/A	vint32mf2x3_t	vint32m1x3_t	vint32m2x3_t	N/A
4	N/A	N/A	vint32mf2x4_t	vint32m1x4_t	vint32m2x4_t	N/A
5	N/A	N/A	vint32mf2x5_t	vint32m1x5_t	N/A	N/A
6	N/A	N/A	vint32mf2x6_t	vint32m1x6_t	N/A	N/A
7	N/A	N/A	vint32mf2x7_t	vint32m1x7_t	N/A	N/A
8	N/A	N/A	vint32mf2x8_t	vint32m1x8_t	N/A	N/A

uint32_t:

NF LMUL	LMUL = 1/8	LMUL = 1/4	LMUL = 1/2	LMUL = 1	LMUL = 2	LMUL =
2	N/A	N/A	vuint32mf2x2_t	vuint32m1x2_t	vuint32m2x2_t	vuint32
3	N/A	N/A	vuint32mf2x3_t	vuint32m1x3_t	vuint32m2x3_t	N/A
4	N/A	N/A	vuint32mf2x4_t	vuint32m1x4_t	vuint32m2x4_t	N/A
5	N/A	N/A	vuint32mf2x5_t	vuint32m1x5_t	N/A	N/A
6	N/A	N/A	vuint32mf2x6_t	vuint32m1x6_t	N/A	N/A
7	N/A	N/A	vuint32mf2x7_t	vuint32m1x7_t	N/A	N/A

NF LMUL	LMUL = 1/8	LMUL = 1/4	LMUL = 1/2	LMUL = 1	LMUL = 2	LMUL =
8	N/A	N/A	vuint32mf2x8_t	vuint32m1x8_t	N/A	N/A

int64_t:

NF LMUL	LMUL = 1/8	LMUL = 1/4	LMUL = 1/2	LMUL = 1	LMUL = 2	LMUL = 4
2	N/A	N/A	N/A	vint64m1x2_t	vint64m2x2_t	vint64m4x2_
3	N/A	N/A	N/A	vint64m1x3_t	vint64m2x3_t	N/A
4	N/A	N/A	N/A	vint64m1x4_t	vint64m2x4_t	N/A
5	N/A	N/A	N/A	vint64m1x5_t	N/A	N/A
6	N/A	N/A	N/A	vint64m1x6_t	N/A	N/A
7	N/A	N/A	N/A	vint64m1x7_t	N/A	N/A
8	N/A	N/A	N/A	vint64m1x8_t	N/A	N/A

uint64_t:

NF LMUL	LMUL = 1/8	LMUL = 1/4	LMUL = 1/2	LMUL = 1	LMUL = 2	LMUL = 4
2	N/A	N/A	N/A	vuint64m1x2_t	vuint64m2x2_t	vuint64m4
3	N/A	N/A	N/A	vuint64m1x3_t	vuint64m2x3_t	N/A
4	N/A	N/A	N/A	vuint64m1x4_t	vuint64m2x4_t	N/A
5	N/A	N/A	N/A	vuint64m1x5_t	N/A	N/A
6	N/A	N/A	N/A	vuint64m1x6_t	N/A	N/A
7	N/A	N/A	N/A	vuint64m1x7_t	N/A	N/A
8	N/A	N/A	N/A	vuint64m1x8_t	N/A	N/A

float16:

NF LMUL	LMUL = 1/8	LMUL = 1/4	LMUL = 1/2	LMUL = 1	LMUL = 2	LMUL = 4	LMUL = 8
2	N/A	vfloat16mf4x2_t	vfloat16mf2x2_t	vfloat16m1x2_t	vfloat16m2x2_t	vfloat16m4x2_t	N/A
3	N/A	vfloat16mf4x3_t	vfloat16mf2x3_t	vfloat16m1x3_t	vfloat16m2x3_t	N/A	N/A
4	N/A	vfloat16mf4x4_t	vfloat16mf2x4_t	vfloat16m1x4_t	vfloat16m2x4_t	N/A	N/A
5	N/A	vfloat16mf4x5_t	vfloat16mf2x5_t	vfloat16m1x5_t	N/A	N/A	N/A
6	N/A	vfloat16mf4x6_t	vfloat16mf2x6_t	vfloat16m1x6_t	N/A	N/A	N/A
7	N/A	vfloat16mf4x7_t	vfloat16mf2x7_t	vfloat16m1x7_t	N/A	N/A	N/A
8	N/A	vfloat16mf4x8_t	vfloat16mf2x8_t	vfloat16m1x8_t	N/A	N/A	N/A

float32:

NF LMUL	LMUL = 1/8	LMUL = 1/4	LMUL = 1/2	LMUL = 1	LMUL = 2	LMUL
2	N/A	N/A	vfloat32mf2x2_t	vfloat32m1x2_t	vfloat32m2x2_t	vfloat3
3	N/A	N/A	vfloat32mf2x3_t	vfloat32m1x3_t	vfloat32m2x3_t	N/A
4	N/A	N/A	vfloat32mf2x4_t	vfloat32m1x4_t	vfloat32m2x4_t	N/A
5	N/A	N/A	vfloat32mf2x5_t	vfloat32m1x5_t	N/A	N/A
6	N/A	N/A	vfloat32mf2x6_t	vfloat32m1x6_t	N/A	N/A
7	N/A	N/A	vfloat32mf2x7_t	vfloat32m1x7_t	N/A	N/A
8	N/A	N/A	vfloat32mf2x8_t	vfloat32m1x8_t	N/A	N/A

float64:

NF LMUL	LMUL = 1/8	LMUL = 1/4	LMUL = 1/2	LMUL = 1	LMUL = 2	LMUL =
2	N/A	N/A	N/A	vfloat64m1x2_t	vfloat64m2x2_t	vfloat64m
3	N/A	N/A	N/A	vfloat64m1x3_t	vfloat64m2x3_t	N/A
4	N/A	N/A	N/A	vfloat64m1x4_t	vfloat64m2x4_t	N/A
5	N/A	N/A	N/A	vfloat64m1x5_t	N/A	N/A
6	N/A	N/A	N/A	vfloat64m1x6_t	N/A	N/A
7	N/A	N/A	N/A	vfloat64m1x7_t	N/A	N/A
8	N/A	N/A	N/A	vfloat64m1x8_t	N/A	N/A

Configuration-Setting and `vl` Argument

There are two variants of configuration setting intrinsics. `vsetvl` is used to get the active vector length (`vl`) according to the given application vector length(`AVL`), `SEW` and `LMUL`.

`vl` register status is not expose to C language level, so in theory you can treat `vsetvl` and `vsetvlmax` functions are return the min value for `avl` and `VLMAX`.

```
size_t vsetvl_e8m1 (size_t avl);
size_t vsetvl_e8m2 (size_t avl);
size_t vsetvl_e8m4 (size_t avl);
size_t vsetvl_e8m8 (size_t avl);
size_t vsetvlmax_e8m1 ();
size_t vsetvlmax_e8m2 ();
size_t vsetvlmax_e8m4 ();
size_t vsetvlmax_e8m8 ();
```

There is no need to specify the behavior of tail and masked-off elements being undisturbed or agnostic. The default setting is tail agnostic and masked-off undisturbed. If users do not want to keep the values in masked-off elements, they could pass `vundefined()` as the `maskedoff` value.

`SEW` and `LMUL` are a part of the naming. They are static information for the intrinsics.

All of the intrinsic functions have a `vl` argument to specify the active vector length, except a few functions operate regardless of `vl`. e.g. `vmv.x.s`, `vfmv.f.s`, `vundefined`, `vreinterpret`, `vlmul_ext`, `vlmul_trunc`, `vget`, `vset` and `vcreate`.

The intrinsic functions will only operate at most `VLMAX` element if the `vl` argument are larger than `VLMAX`.

The semantics of following two snippets are equivalent. We strongly suggest the first form.

```
size_t vl = vsetvl_e8m1 (avl);
vint8m1_t va, vb, vc;
va = vadd_vv_i8m1(vb, vc, vl);
```

```
vint8m1_t va, vb, vc;
va = vadd_vv_i8m1(vb, vc, avl);
```

Naming Rules

Intrinsics is the interface to the low level assembly in high level programming language. The intrinsic API has the goal to make all the V-ext instructions accessible from C/C++. The intrinsic names are as close as the assembly mnemonics. Besides the basic intrinsics corresponding to assembly mnemonics, there are intrinsics close to semantic naming.

The intrinsic names will encode return type if it is appropriate. It is easier to know the output type of the intrinsics from the name. In addition, if the intrinsic call is used as the operand, having the return type is more immediate. If there is no return value, the intrinsics will encode the input value types. If the return type is the same, use exceptional rules to differentiate them. See Exceptions in Naming.

In general, the naming rule of intrinsics is

```
INTRINSIC ::= MNEMONIC '_' RET_TYPE
MNEMONIC ::= Instruction name in v-ext specification. Replace
    '.' with '_'.
RET_TYPE ::= SEW LMUL
SEW ::= ( i8 | i16 | i32 | i64 | u8 | u16 | u32 | u64 | f16 |
    f32 | f64 )
LMUL ::= ( m1 | m2 | m4 | m8 | mf2 | mf4 | mf8 )

Example:

vadd.vv vd, vs2, vs1:
vint8m1_t vadd_vv_i8m1(vint8m1_t vs2, vint8m1_t vs1, size_t vl);
```

```
vwaddu.vv vd, vs2, vs1:
vint16m2_t vwaddu_vv_i16m2(vint8m1_t vs2, vint8m1_t vs1, size_t
    vl);
```

Exceptions in Naming

If intrinsics have the same return type under different input types, we could not use general naming rules directly on these intrinsics. It will cause the same intrinsic names for different input types.

This section lists all exceptional cases for intrinsic naming.

Vector Stores

It does not encode return type into vector store. There is no return data for store operations. Instead, use the type of store data to name the intrinsics.

Example:

```
vse8.v vs3, (rs1):
void vse8_v_i8m1(int8_t *rs1, vint8m1_t vs3, size_t vl);
```

Vector Integer Add-with-Carry / Subtract-with-Borrow Instructions

The result of vmadc and vmsbc is mask types. Becuase we use the ratio SEW/LMUL to name the mask types and multiple (SEW, LMUL) pairs map to the same ratio, in addition to use the return type to name the intrinsics, we also encode the input types to distinguish these intrinsics.

Example:

```
vmadc.vv vd, vs2, vs1:
vbool8_t vmadc_vv_i8m1_b8(vint8m1_t vs2, vint8m1_t vs1, size_t
    vl);
```

Comparison Instructions

The result of comparison instructions is mask types. Becuase we use the ratio SEW/LMUL to name the mask types and multiple (SEW, LMUL) pairs map to the same ratio, in addition to use the return type to name the intrinsics, we also encode the input types to distinguish these intrinsics.

Example:

```
vmseq.vv vd, vs2, vs1:
vbool8_t vmseq_vv_i8m1_b8(vint8m1_t vs2, vint8m1_t vs1, size_t
    vl);
```

```
vbool8_t vmseq_vv_i16m2_b8(vint16m2_t vs2, vint16m2_t vs1,
    size_t vl);
```

Reduction Instructions

The scalar input and output operands are held in element 0 of a single vector register. Use LMUL = 1 in the return type. To distinguish different intrinsics with different input types, encode the input type and the result type in the name.

Example:

```
vredsum.vs vd, vs2, vs1:
vint8m1_t vredsum_vs_i8m1_i8m1(vint8m1_t dest, vint8m1_t vs2,
    vint8m1_t vs1, size_t vl);
vint8m1_t vredsum_vs_i8m2_i8m1(vint8m1_t dest, vint8m2_t vs2,
    vint8m1_t vs1, size_t vl);
vint8m1_t vredsum_vs_i8m4_i8m1(vint8m1_t dest, vint8m4_t vs2,
    vint8m1_t vs1, size_t vl);
vint8m1_t vredsum_vs_i8m8_i8m1(vint8m1_t dest, vint8m8_t vs2,
    vint8m1_t vs1, size_t vl);
```

`vpopc.m` and `vfirst.m`

The return type of `vpopc.m` and `vfirst.m` is apparently an integer. Do not encode the return type into it. Instead, encode the input type to it.

Example:

```
vpopc.m rd, vs2:
unsigned long vpopc_m_b1(vbool1_t vs2, size_t vl);
unsigned long vpopc_m_b2(vbool2_t vs2, size_t vl);
```

Permutation Instructions

To move the element 0 of a vector to a scalar, encode the input vector type and the output scalar type.

Example:

```
vmv.x.s rd, vs2:
int8_t vmv_x_s_i8m1_i8 (vint8m1_t vs2, size_t vl);
int8_t vmv_x_s_i8m2_i8 (vint8m2_t vs2, size_t vl);
int8_t vmv_x_s_i8m4_i8 (vint8m4_t vs2, size_t vl);
int8_t vmv_x_s_i8m8_i8 (vint8m8_t vs2, size_t vl);
```

Scalar in Vector Operations

In V specification, it defines operations between vector and scalar types. If `XLEN` > `SEW`, the least-significant SEW bits of the scalar register are used. If `XLEN` < `SEW`, the value from the scalar register is sign-extended to SEW bits.

We define arithmetic intrinsics with scalar using SEW types.

```
Example:
```

```
// Use uint8_t for op2.
vuint8m1_t vadd_vx_u8m1(vuint8m1_t op1, uint8_t op2, size_t vl);
// Use uint64_t for op2.
vuint64m1_t vadd_vx_u64m1(vuint64m1_t op1, uint64_t op2, size_t
    vl);
```

The compiler may generate multiple instructions for the intrinsics. For example, it is a little bit complicated to support `uint64_t` operations under `XLEN` = 32.

It breaks the one-to-one mapping between intrinsics and assembly mnemonics in some hardware configurations. However, it makes more sense for users to use the scalar types consistent with the `SEW` of vector types.

There is the same issue for `vmv.x.s`, `vmv.s.x`, `vfmv.f.s`, `vfmv.s.f`, `vslide1up.vx`, `vfslide1up.vf`, `vslide1down.vx`, and `vfslide1down.vx`. Use `SEW` to encode the scalar type.

```
Example:
```

```
// Use uint8_t for op2.
vuint8m1_t vslide1up_vx_u8m1(vuint8m1_t dest, vuint8m1_t op1,
    uint8_1 op2);
```

Mask in Intrinsics

RISC-V "V" extension only has "merge in output" semantic. Intrinsics with mask has two additional arguments, `mask` and `maskedoff`.

```
vd = vop(mask, maskedoff, arg1, arg2)
vd[i] = maskedoff[i], if mask[i] == 0
vd[i] = vop(arg1[i], arg2[2]), if mask[i] == 1
```

In general, the naming rule of intrinsic with mask v0.t is

```
INTRINSIC_WITH_MASK ::= INTRINSIC '_m'
```

```
Example:
```

```
vadd.vv vd, vs2, vs1, v0.t:
```

```
vint8m1_t vadd_vv_i8m1_m(vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t vs2, vint8m1_t vs1, size_t vl);
```

If the intrinsics are always masked, there is no need to append _m to the intrinsic. For example, the vmerge instructions are always masked.

```
Example:
```

```
vmerge.vvm vd, vs2, vs1, v0:
vint8m1_t vmerge_vvm_i8m1(vbool8_t mask, vint8m1_t vs2,
    vint8m1_t vs1, size_t vl);

vcompress.vm vd, vs2, vs1:
vint8m1_t vcompress_vm_i8m1(vbool8_t vs1, vint8m1_t maskedoff,
    vint8m1_t vs2, size_t vl);
```

There are two additional masking semantics: *zero in output* semantic and *don't care in output* semantic. Users could leverage *merge in output* intrinsics to simulate these two additional masking semantics.

```
Example:
```

```
// Don't care in output semantic
vint8m1_t vadd_vv_i8m1_m(vbool8_t mask, vundefined_i8m1(),
    vint8m1_t vs2, vint8m1_t vs1, size_t vl);
```

Masked Intrinsics Without MaskedOff

Vector Stores

There is no maskedoff argument for store operations. The value of maskedoff already exists in memory.

```
Example:
```

```
vse8.v vs3, (rs1), v0.t:
void vse8_v_i8m1_m(vbool8_t mask, int8_t *rs1, vint8m1_t vs3,
    size_t vl);
```

Reduction Instructions

The result of reductions is put in element 0 of the output vector. There is no maskedoff argument for reduction operations.

```
Example:
```

```
vredsum.vs vd, vs2, vs1, v0.t:
vint8m1_t vredsum_vs_i8m2_i8m1_m(vbool4_t mask, vint8m1_t dest,
    vint8m2_t vs2, vint8m1_t vs1, size_t vl);
```

Merge Instructions

The result of merge operations comes from their two source operands. Merge intrinsics have no `maskedoff` argument.

Example:

```
vmerge.vvm vd, vs2, vs1, v0:
vint8m1_t vmerge_vvm_i8m1_m(vbool8_t mask, vint8m1_t vs2,
    vint8m1_t vs1, size_t vl);
```

Keep the Original Values of the Destination Vector

`vmv.s.x` and reduction operations will only modify the first element of the destination vector. Users could keep the original values of the remaining elements in the destination vector through `dest` argument in these intrinsics.

Vector slide instructions also have unchanged parts in the destination register group. Users could keep the original values of the unchanged parts in the destination vector group through `dest` argument in the intrinsics.

Example:

```
vint8m1_t vmv_s_x_i8m1(vint8m1_t dest, int8_t src, size_t vl);
vint8m1_t vredsum_vs_i8m1_i8m1(vint8m1_t dest, vint8m1_t vs2,
    vint8m1_t vs1, size_t vl);
vint8m1_t vredsum_vs_i8m2_i8m1_m(vbool4_t mask, vint8m1_t dest,
    vint8m2_t vs2, vint8m1_t vs1, size_t vl);
vuint8m1_t vslide1up_vx_u8m1(vuint8m1_t dest, vuint8m1_t op1,
    uint8_1 op2, size_t vl);
```

SEW and LMUL of Intrinsics

`SEW` and `LMUL` are the static information for the intrinsics. The compiler will generate vsetvli when vtype is changed between operations.

Example:

```
vint8m1_t a, b, c, d;
vint16m2_t a2, b2, c2;
...
a2 = vwadd_vv_i16m2(a, b, vl);
b2 = vwadd_vv_i16m2(c, d, vl);
c2 = vadd_vv_i16m2(a2, b2, vl);
```

It will generate the following instructions.

```
vsetvli x0, vl, e8,m1
vwadd.vv a2, a, b
vwadd.vv b2, c, d
vsetvli x0, vl, e16,m2
vadd.vv c2, a2, b2
```

Be aware that when the ratio of `LMUL/SEW` is changed, users need to ensure the `vl` is correct for the following operations if using *implicit vl intrinsics*.

C Operators on RISC-V Vector Types

The semantic of C builtin operators, other than simple assignment, hasn't been decided yet. Simple assignment keeps the usual C semantics of storing the value on the right operand into the variable of the left operand.

Utility Functions

This section lists all utility functions to help users program in V intrinsics easier.

Vector Initialization

These utility functions are used to initialize vector values. They could be used in masking intrinsics with *don't care in output* semantics.

```
Example:
```

```
vint8m1_t vundefined_i8m1()
```

Note: Any operation with `vundefined_*` () are undefined and unpredictable, the only recommended usage is used as maskedoff operand; an additional note is any operation with `vundefined_*` () will got unpredictable result, e.g. `vxor(vundefined (), vundefined ())` and `vec a = vundefined(); vec b = vxor(a, a);` both are not guarantee result vector with zeros.

Reinterpret between floating point and integer types

These utility functions help users to convert types between floating point and integer types. The reinterpreter intrinsics only change the types of underlying contents. It is a nop operation.

```
Example:
```

```
// Convert floating point to signed integer types.
vint64m1_t vreinterpret_v_f64m1_i64m1(vfloat64m1_t src)
// Convert floating point to unsigned integer types.
vuint64m1_t vreinterpret_v_f64m1_u64m1(vfloat64m1_t src);
```

Reinterpret between signed and unsigned types

These utility functions help users to convert types between signed and unsigned types. The reinterpreter intrinsics only change the types of underlying contents. It is a nop operation.

```
Example:
```

```
// Convert signed to unsigned types.
vuint8m1_t vreinterpret_v_i8m1_u8m1(vint8m1_t src)
```

Reinterpret between different SEW under the same LMUL

These utility functions help users to convert types between `SEW`s under the same LMUL, e.g., convert vint32m1_t to vint64m1_t. The reinterpreter intrinsics only change the types of underlying contents. It is a nop operation. It will generate `vsetvli` by the following vector operation for the new type.

```
Example:
```

```
// Convert SEW under the same LMUL.
vint64m1_t vreinterpret_v_i32m1_i64m1(vint32m1_t src)
```

LMUL truncation and LMUL extension functions

These utility functions help users to truncate or extent current LMUL under same SEW regardless of vl (it won't change content of vl register)

The LMUL extension result of extension part are undefined value.

```
Example:
```

```
// LMUL Truncation, vlmul_trunc_v_<src_lmul>_<target_lmul>
vint64m1_t vlmul_trunc_v_i64m2_i64m1 (vint64m2_t op1);
vint64m1_t vlmul_trunc_v_i64m4_i64m1 (vint64m4_t op1);
vint64m2_t vlmul_trunc_v_i64m4_i64m2 (vint64m4_t op1);

// LMUL Extension, vlmul_ext_v_<src_lmul>_<target_lmul>
vint64m2_t vlmul_ext_v_i64m1_i64m2 (vint64m1_t op1);
vint64m4_t vlmul_ext_v_i64m1_i64m4 (vint64m1_t op1);
vint64m8_t vlmul_ext_v_i64m1_i64m8 (vint64m1_t op1);
```

Vector Insertion and Extraction functions

These utility functions help users to insert or extract smaller LMUL under same SEW.

```
Example:

// Insert an smaller LMUL, vset_v_<src_lmul>_<target_lmul>
vint32m2_t vset_v_i32m1_i32m2 (vint32m2_t dest, size_t index,
    vint32m1_t val);
vint32m4_t vset_v_i32m1_i32m4 (vint32m4_t dest, size_t index,
    vint32m1_t val);
vint32m4_t vset_v_i32m2_i32m4 (vint32m4_t dest, size_t index,
    vint32m2_t val);

// Extract an smaller LMUL, vget_v_<src_lmul>_<target_lmul>
vint32m1_t vget_v_i32m2_i32m1 (vint32m2_t src, size_t index);
vint32m1_t vget_v_i32m4_i32m1 (vint32m4_t src, size_t index);
vint32m2_t vget_v_i32m4_i32m2 (vint32m4_t src, size_t index);
```

Utility Functions for Segment Load/Store Types

These utility functions help users to create segment load/store types and insert/extract elements to/from segment load/store types.

```
Example:

// Create segment load/store types.
vint32m2x2_t vcreate_i32m2x2(vint32m2_t val1, vint32m2_t val2)
vint32m2x3_t vcreate_i32m2x3(vint32m2_t val1, vint32m2_t val2,
    vint32m2_t val3)

// Insert an element to segment load/store types.
vint32m2x2_t vset_i32m2x2(vint32m2x2_t tuple, size_t index,
    vint32m2_t value)

// Extract an element from segment load/store types.
vint32m2_t vget_i32m2x2_i32m2(vint32m2x2_t tuple, size_t index)
vint32m2_t vget_i32m2x3_i32m2(vint32m2x3_t tuple, size_t index)
```

Overloaded Interface

Overloaded Interface have shorter function name and support less number of intrinsic functions.

Overloaded interface are always keep full function name with removing the suffix.

Compiler could support overloaded interface optionally. Preprocessor macro `__riscv_v_intrinsic_overloading` is defined when overloaded interface is available.

```
Example:
```

```
vadd.vv, vadd.vx, vadd.vi will have an unified interface vadd()
    for them.

vint8m1_t vadd(vint8m1_t op1, vint8m1_t op2, size_t vl);
// The compiler will choose the following intrinsic
vint8m1_t vadd_vv_i8m1(vint8m1_t op1, vint8m1_t op2, size_t vl);

vint8m2_t vadd(vint8m2_t op1, vint8m2_t op2, size_t vl);
// The compiler will choose the following intrinsic
vint8m2_t vadd_vv_i8m2(vint8m2_t op1, vint8m2_t op2, size_t vl);

vint8m1_t vadd(vint8m1_t op1, int8_t op2, size_t vl);
// The compiler will choose the following intrinsic
vint8m1_t vadd_vx_i8m1(vint8m1_t op1, int8_t op2, size_t vl);

vint8mf8_t vadd(vbool64_t mask, vint8mf8_t maskedoff, vint8mf8_t
    op1, vint8mf8_t op2, size_t vl);
// The compiler will choose the following intrinsic
vint8mf8_t vadd_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
```

The unsupported overloading functions

The unsupported overloading functions are based on the types of input/return arguments:

1. Input arguments are scalar type alone. (non-masked vle/vlse, etc.)
2. Input argument is empty. (vmclr.m/vmset.m/vid.v)
3. Input boolean vector argument with return type of a non boolean vector. (viota)

Non-masked `vle`, `vleff` and `vlseg`

Non-masked `viota.m`

`vmv.v.x` and `vfmv.v.f`

`vmclr.m`, `vmset.m`, `vid.v`, `vundefined`

Special naming rule for some overloaded interfaces.

Convert Instructions.

Append one more suffix from mnemonic in the function names to distinct the different operation.

Example:

```
// vint16m1_t vfcvt_x_f_v_i16m1 (vfloat16m1_t src, size_t vl);
vint16m1_t vfcvt_x (vfloat16m1_t src, size_t vl);
```

Reinterpret, LMUL truncation, LMUL extension and vector extraction functions.

Append output type in the function names to avoid different operations have the same type of argument.

Example:

```
// vuint8mf4_t vreinterpret_v_u16mf4_u8mf4(vuint16mf4_t src)
vuint8mf4_t vreinterpret_u8mf4(vuint16mf4_t src)
// vfloat16mf4_t vreinterpret_v_u16mf4_f16mf4(vuint16mf4_t src)
vfloat16mf4_t vreinterpret_f16mf4(vuint16mf4_t src)

// vuint8mf8_t vlmul_trunc_v_u8m1_u8mf8(vuint8m1_t op1);
vuint8mf8_t vlmul_trunc_u8mf8(vuint8m1_t op1);
// vuint8mf4_t vlmul_trunc_v_u8m1_u8mf4(vuint8m1_t op1);
vuint8mf4_t vlmul_trunc_u8mf4(vuint8m1_t op1);

// vint8m2_t vget_v_i8m8_i8m2(vint8m8_t src, size_t index);
vint8m2_t vget_i8m2(vint8m8_t src, size_t index);
// vint8m4_t vget_v_i8m8_i8m4(vint8m8_t src, size_t index);
vint8m4_t vgeti8m4(vint8m8_t src, size_t index);
```

Widening Vector-Scalar Arithmetic Instructions for vx/wx and vf/wf cases.

The scalar type promotions is not obvious if instruction supports source vector type is 2*SEW and SEW, so append the vx/wx/vf/wf suffix in the function names. (ex. vwadd[u].vx/vwadd[u].wx, vwsub[u].vx/vwsub[u].wx, vfwadd_vf/vfwadd_wf and vfwsub_vf/vfwsub_wf). In order to consistent, vector-vector operations also append a suffix in the function name.

```
// Example: users need to specific explicit type for op2 if
   below functions have the same name.
vuint32mf2_t vwaddu_wx(vuint32mf2_t op1, uint16_t op2, size_t
   vl);
vuint64m1_t  vwaddu_vx(vuint32mf2_t op1, uint32_t op2, size_t
   vl);
```

Vector Move Instructions.

Original overloading name are confusing. Append one more suffix for readability. For example:

```
// Old.
vint8m1_t vmv (vint8m1_t src, size_t vl); // vmv.v.v
int8_t vmv (vint8m1_t src); // vmv.x.s
vint8m1_t vmv (vint8m1_t dst, int8_t src, size_t vl); // vmv.s.x
float16_t vfmv (vfloat16m1_t src); // vfmv.f.s
vfloat16m1_t vfmv (vfloat16m1_t dst, float16_t src, size_t vl);
    // vfmv.s.f
```

```
// New.
vint8m1_t vmv_v (vint8m1_t src, size_t vl); // vmv.v.v
int8_t vmv_x (vint8m1_t src); // vmv.x.s
vint8m1_t vmv_s (vint8m1_t dst, int8_t src, size_t vl); //
    vmv.s.x
float16_t vfmv_f (vfloat16m1_t src); // vfmv.f.s
vfloat16m1_t vfmv_s (vfloat16m1_t dst, float16_t src, size_t
    vl); // vfmv.s.f
```

Switching Vtype and Keep same VL after vsetvl instruction

Compiler should guarantee the correctness of vtype setting after vsetvl instruction. For example considering the widening multiply example as below.

```
vl = vsetvl_e16m4(n);
vfloat16m4_t vx = vle16_v_f16m4(ptr_x, vl);
// vsetvl_e32m8(vl); // No need to keep the same vl and change
    vtype manually
vfloat32m8_t vy = vle32_v_f32m8(ptr_y, vl);
// vsetvl_e16m4(vl); // No need to keep the same vl and change
    vtype manually
vfwmacc_vf_f32m8(vy, 2.0, vx, vl);
// vsetvl_e32m8(vl); // No need to keep the same vl and change
    vtype manually
vse32_v_f32m8(ptr_y, vy, vl);
```

This example has a `vl` computed from `vsetvl_e16m4`, and changing the type to `vfloat32m8_t` in the middle. With compiler's helping, users don't need to change vtype manually because `vfloat16m4_t` and `vfloat32m8_t` have the exact same number of elements (same `SEW`/`LMUL` ratio). Noted that when using the different vtype intrinsic functions with a new `SEW`/`LMUL` ratio after vsetvl instruction, the result will raise an illegal-instruction exception.

Programming Note

Strided load/store with stride of 0

The V extension spec mentions that the strided load/store instruction with stride of 0 could have different instruction to perform all memory accesses or fewer memory operations. Since needing all memory accesses isn't likely to be common, the compiler implementation is allowed to generate fewer memory operations with strided load/store intrinsics. In other words, compiler does not guarantee generating the all memory accesses instruction in strided load/store intrinsics with stride of 0. If the user needs all memory accesses to be performed, they should use an indexed load/store intrinsics with all zero indices.

RVV Intrinsic Functions List

RVV C Type System:

RVV C extension types:

Prototypes:

```
vint8mf8_t
vint8mf4_t
vint8mf2_t
vint8m1_t
vint8m2_t
vint8m4_t
vint8m8_t
vint16mf4_t
vint16mf2_t
vint16m1_t
vint16m2_t
vint16m4_t
vint16m8_t
vint32mf2_t
vint32m1_t
vint32m2_t
vint32m4_t
vint32m8_t
vint64m1_t
vint64m2_t
vint64m4_t
vint64m8_t
vuint8mf8_t
vuint8mf4_t
vuint8mf2_t
vuint8m1_t
vuint8m2_t
vuint8m4_t
```

```
vuint8m8_t
vuint16mf4_t
vuint16mf2_t
vuint16m1_t
vuint16m2_t
vuint16m4_t
vuint16m8_t
vuint32mf2_t
vuint32m1_t
vuint32m2_t
vuint32m4_t
vuint32m8_t
vuint64m1_t
vuint64m2_t
vuint64m4_t
vuint64m8_t
vfloat16mf4_t
vfloat16mf2_t
vfloat16m1_t
vfloat16m2_t
vfloat16m4_t
vfloat16m8_t
vfloat32mf2_t
vfloat32m1_t
vfloat32m2_t
vfloat32m4_t
vfloat32m8_t
vfloat64m1_t
vfloat64m2_t
vfloat64m4_t
vfloat64m8_t
```

RVV C extension mask types:

- The Syntax is `vbool<MLEN>_t`
- `vbool1_t`
- `vbool2_t`
- `vbool4_t`
- `vbool8_t`
- `vbool16_t`
- `vbool32_t`
- `vbool64_t`

Configuration-Setting and Utility Functions:

Set `vl` and `vtype` Functions:

Prototypes:

```
size_t vsetvl_e8mf8 (size_t avl);
size_t vsetvl_e8mf4 (size_t avl);
size_t vsetvl_e8mf2 (size_t avl);
size_t vsetvl_e8m1 (size_t avl);
size_t vsetvl_e8m2 (size_t avl);
size_t vsetvl_e8m4 (size_t avl);
size_t vsetvl_e8m8 (size_t avl);
size_t vsetvl_e16mf4 (size_t avl);
size_t vsetvl_e16mf2 (size_t avl);
size_t vsetvl_e16m1 (size_t avl);
size_t vsetvl_e16m2 (size_t avl);
size_t vsetvl_e16m4 (size_t avl);
size_t vsetvl_e16m8 (size_t avl);
size_t vsetvl_e32mf2 (size_t avl);
size_t vsetvl_e32m1 (size_t avl);
size_t vsetvl_e32m2 (size_t avl);
size_t vsetvl_e32m4 (size_t avl);
size_t vsetvl_e32m8 (size_t avl);
size_t vsetvl_e64m1 (size_t avl);
size_t vsetvl_e64m2 (size_t avl);
size_t vsetvl_e64m4 (size_t avl);
size_t vsetvl_e64m8 (size_t avl);
```

Set the vl to VLMAX with specific vtype:

Prototypes:

```
size_t vsetvlmax_e8mf8 ();
size_t vsetvlmax_e8mf4 ();
size_t vsetvlmax_e8mf2 ();
size_t vsetvlmax_e8m1 ();
size_t vsetvlmax_e8m2 ();
size_t vsetvlmax_e8m4 ();
size_t vsetvlmax_e8m8 ();
size_t vsetvlmax_e16mf4 ();
size_t vsetvlmax_e16mf2 ();
size_t vsetvlmax_e16m1 ();
size_t vsetvlmax_e16m2 ();
size_t vsetvlmax_e16m4 ();
size_t vsetvlmax_e16m8 ();
size_t vsetvlmax_e32mf2 ();
size_t vsetvlmax_e32m1 ();
```

```
size_t vsetvlmax_e32m2 ();
size_t vsetvlmax_e32m4 ();
size_t vsetvlmax_e32m8 ();
size_t vsetvlmax_e64m1 ();
size_t vsetvlmax_e64m2 ();
size_t vsetvlmax_e64m4 ();
size_t vsetvlmax_e64m8 ();
```

Vector Loads and Stores Functions:

Vector Unit-Stride Load Functions:

Prototypes:

```
vint8mf8_t vle8_v_i8mf8 (const int8_t *base, size_t vl);
vint8mf4_t vle8_v_i8mf4 (const int8_t *base, size_t vl);
vint8mf2_t vle8_v_i8mf2 (const int8_t *base, size_t vl);
vint8m1_t vle8_v_i8m1 (const int8_t *base, size_t vl);
vint8m2_t vle8_v_i8m2 (const int8_t *base, size_t vl);
vint8m4_t vle8_v_i8m4 (const int8_t *base, size_t vl);
vint8m8_t vle8_v_i8m8 (const int8_t *base, size_t vl);
vint16mf4_t vle16_v_i16mf4 (const int16_t *base, size_t vl);
vint16mf2_t vle16_v_i16mf2 (const int16_t *base, size_t vl);
vint16m1_t vle16_v_i16m1 (const int16_t *base, size_t vl);
vint16m2_t vle16_v_i16m2 (const int16_t *base, size_t vl);
vint16m4_t vle16_v_i16m4 (const int16_t *base, size_t vl);
vint16m8_t vle16_v_i16m8 (const int16_t *base, size_t vl);
vint32mf2_t vle32_v_i32mf2 (const int32_t *base, size_t vl);
vint32m1_t vle32_v_i32m1 (const int32_t *base, size_t vl);
vint32m2_t vle32_v_i32m2 (const int32_t *base, size_t vl);
vint32m4_t vle32_v_i32m4 (const int32_t *base, size_t vl);
vint32m8_t vle32_v_i32m8 (const int32_t *base, size_t vl);
vint64m1_t vle64_v_i64m1 (const int64_t *base, size_t vl);
vint64m2_t vle64_v_i64m2 (const int64_t *base, size_t vl);
vint64m4_t vle64_v_i64m4 (const int64_t *base, size_t vl);
vint64m8_t vle64_v_i64m8 (const int64_t *base, size_t vl);
vuint8mf8_t vle8_v_u8mf8 (const uint8_t *base, size_t vl);
vuint8mf4_t vle8_v_u8mf4 (const uint8_t *base, size_t vl);
vuint8mf2_t vle8_v_u8mf2 (const uint8_t *base, size_t vl);
vuint8m1_t vle8_v_u8m1 (const uint8_t *base, size_t vl);
vuint8m2_t vle8_v_u8m2 (const uint8_t *base, size_t vl);
vuint8m4_t vle8_v_u8m4 (const uint8_t *base, size_t vl);
vuint8m8_t vle8_v_u8m8 (const uint8_t *base, size_t vl);
vuint16mf4_t vle16_v_u16mf4 (const uint16_t *base, size_t vl);
vuint16mf2_t vle16_v_u16mf2 (const uint16_t *base, size_t vl);
vuint16m1_t vle16_v_u16m1 (const uint16_t *base, size_t vl);
```

```
vuint16m2_t vle16_v_u16m2 (const uint16_t *base, size_t vl);
vuint16m4_t vle16_v_u16m4 (const uint16_t *base, size_t vl);
vuint16m8_t vle16_v_u16m8 (const uint16_t *base, size_t vl);
vuint32mf2_t vle32_v_u32mf2 (const uint32_t *base, size_t vl);
vuint32m1_t vle32_v_u32m1 (const uint32_t *base, size_t vl);
vuint32m2_t vle32_v_u32m2 (const uint32_t *base, size_t vl);
vuint32m4_t vle32_v_u32m4 (const uint32_t *base, size_t vl);
vuint32m8_t vle32_v_u32m8 (const uint32_t *base, size_t vl);
vuint64m1_t vle64_v_u64m1 (const uint64_t *base, size_t vl);
vuint64m2_t vle64_v_u64m2 (const uint64_t *base, size_t vl);
vuint64m4_t vle64_v_u64m4 (const uint64_t *base, size_t vl);
vuint64m8_t vle64_v_u64m8 (const uint64_t *base, size_t vl);
vfloat16mf4_t vle16_v_f16mf4 (const float16_t *base, size_t vl);
vfloat16mf2_t vle16_v_f16mf2 (const float16_t *base, size_t vl);
vfloat16m1_t vle16_v_f16m1 (const float16_t *base, size_t vl);
vfloat16m2_t vle16_v_f16m2 (const float16_t *base, size_t vl);
vfloat16m4_t vle16_v_f16m4 (const float16_t *base, size_t vl);
vfloat16m8_t vle16_v_f16m8 (const float16_t *base, size_t vl);
vfloat32mf2_t vle32_v_f32mf2 (const float32_t *base, size_t vl);
vfloat32m1_t vle32_v_f32m1 (const float32_t *base, size_t vl);
vfloat32m2_t vle32_v_f32m2 (const float32_t *base, size_t vl);
vfloat32m4_t vle32_v_f32m4 (const float32_t *base, size_t vl);
vfloat32m8_t vle32_v_f32m8 (const float32_t *base, size_t vl);
vfloat64m1_t vle64_v_f64m1 (const float64_t *base, size_t vl);
vfloat64m2_t vle64_v_f64m2 (const float64_t *base, size_t vl);
vfloat64m4_t vle64_v_f64m4 (const float64_t *base, size_t vl);
vfloat64m8_t vle64_v_f64m8 (const float64_t *base, size_t vl);
// masked functions
vint8mf8_t vle8_v_i8mf8_m (vbool64_t mask, vint8mf8_t maskedoff,
    const int8_t *base, size_t vl);
vint8mf4_t vle8_v_i8mf4_m (vbool32_t mask, vint8mf4_t maskedoff,
    const int8_t *base, size_t vl);
vint8mf2_t vle8_v_i8mf2_m (vbool16_t mask, vint8mf2_t maskedoff,
    const int8_t *base, size_t vl);
vint8m1_t vle8_v_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    const int8_t *base, size_t vl);
vint8m2_t vle8_v_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    const int8_t *base, size_t vl);
vint8m4_t vle8_v_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    const int8_t *base, size_t vl);
vint8m8_t vle8_v_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    const int8_t *base, size_t vl);
vint16mf4_t vle16_v_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, const int16_t *base, size_t vl);
vint16mf2_t vle16_v_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, const int16_t *base, size_t vl);
```

```
vint16m1_t vle16_v_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, const int16_t *base, size_t vl);
vint16m2_t vle16_v_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    const int16_t *base, size_t vl);
vint16m4_t vle16_v_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    const int16_t *base, size_t vl);
vint16m8_t vle16_v_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    const int16_t *base, size_t vl);
vint32mf2_t vle32_v_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, const int32_t *base, size_t vl);
vint32m1_t vle32_v_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, const int32_t *base, size_t vl);
vint32m2_t vle32_v_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, const int32_t *base, size_t vl);
vint32m4_t vle32_v_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    const int32_t *base, size_t vl);
vint32m8_t vle32_v_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    const int32_t *base, size_t vl);
vint64m1_t vle64_v_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, const int64_t *base, size_t vl);
vint64m2_t vle64_v_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, const int64_t *base, size_t vl);
vint64m4_t vle64_v_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, const int64_t *base, size_t vl);
vint64m8_t vle64_v_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    const int64_t *base, size_t vl);
vuint8mf8_t vle8_v_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, const uint8_t *base, size_t vl);
vuint8mf4_t vle8_v_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, const uint8_t *base, size_t vl);
vuint8mf2_t vle8_v_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, const uint8_t *base, size_t vl);
vuint8m1_t vle8_v_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    const uint8_t *base, size_t vl);
vuint8m2_t vle8_v_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    const uint8_t *base, size_t vl);
vuint8m4_t vle8_v_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    const uint8_t *base, size_t vl);
vuint8m8_t vle8_v_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    const uint8_t *base, size_t vl);
vuint16mf4_t vle16_v_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, const uint16_t *base, size_t vl);
vuint16mf2_t vle16_v_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, const uint16_t *base, size_t vl);
vuint16m1_t vle16_v_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, const uint16_t *base, size_t vl);
```

```
vuint16m2_t vle16_v_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, const uint16_t *base, size_t vl);
vuint16m4_t vle16_v_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, const uint16_t *base, size_t vl);
vuint16m8_t vle16_v_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, const uint16_t *base, size_t vl);
vuint32mf2_t vle32_v_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, const uint32_t *base, size_t vl);
vuint32m1_t vle32_v_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, const uint32_t *base, size_t vl);
vuint32m2_t vle32_v_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, const uint32_t *base, size_t vl);
vuint32m4_t vle32_v_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, const uint32_t *base, size_t vl);
vuint32m8_t vle32_v_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, const uint32_t *base, size_t vl);
vuint64m1_t vle64_v_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, const uint64_t *base, size_t vl);
vuint64m2_t vle64_v_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, const uint64_t *base, size_t vl);
vuint64m4_t vle64_v_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, const uint64_t *base, size_t vl);
vuint64m8_t vle64_v_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, const uint64_t *base, size_t vl);
vfloat16mf4_t vle16_v_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, const float16_t *base, size_t vl);
vfloat16mf2_t vle16_v_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, const float16_t *base, size_t vl);
vfloat16m1_t vle16_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, const float16_t *base, size_t vl);
vfloat16m2_t vle16_v_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, const float16_t *base, size_t vl);
vfloat16m4_t vle16_v_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, const float16_t *base, size_t vl);
vfloat16m8_t vle16_v_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, const float16_t *base, size_t vl);
vfloat32mf2_t vle32_v_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, const float32_t *base, size_t vl);
vfloat32m1_t vle32_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, const float32_t *base, size_t vl);
vfloat32m2_t vle32_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, const float32_t *base, size_t vl);
vfloat32m4_t vle32_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, const float32_t *base, size_t vl);
vfloat32m8_t vle32_v_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, const float32_t *base, size_t vl);
```

```
vfloat64m1_t vle64_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, const float64_t *base, size_t vl);
vfloat64m2_t vle64_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, const float64_t *base, size_t vl);
vfloat64m4_t vle64_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, const float64_t *base, size_t vl);
vfloat64m8_t vle64_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, const float64_t *base, size_t vl);
```

Vector Unit-Stride Store Functions:

Prototypes:

```
void vse8_v_i8mf8 (int8_t *base, vint8mf8_t value, size_t vl);
void vse8_v_i8mf4 (int8_t *base, vint8mf4_t value, size_t vl);
void vse8_v_i8mf2 (int8_t *base, vint8mf2_t value, size_t vl);
void vse8_v_i8m1 (int8_t *base, vint8m1_t value, size_t vl);
void vse8_v_i8m2 (int8_t *base, vint8m2_t value, size_t vl);
void vse8_v_i8m4 (int8_t *base, vint8m4_t value, size_t vl);
void vse8_v_i8m8 (int8_t *base, vint8m8_t value, size_t vl);
void vse16_v_i16mf4 (int16_t *base, vint16mf4_t value, size_t
    vl);
void vse16_v_i16mf2 (int16_t *base, vint16mf2_t value, size_t
    vl);
void vse16_v_i16m1 (int16_t *base, vint16m1_t value, size_t vl);
void vse16_v_i16m2 (int16_t *base, vint16m2_t value, size_t vl);
void vse16_v_i16m4 (int16_t *base, vint16m4_t value, size_t vl);
void vse16_v_i16m8 (int16_t *base, vint16m8_t value, size_t vl);
void vse32_v_i32mf2 (int32_t *base, vint32mf2_t value, size_t
    vl);
void vse32_v_i32m1 (int32_t *base, vint32m1_t value, size_t vl);
void vse32_v_i32m2 (int32_t *base, vint32m2_t value, size_t vl);
void vse32_v_i32m4 (int32_t *base, vint32m4_t value, size_t vl);
void vse32_v_i32m8 (int32_t *base, vint32m8_t value, size_t vl);
void vse64_v_i64m1 (int64_t *base, vint64m1_t value, size_t vl);
void vse64_v_i64m2 (int64_t *base, vint64m2_t value, size_t vl);
void vse64_v_i64m4 (int64_t *base, vint64m4_t value, size_t vl);
void vse64_v_i64m8 (int64_t *base, vint64m8_t value, size_t vl);
void vse8_v_u8mf8 (uint8_t *base, vuint8mf8_t value, size_t vl);
void vse8_v_u8mf4 (uint8_t *base, vuint8mf4_t value, size_t vl);
void vse8_v_u8mf2 (uint8_t *base, vuint8mf2_t value, size_t vl);
void vse8_v_u8m1 (uint8_t *base, vuint8m1_t value, size_t vl);
void vse8_v_u8m2 (uint8_t *base, vuint8m2_t value, size_t vl);
void vse8_v_u8m4 (uint8_t *base, vuint8m4_t value, size_t vl);
void vse8_v_u8m8 (uint8_t *base, vuint8m8_t value, size_t vl);
```

```
void vse16_v_u16mf4 (uint16_t *base, vuint16mf4_t value, size_t
    vl);
void vse16_v_u16mf2 (uint16_t *base, vuint16mf2_t value, size_t
    vl);
void vse16_v_u16m1 (uint16_t *base, vuint16m1_t value, size_t
    vl);
void vse16_v_u16m2 (uint16_t *base, vuint16m2_t value, size_t
    vl);
void vse16_v_u16m4 (uint16_t *base, vuint16m4_t value, size_t
    vl);
void vse16_v_u16m8 (uint16_t *base, vuint16m8_t value, size_t
    vl);
void vse32_v_u32mf2 (uint32_t *base, vuint32mf2_t value, size_t
    vl);
void vse32_v_u32m1 (uint32_t *base, vuint32m1_t value, size_t
    vl);
void vse32_v_u32m2 (uint32_t *base, vuint32m2_t value, size_t
    vl);
void vse32_v_u32m4 (uint32_t *base, vuint32m4_t value, size_t
    vl);
void vse32_v_u32m8 (uint32_t *base, vuint32m8_t value, size_t
    vl);
void vse64_v_u64m1 (uint64_t *base, vuint64m1_t value, size_t
    vl);
void vse64_v_u64m2 (uint64_t *base, vuint64m2_t value, size_t
    vl);
void vse64_v_u64m4 (uint64_t *base, vuint64m4_t value, size_t
    vl);
void vse64_v_u64m8 (uint64_t *base, vuint64m8_t value, size_t
    vl);
void vse16_v_f16mf4 (float16_t *base, vfloat16mf4_t value,
    size_t vl);
void vse16_v_f16mf2 (float16_t *base, vfloat16mf2_t value,
    size_t vl);
void vse16_v_f16m1 (float16_t *base, vfloat16m1_t value, size_t
    vl);
void vse16_v_f16m2 (float16_t *base, vfloat16m2_t value, size_t
    vl);
void vse16_v_f16m4 (float16_t *base, vfloat16m4_t value, size_t
    vl);
void vse16_v_f16m8 (float16_t *base, vfloat16m8_t value, size_t
    vl);
void vse32_v_f32mf2 (float32_t *base, vfloat32mf2_t value,
    size_t vl);
void vse32_v_f32m1 (float32_t *base, vfloat32m1_t value, size_t
    vl);
```

```
void vse32_v_f32m2 (float32_t *base, vfloat32m2_t value, size_t
    vl);
void vse32_v_f32m4 (float32_t *base, vfloat32m4_t value, size_t
    vl);
void vse32_v_f32m8 (float32_t *base, vfloat32m8_t value, size_t
    vl);
void vse64_v_f64m1 (float64_t *base, vfloat64m1_t value, size_t
    vl);
void vse64_v_f64m2 (float64_t *base, vfloat64m2_t value, size_t
    vl);
void vse64_v_f64m4 (float64_t *base, vfloat64m4_t value, size_t
    vl);
void vse64_v_f64m8 (float64_t *base, vfloat64m8_t value, size_t
    vl);
// masked functions
void vse8_v_i8mf8_m (vbool64_t mask, int8_t *base, vint8mf8_t
    value, size_t vl);
void vse8_v_i8mf4_m (vbool32_t mask, int8_t *base, vint8mf4_t
    value, size_t vl);
void vse8_v_i8mf2_m (vbool16_t mask, int8_t *base, vint8mf2_t
    value, size_t vl);
void vse8_v_i8m1_m (vbool8_t mask, int8_t *base, vint8m1_t
    value, size_t vl);
void vse8_v_i8m2_m (vbool4_t mask, int8_t *base, vint8m2_t
    value, size_t vl);
void vse8_v_i8m4_m (vbool2_t mask, int8_t *base, vint8m4_t
    value, size_t vl);
void vse8_v_i8m8_m (vbool1_t mask, int8_t *base, vint8m8_t
    value, size_t vl);
void vse16_v_i16mf4_m (vbool64_t mask, int16_t *base,
    vint16mf4_t value, size_t vl);
void vse16_v_i16mf2_m (vbool32_t mask, int16_t *base,
    vint16mf2_t value, size_t vl);
void vse16_v_i16m1_m (vbool16_t mask, int16_t *base, vint16m1_t
    value, size_t vl);
void vse16_v_i16m2_m (vbool8_t mask, int16_t *base, vint16m2_t
    value, size_t vl);
void vse16_v_i16m4_m (vbool4_t mask, int16_t *base, vint16m4_t
    value, size_t vl);
void vse16_v_i16m8_m (vbool2_t mask, int16_t *base, vint16m8_t
    value, size_t vl);
void vse32_v_i32mf2_m (vbool64_t mask, int32_t *base,
    vint32mf2_t value, size_t vl);
void vse32_v_i32m1_m (vbool32_t mask, int32_t *base, vint32m1_t
    value, size_t vl);
```

```
void vse32_v_i32m2_m (vbool16_t mask, int32_t *base, vint32m2_t
    value, size_t vl);
void vse32_v_i32m4_m (vbool8_t mask, int32_t *base, vint32m4_t
    value, size_t vl);
void vse32_v_i32m8_m (vbool4_t mask, int32_t *base, vint32m8_t
    value, size_t vl);
void vse64_v_i64m1_m (vbool64_t mask, int64_t *base, vint64m1_t
    value, size_t vl);
void vse64_v_i64m2_m (vbool32_t mask, int64_t *base, vint64m2_t
    value, size_t vl);
void vse64_v_i64m4_m (vbool16_t mask, int64_t *base, vint64m4_t
    value, size_t vl);
void vse64_v_i64m8_m (vbool8_t mask, int64_t *base, vint64m8_t
    value, size_t vl);
void vse8_v_u8mf8_m (vbool64_t mask, uint8_t *base, vuint8mf8_t
    value, size_t vl);
void vse8_v_u8mf4_m (vbool32_t mask, uint8_t *base, vuint8mf4_t
    value, size_t vl);
void vse8_v_u8mf2_m (vbool16_t mask, uint8_t *base, vuint8mf2_t
    value, size_t vl);
void vse8_v_u8m1_m (vbool8_t mask, uint8_t *base, vuint8m1_t
    value, size_t vl);
void vse8_v_u8m2_m (vbool4_t mask, uint8_t *base, vuint8m2_t
    value, size_t vl);
void vse8_v_u8m4_m (vbool2_t mask, uint8_t *base, vuint8m4_t
    value, size_t vl);
void vse8_v_u8m8_m (vbool1_t mask, uint8_t *base, vuint8m8_t
    value, size_t vl);
void vse16_v_u16mf4_m (vbool64_t mask, uint16_t *base,
    vuint16mf4_t value, size_t vl);
void vse16_v_u16mf2_m (vbool32_t mask, uint16_t *base,
    vuint16mf2_t value, size_t vl);
void vse16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t value, size_t vl);
void vse16_v_u16m2_m (vbool8_t mask, uint16_t *base, vuint16m2_t
    value, size_t vl);
void vse16_v_u16m4_m (vbool4_t mask, uint16_t *base, vuint16m4_t
    value, size_t vl);
void vse16_v_u16m8_m (vbool2_t mask, uint16_t *base, vuint16m8_t
    value, size_t vl);
void vse32_v_u32mf2_m (vbool64_t mask, uint32_t *base,
    vuint32mf2_t value, size_t vl);
void vse32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t value, size_t vl);
void vse32_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint32m2_t value, size_t vl);
```

```
void vse32_v_u32m4_m (vbool8_t mask, uint32_t *base, vuint32m4_t
    value, size_t vl);
void vse32_v_u32m8_m (vbool4_t mask, uint32_t *base, vuint32m8_t
    value, size_t vl);
void vse64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t value, size_t vl);
void vse64_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint64m2_t value, size_t vl);
void vse64_v_u64m4_m (vbool16_t mask, uint64_t *base,
    vuint64m4_t value, size_t vl);
void vse64_v_u64m8_m (vbool8_t mask, uint64_t *base, vuint64m8_t
    value, size_t vl);
void vse16_v_f16mf4_m (vbool64_t mask, float16_t *base,
    vfloat16mf4_t value, size_t vl);
void vse16_v_f16mf2_m (vbool32_t mask, float16_t *base,
    vfloat16mf2_t value, size_t vl);
void vse16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vfloat16m1_t value, size_t vl);
void vse16_v_f16m2_m (vbool8_t mask, float16_t *base,
    vfloat16m2_t value, size_t vl);
void vse16_v_f16m4_m (vbool4_t mask, float16_t *base,
    vfloat16m4_t value, size_t vl);
void vse16_v_f16m8_m (vbool2_t mask, float16_t *base,
    vfloat16m8_t value, size_t vl);
void vse32_v_f32mf2_m (vbool64_t mask, float32_t *base,
    vfloat32mf2_t value, size_t vl);
void vse32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vfloat32m1_t value, size_t vl);
void vse32_v_f32m2_m (vbool16_t mask, float32_t *base,
    vfloat32m2_t value, size_t vl);
void vse32_v_f32m4_m (vbool8_t mask, float32_t *base,
    vfloat32m4_t value, size_t vl);
void vse32_v_f32m8_m (vbool4_t mask, float32_t *base,
    vfloat32m8_t value, size_t vl);
void vse64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vfloat64m1_t value, size_t vl);
void vse64_v_f64m2_m (vbool32_t mask, float64_t *base,
    vfloat64m2_t value, size_t vl);
void vse64_v_f64m4_m (vbool16_t mask, float64_t *base,
    vfloat64m4_t value, size_t vl);
void vse64_v_f64m8_m (vbool8_t mask, float64_t *base,
    vfloat64m8_t value, size_t vl);
```

Vector Strided Load Functions:

Prototypes:

```
vint8mf8_t vlse8_v_i8mf8 (const int8_t *base, ptrdiff_t bstride,
    size_t vl);
vint8mf4_t vlse8_v_i8mf4 (const int8_t *base, ptrdiff_t bstride,
    size_t vl);
vint8mf2_t vlse8_v_i8mf2 (const int8_t *base, ptrdiff_t bstride,
    size_t vl);
vint8m1_t vlse8_v_i8m1 (const int8_t *base, ptrdiff_t bstride,
    size_t vl);
vint8m2_t vlse8_v_i8m2 (const int8_t *base, ptrdiff_t bstride,
    size_t vl);
vint8m4_t vlse8_v_i8m4 (const int8_t *base, ptrdiff_t bstride,
    size_t vl);
vint8m8_t vlse8_v_i8m8 (const int8_t *base, ptrdiff_t bstride,
    size_t vl);
vint16mf4_t vlse16_v_i16mf4 (const int16_t *base, ptrdiff_t
    bstride, size_t vl);
vint16mf2_t vlse16_v_i16mf2 (const int16_t *base, ptrdiff_t
    bstride, size_t vl);
vint16m1_t vlse16_v_i16m1 (const int16_t *base, ptrdiff_t
    bstride, size_t vl);
vint16m2_t vlse16_v_i16m2 (const int16_t *base, ptrdiff_t
    bstride, size_t vl);
vint16m4_t vlse16_v_i16m4 (const int16_t *base, ptrdiff_t
    bstride, size_t vl);
vint16m8_t vlse16_v_i16m8 (const int16_t *base, ptrdiff_t
    bstride, size_t vl);
vint32mf2_t vlse32_v_i32mf2 (const int32_t *base, ptrdiff_t
    bstride, size_t vl);
vint32m1_t vlse32_v_i32m1 (const int32_t *base, ptrdiff_t
    bstride, size_t vl);
vint32m2_t vlse32_v_i32m2 (const int32_t *base, ptrdiff_t
    bstride, size_t vl);
vint32m4_t vlse32_v_i32m4 (const int32_t *base, ptrdiff_t
    bstride, size_t vl);
vint32m8_t vlse32_v_i32m8 (const int32_t *base, ptrdiff_t
    bstride, size_t vl);
vint64m1_t vlse64_v_i64m1 (const int64_t *base, ptrdiff_t
    bstride, size_t vl);
vint64m2_t vlse64_v_i64m2 (const int64_t *base, ptrdiff_t
    bstride, size_t vl);
vint64m4_t vlse64_v_i64m4 (const int64_t *base, ptrdiff_t
    bstride, size_t vl);
vint64m8_t vlse64_v_i64m8 (const int64_t *base, ptrdiff_t
    bstride, size_t vl);
vuint8mf8_t vlse8_v_u8mf8 (const uint8_t *base, ptrdiff_t
    bstride, size_t vl);
```

```
vuint8mf4_t vlse8_v_u8mf4 (const uint8_t *base, ptrdiff_t
    bstride, size_t vl);
vuint8mf2_t vlse8_v_u8mf2 (const uint8_t *base, ptrdiff_t
    bstride, size_t vl);
vuint8m1_t vlse8_v_u8m1 (const uint8_t *base, ptrdiff_t bstride,
    size_t vl);
vuint8m2_t vlse8_v_u8m2 (const uint8_t *base, ptrdiff_t bstride,
    size_t vl);
vuint8m4_t vlse8_v_u8m4 (const uint8_t *base, ptrdiff_t bstride,
    size_t vl);
vuint8m8_t vlse8_v_u8m8 (const uint8_t *base, ptrdiff_t bstride,
    size_t vl);
vuint16mf4_t vlse16_v_u16mf4 (const uint16_t *base, ptrdiff_t
    bstride, size_t vl);
vuint16mf2_t vlse16_v_u16mf2 (const uint16_t *base, ptrdiff_t
    bstride, size_t vl);
vuint16m1_t vlse16_v_u16m1 (const uint16_t *base, ptrdiff_t
    bstride, size_t vl);
vuint16m2_t vlse16_v_u16m2 (const uint16_t *base, ptrdiff_t
    bstride, size_t vl);
vuint16m4_t vlse16_v_u16m4 (const uint16_t *base, ptrdiff_t
    bstride, size_t vl);
vuint16m8_t vlse16_v_u16m8 (const uint16_t *base, ptrdiff_t
    bstride, size_t vl);
vuint32mf2_t vlse32_v_u32mf2 (const uint32_t *base, ptrdiff_t
    bstride, size_t vl);
vuint32m1_t vlse32_v_u32m1 (const uint32_t *base, ptrdiff_t
    bstride, size_t vl);
vuint32m2_t vlse32_v_u32m2 (const uint32_t *base, ptrdiff_t
    bstride, size_t vl);
vuint32m4_t vlse32_v_u32m4 (const uint32_t *base, ptrdiff_t
    bstride, size_t vl);
vuint32m8_t vlse32_v_u32m8 (const uint32_t *base, ptrdiff_t
    bstride, size_t vl);
vuint64m1_t vlse64_v_u64m1 (const uint64_t *base, ptrdiff_t
    bstride, size_t vl);
vuint64m2_t vlse64_v_u64m2 (const uint64_t *base, ptrdiff_t
    bstride, size_t vl);
vuint64m4_t vlse64_v_u64m4 (const uint64_t *base, ptrdiff_t
    bstride, size_t vl);
vuint64m8_t vlse64_v_u64m8 (const uint64_t *base, ptrdiff_t
    bstride, size_t vl);
vfloat16mf4_t vlse16_v_f16mf4 (const float16_t *base, ptrdiff_t
    bstride, size_t vl);
vfloat16mf2_t vlse16_v_f16mf2 (const float16_t *base, ptrdiff_t
    bstride, size_t vl);
```

```
vfloat16m1_t vlse16_v_f16m1 (const float16_t *base, ptrdiff_t
    bstride, size_t vl);
vfloat16m2_t vlse16_v_f16m2 (const float16_t *base, ptrdiff_t
    bstride, size_t vl);
vfloat16m4_t vlse16_v_f16m4 (const float16_t *base, ptrdiff_t
    bstride, size_t vl);
vfloat16m8_t vlse16_v_f16m8 (const float16_t *base, ptrdiff_t
    bstride, size_t vl);
vfloat32mf2_t vlse32_v_f32mf2 (const float32_t *base, ptrdiff_t
    bstride, size_t vl);
vfloat32m1_t vlse32_v_f32m1 (const float32_t *base, ptrdiff_t
    bstride, size_t vl);
vfloat32m2_t vlse32_v_f32m2 (const float32_t *base, ptrdiff_t
    bstride, size_t vl);
vfloat32m4_t vlse32_v_f32m4 (const float32_t *base, ptrdiff_t
    bstride, size_t vl);
vfloat32m8_t vlse32_v_f32m8 (const float32_t *base, ptrdiff_t
    bstride, size_t vl);
vfloat64m1_t vlse64_v_f64m1 (const float64_t *base, ptrdiff_t
    bstride, size_t vl);
vfloat64m2_t vlse64_v_f64m2 (const float64_t *base, ptrdiff_t
    bstride, size_t vl);
vfloat64m4_t vlse64_v_f64m4 (const float64_t *base, ptrdiff_t
    bstride, size_t vl);
vfloat64m8_t vlse64_v_f64m8 (const float64_t *base, ptrdiff_t
    bstride, size_t vl);
// masked functions
vint8mf8_t vlse8_v_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, const int8_t *base, ptrdiff_t bstride, size_t vl);
vint8mf4_t vlse8_v_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, const int8_t *base, ptrdiff_t bstride, size_t vl);
vint8mf2_t vlse8_v_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, const int8_t *base, ptrdiff_t bstride, size_t vl);
vint8m1_t vlse8_v_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    const int8_t *base, ptrdiff_t bstride, size_t vl);
vint8m2_t vlse8_v_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    const int8_t *base, ptrdiff_t bstride, size_t vl);
vint8m4_t vlse8_v_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    const int8_t *base, ptrdiff_t bstride, size_t vl);
vint8m8_t vlse8_v_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    const int8_t *base, ptrdiff_t bstride, size_t vl);
vint16mf4_t vlse16_v_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, const int16_t *base, ptrdiff_t bstride, size_t
    vl);
vint16mf2_t vlse16_v_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, const int16_t *base, ptrdiff_t bstride, size_t
```

```
          vl);
vint16m1_t vlse16_v_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, const int16_t *base, ptrdiff_t bstride, size_t
    vl);
vint16m2_t vlse16_v_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, const int16_t *base, ptrdiff_t bstride, size_t
    vl);
vint16m4_t vlse16_v_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, const int16_t *base, ptrdiff_t bstride, size_t
    vl);
vint16m8_t vlse16_v_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, const int16_t *base, ptrdiff_t bstride, size_t
    vl);
vint32mf2_t vlse32_v_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, const int32_t *base, ptrdiff_t bstride, size_t
    vl);
vint32m1_t vlse32_v_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, const int32_t *base, ptrdiff_t bstride, size_t
    vl);
vint32m2_t vlse32_v_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, const int32_t *base, ptrdiff_t bstride, size_t
    vl);
vint32m4_t vlse32_v_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, const int32_t *base, ptrdiff_t bstride, size_t
    vl);
vint32m8_t vlse32_v_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, const int32_t *base, ptrdiff_t bstride, size_t
    vl);
vint64m1_t vlse64_v_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, const int64_t *base, ptrdiff_t bstride, size_t
    vl);
vint64m2_t vlse64_v_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, const int64_t *base, ptrdiff_t bstride, size_t
    vl);
vint64m4_t vlse64_v_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, const int64_t *base, ptrdiff_t bstride, size_t
    vl);
vint64m8_t vlse64_v_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, const int64_t *base, ptrdiff_t bstride, size_t
    vl);
vuint8mf8_t vlse8_v_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, const uint8_t *base, ptrdiff_t bstride, size_t
    vl);
vuint8mf4_t vlse8_v_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, const uint8_t *base, ptrdiff_t bstride, size_t
    vl);
```

```
vuint8mf2_t vlse8_v_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, const uint8_t *base, ptrdiff_t bstride, size_t
    vl);
vuint8m1_t vlse8_v_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    const uint8_t *base, ptrdiff_t bstride, size_t vl);
vuint8m2_t vlse8_v_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    const uint8_t *base, ptrdiff_t bstride, size_t vl);
vuint8m4_t vlse8_v_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    const uint8_t *base, ptrdiff_t bstride, size_t vl);
vuint8m8_t vlse8_v_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    const uint8_t *base, ptrdiff_t bstride, size_t vl);
vuint16mf4_t vlse16_v_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, const uint16_t *base, ptrdiff_t bstride, size_t
    vl);
vuint16mf2_t vlse16_v_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, const uint16_t *base, ptrdiff_t bstride, size_t
    vl);
vuint16m1_t vlse16_v_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, const uint16_t *base, ptrdiff_t bstride, size_t
    vl);
vuint16m2_t vlse16_v_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, const uint16_t *base, ptrdiff_t bstride, size_t
    vl);
vuint16m4_t vlse16_v_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, const uint16_t *base, ptrdiff_t bstride, size_t
    vl);
vuint16m8_t vlse16_v_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, const uint16_t *base, ptrdiff_t bstride, size_t
    vl);
vuint32mf2_t vlse32_v_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, const uint32_t *base, ptrdiff_t bstride, size_t
    vl);
vuint32m1_t vlse32_v_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, const uint32_t *base, ptrdiff_t bstride, size_t
    vl);
vuint32m2_t vlse32_v_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, const uint32_t *base, ptrdiff_t bstride, size_t
    vl);
vuint32m4_t vlse32_v_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, const uint32_t *base, ptrdiff_t bstride, size_t
    vl);
vuint32m8_t vlse32_v_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, const uint32_t *base, ptrdiff_t bstride, size_t
    vl);
vuint64m1_t vlse64_v_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, const uint64_t *base, ptrdiff_t bstride, size_t
```

```
    vl);
vuint64m2_t vlse64_v_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, const uint64_t *base, ptrdiff_t bstride, size_t
    vl);
vuint64m4_t vlse64_v_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, const uint64_t *base, ptrdiff_t bstride, size_t
    vl);
vuint64m8_t vlse64_v_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, const uint64_t *base, ptrdiff_t bstride, size_t
    vl);
vfloat16mf4_t vlse16_v_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, const float16_t *base, ptrdiff_t bstride, size_t
    vl);
vfloat16mf2_t vlse16_v_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, const float16_t *base, ptrdiff_t bstride, size_t
    vl);
vfloat16m1_t vlse16_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, const float16_t *base, ptrdiff_t bstride, size_t
    vl);
vfloat16m2_t vlse16_v_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, const float16_t *base, ptrdiff_t bstride, size_t
    vl);
vfloat16m4_t vlse16_v_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, const float16_t *base, ptrdiff_t bstride, size_t
    vl);
vfloat16m8_t vlse16_v_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, const float16_t *base, ptrdiff_t bstride, size_t
    vl);
vfloat32mf2_t vlse32_v_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, const float32_t *base, ptrdiff_t bstride, size_t
    vl);
vfloat32m1_t vlse32_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, const float32_t *base, ptrdiff_t bstride, size_t
    vl);
vfloat32m2_t vlse32_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, const float32_t *base, ptrdiff_t bstride, size_t
    vl);
vfloat32m4_t vlse32_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, const float32_t *base, ptrdiff_t bstride, size_t
    vl);
vfloat32m8_t vlse32_v_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, const float32_t *base, ptrdiff_t bstride, size_t
    vl);
vfloat64m1_t vlse64_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, const float64_t *base, ptrdiff_t bstride, size_t
    vl);
```

```
vfloat64m2_t vlse64_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, const float64_t *base, ptrdiff_t bstride, size_t
    vl);
vfloat64m4_t vlse64_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, const float64_t *base, ptrdiff_t bstride, size_t
    vl);
vfloat64m8_t vlse64_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, const float64_t *base, ptrdiff_t bstride, size_t
    vl);
```

Vector Strided Store Functions:

Prototypes:

```
void vsse8_v_i8mf8 (int8_t *base, ptrdiff_t bstride, vint8mf8_t
    value, size_t vl);
void vsse8_v_i8mf4 (int8_t *base, ptrdiff_t bstride, vint8mf4_t
    value, size_t vl);
void vsse8_v_i8mf2 (int8_t *base, ptrdiff_t bstride, vint8mf2_t
    value, size_t vl);
void vsse8_v_i8m1 (int8_t *base, ptrdiff_t bstride, vint8m1_t
    value, size_t vl);
void vsse8_v_i8m2 (int8_t *base, ptrdiff_t bstride, vint8m2_t
    value, size_t vl);
void vsse8_v_i8m4 (int8_t *base, ptrdiff_t bstride, vint8m4_t
    value, size_t vl);
void vsse8_v_i8m8 (int8_t *base, ptrdiff_t bstride, vint8m8_t
    value, size_t vl);
void vsse16_v_i16mf4 (int16_t *base, ptrdiff_t bstride,
    vint16mf4_t value, size_t vl);
void vsse16_v_i16mf2 (int16_t *base, ptrdiff_t bstride,
    vint16mf2_t value, size_t vl);
void vsse16_v_i16m1 (int16_t *base, ptrdiff_t bstride,
    vint16m1_t value, size_t vl);
void vsse16_v_i16m2 (int16_t *base, ptrdiff_t bstride,
    vint16m2_t value, size_t vl);
void vsse16_v_i16m4 (int16_t *base, ptrdiff_t bstride,
    vint16m4_t value, size_t vl);
void vsse16_v_i16m8 (int16_t *base, ptrdiff_t bstride,
    vint16m8_t value, size_t vl);
void vsse32_v_i32mf2 (int32_t *base, ptrdiff_t bstride,
    vint32mf2_t value, size_t vl);
void vsse32_v_i32m1 (int32_t *base, ptrdiff_t bstride,
    vint32m1_t value, size_t vl);
void vsse32_v_i32m2 (int32_t *base, ptrdiff_t bstride,
    vint32m2_t value, size_t vl);
```

```
void vsse32_v_i32m4 (int32_t *base, ptrdiff_t bstride,
    vint32m4_t value, size_t vl);
void vsse32_v_i32m8 (int32_t *base, ptrdiff_t bstride,
    vint32m8_t value, size_t vl);
void vsse64_v_i64m1 (int64_t *base, ptrdiff_t bstride,
    vint64m1_t value, size_t vl);
void vsse64_v_i64m2 (int64_t *base, ptrdiff_t bstride,
    vint64m2_t value, size_t vl);
void vsse64_v_i64m4 (int64_t *base, ptrdiff_t bstride,
    vint64m4_t value, size_t vl);
void vsse64_v_i64m8 (int64_t *base, ptrdiff_t bstride,
    vint64m8_t value, size_t vl);
void vsse8_v_u8mf8 (uint8_t *base, ptrdiff_t bstride,
    vuint8mf8_t value, size_t vl);
void vsse8_v_u8mf4 (uint8_t *base, ptrdiff_t bstride,
    vuint8mf4_t value, size_t vl);
void vsse8_v_u8mf2 (uint8_t *base, ptrdiff_t bstride,
    vuint8mf2_t value, size_t vl);
void vsse8_v_u8m1 (uint8_t *base, ptrdiff_t bstride, vuint8m1_t
    value, size_t vl);
void vsse8_v_u8m2 (uint8_t *base, ptrdiff_t bstride, vuint8m2_t
    value, size_t vl);
void vsse8_v_u8m4 (uint8_t *base, ptrdiff_t bstride, vuint8m4_t
    value, size_t vl);
void vsse8_v_u8m8 (uint8_t *base, ptrdiff_t bstride, vuint8m8_t
    value, size_t vl);
void vsse16_v_u16mf4 (uint16_t *base, ptrdiff_t bstride,
    vuint16mf4_t value, size_t vl);
void vsse16_v_u16mf2 (uint16_t *base, ptrdiff_t bstride,
    vuint16mf2_t value, size_t vl);
void vsse16_v_u16m1 (uint16_t *base, ptrdiff_t bstride,
    vuint16m1_t value, size_t vl);
void vsse16_v_u16m2 (uint16_t *base, ptrdiff_t bstride,
    vuint16m2_t value, size_t vl);
void vsse16_v_u16m4 (uint16_t *base, ptrdiff_t bstride,
    vuint16m4_t value, size_t vl);
void vsse16_v_u16m8 (uint16_t *base, ptrdiff_t bstride,
    vuint16m8_t value, size_t vl);
void vsse32_v_u32mf2 (uint32_t *base, ptrdiff_t bstride,
    vuint32mf2_t value, size_t vl);
void vsse32_v_u32m1 (uint32_t *base, ptrdiff_t bstride,
    vuint32m1_t value, size_t vl);
void vsse32_v_u32m2 (uint32_t *base, ptrdiff_t bstride,
    vuint32m2_t value, size_t vl);
void vsse32_v_u32m4 (uint32_t *base, ptrdiff_t bstride,
    vuint32m4_t value, size_t vl);
```

```
void vsse32_v_u32m8 (uint32_t *base, ptrdiff_t bstride,
    vuint32m8_t value, size_t vl);
void vsse64_v_u64m1 (uint64_t *base, ptrdiff_t bstride,
    vuint64m1_t value, size_t vl);
void vsse64_v_u64m2 (uint64_t *base, ptrdiff_t bstride,
    vuint64m2_t value, size_t vl);
void vsse64_v_u64m4 (uint64_t *base, ptrdiff_t bstride,
    vuint64m4_t value, size_t vl);
void vsse64_v_u64m8 (uint64_t *base, ptrdiff_t bstride,
    vuint64m8_t value, size_t vl);
void vsse16_v_f16mf4 (float16_t *base, ptrdiff_t bstride,
    vfloat16mf4_t value, size_t vl);
void vsse16_v_f16mf2 (float16_t *base, ptrdiff_t bstride,
    vfloat16mf2_t value, size_t vl);
void vsse16_v_f16m1 (float16_t *base, ptrdiff_t bstride,
    vfloat16m1_t value, size_t vl);
void vsse16_v_f16m2 (float16_t *base, ptrdiff_t bstride,
    vfloat16m2_t value, size_t vl);
void vsse16_v_f16m4 (float16_t *base, ptrdiff_t bstride,
    vfloat16m4_t value, size_t vl);
void vsse16_v_f16m8 (float16_t *base, ptrdiff_t bstride,
    vfloat16m8_t value, size_t vl);
void vsse32_v_f32mf2 (float32_t *base, ptrdiff_t bstride,
    vfloat32mf2_t value, size_t vl);
void vsse32_v_f32m1 (float32_t *base, ptrdiff_t bstride,
    vfloat32m1_t value, size_t vl);
void vsse32_v_f32m2 (float32_t *base, ptrdiff_t bstride,
    vfloat32m2_t value, size_t vl);
void vsse32_v_f32m4 (float32_t *base, ptrdiff_t bstride,
    vfloat32m4_t value, size_t vl);
void vsse32_v_f32m8 (float32_t *base, ptrdiff_t bstride,
    vfloat32m8_t value, size_t vl);
void vsse64_v_f64m1 (float64_t *base, ptrdiff_t bstride,
    vfloat64m1_t value, size_t vl);
void vsse64_v_f64m2 (float64_t *base, ptrdiff_t bstride,
    vfloat64m2_t value, size_t vl);
void vsse64_v_f64m4 (float64_t *base, ptrdiff_t bstride,
    vfloat64m4_t value, size_t vl);
void vsse64_v_f64m8 (float64_t *base, ptrdiff_t bstride,
    vfloat64m8_t value, size_t vl);
// masked functions
void vsse8_v_i8mf8_m (vbool64_t mask, int8_t *base, ptrdiff_t
    bstride, vint8mf8_t value, size_t vl);
void vsse8_v_i8mf4_m (vbool32_t mask, int8_t *base, ptrdiff_t
    bstride, vint8mf4_t value, size_t vl);
```

```
void vsse8_v_i8mf2_m (vbool16_t mask, int8_t *base, ptrdiff_t
    bstride, vint8mf2_t value, size_t vl);
void vsse8_v_i8m1_m (vbool8_t mask, int8_t *base, ptrdiff_t
    bstride, vint8m1_t value, size_t vl);
void vsse8_v_i8m2_m (vbool4_t mask, int8_t *base, ptrdiff_t
    bstride, vint8m2_t value, size_t vl);
void vsse8_v_i8m4_m (vbool2_t mask, int8_t *base, ptrdiff_t
    bstride, vint8m4_t value, size_t vl);
void vsse8_v_i8m8_m (vbool1_t mask, int8_t *base, ptrdiff_t
    bstride, vint8m8_t value, size_t vl);
void vsse16_v_i16mf4_m (vbool64_t mask, int16_t *base, ptrdiff_t
    bstride, vint16mf4_t value, size_t vl);
void vsse16_v_i16mf2_m (vbool32_t mask, int16_t *base, ptrdiff_t
    bstride, vint16mf2_t value, size_t vl);
void vsse16_v_i16m1_m (vbool16_t mask, int16_t *base, ptrdiff_t
    bstride, vint16m1_t value, size_t vl);
void vsse16_v_i16m2_m (vbool8_t mask, int16_t *base, ptrdiff_t
    bstride, vint16m2_t value, size_t vl);
void vsse16_v_i16m4_m (vbool4_t mask, int16_t *base, ptrdiff_t
    bstride, vint16m4_t value, size_t vl);
void vsse16_v_i16m8_m (vbool2_t mask, int16_t *base, ptrdiff_t
    bstride, vint16m8_t value, size_t vl);
void vsse32_v_i32mf2_m (vbool64_t mask, int32_t *base, ptrdiff_t
    bstride, vint32mf2_t value, size_t vl);
void vsse32_v_i32m1_m (vbool32_t mask, int32_t *base, ptrdiff_t
    bstride, vint32m1_t value, size_t vl);
void vsse32_v_i32m2_m (vbool16_t mask, int32_t *base, ptrdiff_t
    bstride, vint32m2_t value, size_t vl);
void vsse32_v_i32m4_m (vbool8_t mask, int32_t *base, ptrdiff_t
    bstride, vint32m4_t value, size_t vl);
void vsse32_v_i32m8_m (vbool4_t mask, int32_t *base, ptrdiff_t
    bstride, vint32m8_t value, size_t vl);
void vsse64_v_i64m1_m (vbool64_t mask, int64_t *base, ptrdiff_t
    bstride, vint64m1_t value, size_t vl);
void vsse64_v_i64m2_m (vbool32_t mask, int64_t *base, ptrdiff_t
    bstride, vint64m2_t value, size_t vl);
void vsse64_v_i64m4_m (vbool16_t mask, int64_t *base, ptrdiff_t
    bstride, vint64m4_t value, size_t vl);
void vsse64_v_i64m8_m (vbool8_t mask, int64_t *base, ptrdiff_t
    bstride, vint64m8_t value, size_t vl);
void vsse8_v_u8mf8_m (vbool64_t mask, uint8_t *base, ptrdiff_t
    bstride, vuint8mf8_t value, size_t vl);
void vsse8_v_u8mf4_m (vbool32_t mask, uint8_t *base, ptrdiff_t
    bstride, vuint8mf4_t value, size_t vl);
void vsse8_v_u8mf2_m (vbool16_t mask, uint8_t *base, ptrdiff_t
    bstride, vuint8mf2_t value, size_t vl);
```

```
void vsse8_v_u8m1_m (vbool8_t mask, uint8_t *base, ptrdiff_t
    bstride, vuint8m1_t value, size_t vl);
void vsse8_v_u8m2_m (vbool4_t mask, uint8_t *base, ptrdiff_t
    bstride, vuint8m2_t value, size_t vl);
void vsse8_v_u8m4_m (vbool2_t mask, uint8_t *base, ptrdiff_t
    bstride, vuint8m4_t value, size_t vl);
void vsse8_v_u8m8_m (vbool1_t mask, uint8_t *base, ptrdiff_t
    bstride, vuint8m8_t value, size_t vl);
void vsse16_v_u16mf4_m (vbool64_t mask, uint16_t *base,
    ptrdiff_t bstride, vuint16mf4_t value, size_t vl);
void vsse16_v_u16mf2_m (vbool32_t mask, uint16_t *base,
    ptrdiff_t bstride, vuint16mf2_t value, size_t vl);
void vsse16_v_u16m1_m (vbool16_t mask, uint16_t *base, ptrdiff_t
    bstride, vuint16m1_t value, size_t vl);
void vsse16_v_u16m2_m (vbool8_t mask, uint16_t *base, ptrdiff_t
    bstride, vuint16m2_t value, size_t vl);
void vsse16_v_u16m4_m (vbool4_t mask, uint16_t *base, ptrdiff_t
    bstride, vuint16m4_t value, size_t vl);
void vsse16_v_u16m8_m (vbool2_t mask, uint16_t *base, ptrdiff_t
    bstride, vuint16m8_t value, size_t vl);
void vsse32_v_u32mf2_m (vbool64_t mask, uint32_t *base,
    ptrdiff_t bstride, vuint32mf2_t value, size_t vl);
void vsse32_v_u32m1_m (vbool32_t mask, uint32_t *base, ptrdiff_t
    bstride, vuint32m1_t value, size_t vl);
void vsse32_v_u32m2_m (vbool16_t mask, uint32_t *base, ptrdiff_t
    bstride, vuint32m2_t value, size_t vl);
void vsse32_v_u32m4_m (vbool8_t mask, uint32_t *base, ptrdiff_t
    bstride, vuint32m4_t value, size_t vl);
void vsse32_v_u32m8_m (vbool4_t mask, uint32_t *base, ptrdiff_t
    bstride, vuint32m8_t value, size_t vl);
void vsse64_v_u64m1_m (vbool64_t mask, uint64_t *base, ptrdiff_t
    bstride, vuint64m1_t value, size_t vl);
void vsse64_v_u64m2_m (vbool32_t mask, uint64_t *base, ptrdiff_t
    bstride, vuint64m2_t value, size_t vl);
void vsse64_v_u64m4_m (vbool16_t mask, uint64_t *base, ptrdiff_t
    bstride, vuint64m4_t value, size_t vl);
void vsse64_v_u64m8_m (vbool8_t mask, uint64_t *base, ptrdiff_t
    bstride, vuint64m8_t value, size_t vl);
void vsse16_v_f16mf4_m (vbool64_t mask, float16_t *base,
    ptrdiff_t bstride, vfloat16mf4_t value, size_t vl);
void vsse16_v_f16mf2_m (vbool32_t mask, float16_t *base,
    ptrdiff_t bstride, vfloat16mf2_t value, size_t vl);
void vsse16_v_f16m1_m (vbool16_t mask, float16_t *base,
    ptrdiff_t bstride, vfloat16m1_t value, size_t vl);
void vsse16_v_f16m2_m (vbool8_t mask, float16_t *base, ptrdiff_t
    bstride, vfloat16m2_t value, size_t vl);
```

```
void vsse16_v_f16m4_m (vbool4_t mask, float16_t *base, ptrdiff_t
    bstride, vfloat16m4_t value, size_t vl);
void vsse16_v_f16m8_m (vbool2_t mask, float16_t *base, ptrdiff_t
    bstride, vfloat16m8_t value, size_t vl);
void vsse32_v_f32mf2_m (vbool64_t mask, float32_t *base,
    ptrdiff_t bstride, vfloat32mf2_t value, size_t vl);
void vsse32_v_f32m1_m (vbool32_t mask, float32_t *base,
    ptrdiff_t bstride, vfloat32m1_t value, size_t vl);
void vsse32_v_f32m2_m (vbool16_t mask, float32_t *base,
    ptrdiff_t bstride, vfloat32m2_t value, size_t vl);
void vsse32_v_f32m4_m (vbool8_t mask, float32_t *base, ptrdiff_t
    bstride, vfloat32m4_t value, size_t vl);
void vsse32_v_f32m8_m (vbool4_t mask, float32_t *base, ptrdiff_t
    bstride, vfloat32m8_t value, size_t vl);
void vsse64_v_f64m1_m (vbool64_t mask, float64_t *base,
    ptrdiff_t bstride, vfloat64m1_t value, size_t vl);
void vsse64_v_f64m2_m (vbool32_t mask, float64_t *base,
    ptrdiff_t bstride, vfloat64m2_t value, size_t vl);
void vsse64_v_f64m4_m (vbool16_t mask, float64_t *base,
    ptrdiff_t bstride, vfloat64m4_t value, size_t vl);
void vsse64_v_f64m8_m (vbool8_t mask, float64_t *base, ptrdiff_t
    bstride, vfloat64m8_t value, size_t vl);
```

Vector Indexed Load Functions:

Prototypes:

```
vint8mf8_t vloxei8_v_i8mf8 (const int8_t *base, vuint8mf8_t
    bindex, size_t vl);
vint8mf4_t vloxei8_v_i8mf4 (const int8_t *base, vuint8mf4_t
    bindex, size_t vl);
vint8mf2_t vloxei8_v_i8mf2 (const int8_t *base, vuint8mf2_t
    bindex, size_t vl);
vint8m1_t vloxei8_v_i8m1 (const int8_t *base, vuint8m1_t bindex,
    size_t vl);
vint8m2_t vloxei8_v_i8m2 (const int8_t *base, vuint8m2_t bindex,
    size_t vl);
vint8m4_t vloxei8_v_i8m4 (const int8_t *base, vuint8m4_t bindex,
    size_t vl);
vint8m8_t vloxei8_v_i8m8 (const int8_t *base, vuint8m8_t bindex,
    size_t vl);
vint8mf8_t vloxei16_v_i8mf8 (const int8_t *base, vuint16mf4_t
    bindex, size_t vl);
vint8mf4_t vloxei16_v_i8mf4 (const int8_t *base, vuint16mf2_t
    bindex, size_t vl);
```

```
vint8mf2_t vloxei16_v_i8mf2 (const int8_t *base, vuint16m1_t
    bindex, size_t vl);
vint8m1_t vloxei16_v_i8m1 (const int8_t *base, vuint16m2_t
    bindex, size_t vl);
vint8m2_t vloxei16_v_i8m2 (const int8_t *base, vuint16m4_t
    bindex, size_t vl);
vint8m4_t vloxei16_v_i8m4 (const int8_t *base, vuint16m8_t
    bindex, size_t vl);
vint8mf8_t vloxei32_v_i8mf8 (const int8_t *base, vuint32mf2_t
    bindex, size_t vl);
vint8mf4_t vloxei32_v_i8mf4 (const int8_t *base, vuint32m1_t
    bindex, size_t vl);
vint8mf2_t vloxei32_v_i8mf2 (const int8_t *base, vuint32m2_t
    bindex, size_t vl);
vint8m1_t vloxei32_v_i8m1 (const int8_t *base, vuint32m4_t
    bindex, size_t vl);
vint8m2_t vloxei32_v_i8m2 (const int8_t *base, vuint32m8_t
    bindex, size_t vl);
vint8mf8_t vloxei64_v_i8mf8 (const int8_t *base, vuint64m1_t
    bindex, size_t vl);
vint8mf4_t vloxei64_v_i8mf4 (const int8_t *base, vuint64m2_t
    bindex, size_t vl);
vint8mf2_t vloxei64_v_i8mf2 (const int8_t *base, vuint64m4_t
    bindex, size_t vl);
vint8m1_t vloxei64_v_i8m1 (const int8_t *base, vuint64m8_t
    bindex, size_t vl);
vint16mf4_t vloxei8_v_i16mf4 (const int16_t *base, vuint8mf8_t
    bindex, size_t vl);
vint16mf2_t vloxei8_v_i16mf2 (const int16_t *base, vuint8mf4_t
    bindex, size_t vl);
vint16m1_t vloxei8_v_i16m1 (const int16_t *base, vuint8mf2_t
    bindex, size_t vl);
vint16m2_t vloxei8_v_i16m2 (const int16_t *base, vuint8m1_t
    bindex, size_t vl);
vint16m4_t vloxei8_v_i16m4 (const int16_t *base, vuint8m2_t
    bindex, size_t vl);
vint16m8_t vloxei8_v_i16m8 (const int16_t *base, vuint8m4_t
    bindex, size_t vl);
vint16mf4_t vloxei16_v_i16mf4 (const int16_t *base, vuint16mf4_t
    bindex, size_t vl);
vint16mf2_t vloxei16_v_i16mf2 (const int16_t *base, vuint16mf2_t
    bindex, size_t vl);
vint16m1_t vloxei16_v_i16m1 (const int16_t *base, vuint16m1_t
    bindex, size_t vl);
vint16m2_t vloxei16_v_i16m2 (const int16_t *base, vuint16m2_t
    bindex, size_t vl);
```

```
vint16m4_t vloxei16_v_i16m4 (const int16_t *base, vuint16m4_t
    bindex, size_t vl);
vint16m8_t vloxei16_v_i16m8 (const int16_t *base, vuint16m8_t
    bindex, size_t vl);
vint16mf4_t vloxei32_v_i16mf4 (const int16_t *base, vuint32mf2_t
    bindex, size_t vl);
vint16mf2_t vloxei32_v_i16mf2 (const int16_t *base, vuint32m1_t
    bindex, size_t vl);
vint16m1_t vloxei32_v_i16m1 (const int16_t *base, vuint32m2_t
    bindex, size_t vl);
vint16m2_t vloxei32_v_i16m2 (const int16_t *base, vuint32m4_t
    bindex, size_t vl);
vint16m4_t vloxei32_v_i16m4 (const int16_t *base, vuint32m8_t
    bindex, size_t vl);
vint16mf4_t vloxei64_v_i16mf4 (const int16_t *base, vuint64m1_t
    bindex, size_t vl);
vint16mf2_t vloxei64_v_i16mf2 (const int16_t *base, vuint64m2_t
    bindex, size_t vl);
vint16m1_t vloxei64_v_i16m1 (const int16_t *base, vuint64m4_t
    bindex, size_t vl);
vint16m2_t vloxei64_v_i16m2 (const int16_t *base, vuint64m8_t
    bindex, size_t vl);
vint32mf2_t vloxei8_v_i32mf2 (const int32_t *base, vuint8mf8_t
    bindex, size_t vl);
vint32m1_t vloxei8_v_i32m1 (const int32_t *base, vuint8mf4_t
    bindex, size_t vl);
vint32m2_t vloxei8_v_i32m2 (const int32_t *base, vuint8mf2_t
    bindex, size_t vl);
vint32m4_t vloxei8_v_i32m4 (const int32_t *base, vuint8m1_t
    bindex, size_t vl);
vint32m8_t vloxei8_v_i32m8 (const int32_t *base, vuint8m2_t
    bindex, size_t vl);
vint32mf2_t vloxei16_v_i32mf2 (const int32_t *base, vuint16mf4_t
    bindex, size_t vl);
vint32m1_t vloxei16_v_i32m1 (const int32_t *base, vuint16mf2_t
    bindex, size_t vl);
vint32m2_t vloxei16_v_i32m2 (const int32_t *base, vuint16m1_t
    bindex, size_t vl);
vint32m4_t vloxei16_v_i32m4 (const int32_t *base, vuint16m2_t
    bindex, size_t vl);
vint32m8_t vloxei16_v_i32m8 (const int32_t *base, vuint16m4_t
    bindex, size_t vl);
vint32mf2_t vloxei32_v_i32mf2 (const int32_t *base, vuint32mf2_t
    bindex, size_t vl);
vint32m1_t vloxei32_v_i32m1 (const int32_t *base, vuint32m1_t
    bindex, size_t vl);
```

```
vint32m2_t vloxei32_v_i32m2 (const int32_t *base, vuint32m2_t
    bindex, size_t vl);
vint32m4_t vloxei32_v_i32m4 (const int32_t *base, vuint32m4_t
    bindex, size_t vl);
vint32m8_t vloxei32_v_i32m8 (const int32_t *base, vuint32m8_t
    bindex, size_t vl);
vint32mf2_t vloxei64_v_i32mf2 (const int32_t *base, vuint64m1_t
    bindex, size_t vl);
vint32m1_t vloxei64_v_i32m1 (const int32_t *base, vuint64m2_t
    bindex, size_t vl);
vint32m2_t vloxei64_v_i32m2 (const int32_t *base, vuint64m4_t
    bindex, size_t vl);
vint32m4_t vloxei64_v_i32m4 (const int32_t *base, vuint64m8_t
    bindex, size_t vl);
vint64m1_t vloxei8_v_i64m1 (const int64_t *base, vuint8mf8_t
    bindex, size_t vl);
vint64m2_t vloxei8_v_i64m2 (const int64_t *base, vuint8mf4_t
    bindex, size_t vl);
vint64m4_t vloxei8_v_i64m4 (const int64_t *base, vuint8mf2_t
    bindex, size_t vl);
vint64m8_t vloxei8_v_i64m8 (const int64_t *base, vuint8m1_t
    bindex, size_t vl);
vint64m1_t vloxei16_v_i64m1 (const int64_t *base, vuint16mf4_t
    bindex, size_t vl);
vint64m2_t vloxei16_v_i64m2 (const int64_t *base, vuint16mf2_t
    bindex, size_t vl);
vint64m4_t vloxei16_v_i64m4 (const int64_t *base, vuint16m1_t
    bindex, size_t vl);
vint64m8_t vloxei16_v_i64m8 (const int64_t *base, vuint16m2_t
    bindex, size_t vl);
vint64m1_t vloxei32_v_i64m1 (const int64_t *base, vuint32mf2_t
    bindex, size_t vl);
vint64m2_t vloxei32_v_i64m2 (const int64_t *base, vuint32m1_t
    bindex, size_t vl);
vint64m4_t vloxei32_v_i64m4 (const int64_t *base, vuint32m2_t
    bindex, size_t vl);
vint64m8_t vloxei32_v_i64m8 (const int64_t *base, vuint32m4_t
    bindex, size_t vl);
vint64m1_t vloxei64_v_i64m1 (const int64_t *base, vuint64m1_t
    bindex, size_t vl);
vint64m2_t vloxei64_v_i64m2 (const int64_t *base, vuint64m2_t
    bindex, size_t vl);
vint64m4_t vloxei64_v_i64m4 (const int64_t *base, vuint64m4_t
    bindex, size_t vl);
vint64m8_t vloxei64_v_i64m8 (const int64_t *base, vuint64m8_t
    bindex, size_t vl);
```

```
vuint8mf8_t vloxei8_v_u8mf8 (const uint8_t *base, vuint8mf8_t
    bindex, size_t vl);
vuint8mf4_t vloxei8_v_u8mf4 (const uint8_t *base, vuint8mf4_t
    bindex, size_t vl);
vuint8mf2_t vloxei8_v_u8mf2 (const uint8_t *base, vuint8mf2_t
    bindex, size_t vl);
vuint8m1_t vloxei8_v_u8m1 (const uint8_t *base, vuint8m1_t
    bindex, size_t vl);
vuint8m2_t vloxei8_v_u8m2 (const uint8_t *base, vuint8m2_t
    bindex, size_t vl);
vuint8m4_t vloxei8_v_u8m4 (const uint8_t *base, vuint8m4_t
    bindex, size_t vl);
vuint8m8_t vloxei8_v_u8m8 (const uint8_t *base, vuint8m8_t
    bindex, size_t vl);
vuint8mf8_t vloxei16_v_u8mf8 (const uint8_t *base, vuint16mf4_t
    bindex, size_t vl);
vuint8mf4_t vloxei16_v_u8mf4 (const uint8_t *base, vuint16mf2_t
    bindex, size_t vl);
vuint8mf2_t vloxei16_v_u8mf2 (const uint8_t *base, vuint16m1_t
    bindex, size_t vl);
vuint8m1_t vloxei16_v_u8m1 (const uint8_t *base, vuint16m2_t
    bindex, size_t vl);
vuint8m2_t vloxei16_v_u8m2 (const uint8_t *base, vuint16m4_t
    bindex, size_t vl);
vuint8m4_t vloxei16_v_u8m4 (const uint8_t *base, vuint16m8_t
    bindex, size_t vl);
vuint8mf8_t vloxei32_v_u8mf8 (const uint8_t *base, vuint32mf2_t
    bindex, size_t vl);
vuint8mf4_t vloxei32_v_u8mf4 (const uint8_t *base, vuint32m1_t
    bindex, size_t vl);
vuint8mf2_t vloxei32_v_u8mf2 (const uint8_t *base, vuint32m2_t
    bindex, size_t vl);
vuint8m1_t vloxei32_v_u8m1 (const uint8_t *base, vuint32m4_t
    bindex, size_t vl);
vuint8m2_t vloxei32_v_u8m2 (const uint8_t *base, vuint32m8_t
    bindex, size_t vl);
vuint8mf8_t vloxei64_v_u8mf8 (const uint8_t *base, vuint64m1_t
    bindex, size_t vl);
vuint8mf4_t vloxei64_v_u8mf4 (const uint8_t *base, vuint64m2_t
    bindex, size_t vl);
vuint8mf2_t vloxei64_v_u8mf2 (const uint8_t *base, vuint64m4_t
    bindex, size_t vl);
vuint8m1_t vloxei64_v_u8m1 (const uint8_t *base, vuint64m8_t
    bindex, size_t vl);
vuint16mf4_t vloxei8_v_u16mf4 (const uint16_t *base, vuint8mf8_t
    bindex, size_t vl);
```

```
vuint16mf2_t vloxei8_v_u16mf2 (const uint16_t *base, vuint8mf4_t
    bindex, size_t vl);
vuint16m1_t vloxei8_v_u16m1 (const uint16_t *base, vuint8mf2_t
    bindex, size_t vl);
vuint16m2_t vloxei8_v_u16m2 (const uint16_t *base, vuint8m1_t
    bindex, size_t vl);
vuint16m4_t vloxei8_v_u16m4 (const uint16_t *base, vuint8m2_t
    bindex, size_t vl);
vuint16m8_t vloxei8_v_u16m8 (const uint16_t *base, vuint8m4_t
    bindex, size_t vl);
vuint16mf4_t vloxei16_v_u16mf4 (const uint16_t *base,
    vuint16mf4_t bindex, size_t vl);
vuint16mf2_t vloxei16_v_u16mf2 (const uint16_t *base,
    vuint16mf2_t bindex, size_t vl);
vuint16m1_t vloxei16_v_u16m1 (const uint16_t *base, vuint16m1_t
    bindex, size_t vl);
vuint16m2_t vloxei16_v_u16m2 (const uint16_t *base, vuint16m2_t
    bindex, size_t vl);
vuint16m4_t vloxei16_v_u16m4 (const uint16_t *base, vuint16m4_t
    bindex, size_t vl);
vuint16m8_t vloxei16_v_u16m8 (const uint16_t *base, vuint16m8_t
    bindex, size_t vl);
vuint16mf4_t vloxei32_v_u16mf4 (const uint16_t *base,
    vuint32mf2_t bindex, size_t vl);
vuint16mf2_t vloxei32_v_u16mf2 (const uint16_t *base,
    vuint32m1_t bindex, size_t vl);
vuint16m1_t vloxei32_v_u16m1 (const uint16_t *base, vuint32m2_t
    bindex, size_t vl);
vuint16m2_t vloxei32_v_u16m2 (const uint16_t *base, vuint32m4_t
    bindex, size_t vl);
vuint16m4_t vloxei32_v_u16m4 (const uint16_t *base, vuint32m8_t
    bindex, size_t vl);
vuint16mf4_t vloxei64_v_u16mf4 (const uint16_t *base,
    vuint64m1_t bindex, size_t vl);
vuint16mf2_t vloxei64_v_u16mf2 (const uint16_t *base,
    vuint64m2_t bindex, size_t vl);
vuint16m1_t vloxei64_v_u16m1 (const uint16_t *base, vuint64m4_t
    bindex, size_t vl);
vuint16m2_t vloxei64_v_u16m2 (const uint16_t *base, vuint64m8_t
    bindex, size_t vl);
vuint32mf2_t vloxei8_v_u32mf2 (const uint32_t *base, vuint8mf8_t
    bindex, size_t vl);
vuint32m1_t vloxei8_v_u32m1 (const uint32_t *base, vuint8mf4_t
    bindex, size_t vl);
vuint32m2_t vloxei8_v_u32m2 (const uint32_t *base, vuint8mf2_t
    bindex, size_t vl);
```

```
vuint32m4_t vloxei8_v_u32m4 (const uint32_t *base, vuint8m1_t
    bindex, size_t vl);
vuint32m8_t vloxei8_v_u32m8 (const uint32_t *base, vuint8m2_t
    bindex, size_t vl);
vuint32mf2_t vloxei16_v_u32mf2 (const uint32_t *base,
    vuint16mf4_t bindex, size_t vl);
vuint32m1_t vloxei16_v_u32m1 (const uint32_t *base, vuint16mf2_t
    bindex, size_t vl);
vuint32m2_t vloxei16_v_u32m2 (const uint32_t *base, vuint16m1_t
    bindex, size_t vl);
vuint32m4_t vloxei16_v_u32m4 (const uint32_t *base, vuint16m2_t
    bindex, size_t vl);
vuint32m8_t vloxei16_v_u32m8 (const uint32_t *base, vuint16m4_t
    bindex, size_t vl);
vuint32mf2_t vloxei32_v_u32mf2 (const uint32_t *base,
    vuint32mf2_t bindex, size_t vl);
vuint32m1_t vloxei32_v_u32m1 (const uint32_t *base, vuint32m1_t
    bindex, size_t vl);
vuint32m2_t vloxei32_v_u32m2 (const uint32_t *base, vuint32m2_t
    bindex, size_t vl);
vuint32m4_t vloxei32_v_u32m4 (const uint32_t *base, vuint32m4_t
    bindex, size_t vl);
vuint32m8_t vloxei32_v_u32m8 (const uint32_t *base, vuint32m8_t
    bindex, size_t vl);
vuint32mf2_t vloxei64_v_u32mf2 (const uint32_t *base,
    vuint64m1_t bindex, size_t vl);
vuint32m1_t vloxei64_v_u32m1 (const uint32_t *base, vuint64m2_t
    bindex, size_t vl);
vuint32m2_t vloxei64_v_u32m2 (const uint32_t *base, vuint64m4_t
    bindex, size_t vl);
vuint32m4_t vloxei64_v_u32m4 (const uint32_t *base, vuint64m8_t
    bindex, size_t vl);
vuint64m1_t vloxei8_v_u64m1 (const uint64_t *base, vuint8mf8_t
    bindex, size_t vl);
vuint64m2_t vloxei8_v_u64m2 (const uint64_t *base, vuint8mf4_t
    bindex, size_t vl);
vuint64m4_t vloxei8_v_u64m4 (const uint64_t *base, vuint8mf2_t
    bindex, size_t vl);
vuint64m8_t vloxei8_v_u64m8 (const uint64_t *base, vuint8m1_t
    bindex, size_t vl);
vuint64m1_t vloxei16_v_u64m1 (const uint64_t *base, vuint16mf4_t
    bindex, size_t vl);
vuint64m2_t vloxei16_v_u64m2 (const uint64_t *base, vuint16mf2_t
    bindex, size_t vl);
vuint64m4_t vloxei16_v_u64m4 (const uint64_t *base, vuint16m1_t
    bindex, size_t vl);
```

```
vuint64m8_t vloxei16_v_u64m8 (const uint64_t *base, vuint16m2_t
    bindex, size_t vl);
vuint64m1_t vloxei32_v_u64m1 (const uint64_t *base, vuint32mf2_t
    bindex, size_t vl);
vuint64m2_t vloxei32_v_u64m2 (const uint64_t *base, vuint32m1_t
    bindex, size_t vl);
vuint64m4_t vloxei32_v_u64m4 (const uint64_t *base, vuint32m2_t
    bindex, size_t vl);
vuint64m8_t vloxei32_v_u64m8 (const uint64_t *base, vuint32m4_t
    bindex, size_t vl);
vuint64m1_t vloxei64_v_u64m1 (const uint64_t *base, vuint64m1_t
    bindex, size_t vl);
vuint64m2_t vloxei64_v_u64m2 (const uint64_t *base, vuint64m2_t
    bindex, size_t vl);
vuint64m4_t vloxei64_v_u64m4 (const uint64_t *base, vuint64m4_t
    bindex, size_t vl);
vuint64m8_t vloxei64_v_u64m8 (const uint64_t *base, vuint64m8_t
    bindex, size_t vl);
vfloat16mf4_t vloxei8_v_f16mf4 (const float16_t *base,
    vuint8mf8_t bindex, size_t vl);
vfloat16mf2_t vloxei8_v_f16mf2 (const float16_t *base,
    vuint8mf4_t bindex, size_t vl);
vfloat16m1_t vloxei8_v_f16m1 (const float16_t *base, vuint8mf2_t
    bindex, size_t vl);
vfloat16m2_t vloxei8_v_f16m2 (const float16_t *base, vuint8m1_t
    bindex, size_t vl);
vfloat16m4_t vloxei8_v_f16m4 (const float16_t *base, vuint8m2_t
    bindex, size_t vl);
vfloat16m8_t vloxei8_v_f16m8 (const float16_t *base, vuint8m4_t
    bindex, size_t vl);
vfloat16mf4_t vloxei16_v_f16mf4 (const float16_t *base,
    vuint16mf4_t bindex, size_t vl);
vfloat16mf2_t vloxei16_v_f16mf2 (const float16_t *base,
    vuint16mf2_t bindex, size_t vl);
vfloat16m1_t vloxei16_v_f16m1 (const float16_t *base,
    vuint16m1_t bindex, size_t vl);
vfloat16m2_t vloxei16_v_f16m2 (const float16_t *base,
    vuint16m2_t bindex, size_t vl);
vfloat16m4_t vloxei16_v_f16m4 (const float16_t *base,
    vuint16m4_t bindex, size_t vl);
vfloat16m8_t vloxei16_v_f16m8 (const float16_t *base,
    vuint16m8_t bindex, size_t vl);
vfloat16mf4_t vloxei32_v_f16mf4 (const float16_t *base,
    vuint32mf2_t bindex, size_t vl);
vfloat16mf2_t vloxei32_v_f16mf2 (const float16_t *base,
    vuint32m1_t bindex, size_t vl);
```

```
vfloat16m1_t vloxei32_v_f16m1 (const float16_t *base,
    vuint32m2_t bindex, size_t vl);
vfloat16m2_t vloxei32_v_f16m2 (const float16_t *base,
    vuint32m4_t bindex, size_t vl);
vfloat16m4_t vloxei32_v_f16m4 (const float16_t *base,
    vuint32m8_t bindex, size_t vl);
vfloat16mf4_t vloxei64_v_f16mf4 (const float16_t *base,
    vuint64m1_t bindex, size_t vl);
vfloat16mf2_t vloxei64_v_f16mf2 (const float16_t *base,
    vuint64m2_t bindex, size_t vl);
vfloat16m1_t vloxei64_v_f16m1 (const float16_t *base,
    vuint64m4_t bindex, size_t vl);
vfloat16m2_t vloxei64_v_f16m2 (const float16_t *base,
    vuint64m8_t bindex, size_t vl);
vfloat32mf2_t vloxei8_v_f32mf2 (const float32_t *base,
    vuint8mf8_t bindex, size_t vl);
vfloat32m1_t vloxei8_v_f32m1 (const float32_t *base, vuint8mf4_t
    bindex, size_t vl);
vfloat32m2_t vloxei8_v_f32m2 (const float32_t *base, vuint8mf2_t
    bindex, size_t vl);
vfloat32m4_t vloxei8_v_f32m4 (const float32_t *base, vuint8m1_t
    bindex, size_t vl);
vfloat32m8_t vloxei8_v_f32m8 (const float32_t *base, vuint8m2_t
    bindex, size_t vl);
vfloat32mf2_t vloxei16_v_f32mf2 (const float32_t *base,
    vuint16mf4_t bindex, size_t vl);
vfloat32m1_t vloxei16_v_f32m1 (const float32_t *base,
    vuint16mf2_t bindex, size_t vl);
vfloat32m2_t vloxei16_v_f32m2 (const float32_t *base,
    vuint16m1_t bindex, size_t vl);
vfloat32m4_t vloxei16_v_f32m4 (const float32_t *base,
    vuint16m2_t bindex, size_t vl);
vfloat32m8_t vloxei16_v_f32m8 (const float32_t *base,
    vuint16m4_t bindex, size_t vl);
vfloat32mf2_t vloxei32_v_f32mf2 (const float32_t *base,
    vuint32mf2_t bindex, size_t vl);
vfloat32m1_t vloxei32_v_f32m1 (const float32_t *base,
    vuint32m1_t bindex, size_t vl);
vfloat32m2_t vloxei32_v_f32m2 (const float32_t *base,
    vuint32m2_t bindex, size_t vl);
vfloat32m4_t vloxei32_v_f32m4 (const float32_t *base,
    vuint32m4_t bindex, size_t vl);
vfloat32m8_t vloxei32_v_f32m8 (const float32_t *base,
    vuint32m8_t bindex, size_t vl);
vfloat32mf2_t vloxei64_v_f32mf2 (const float32_t *base,
    vuint64m1_t bindex, size_t vl);
```

```
vfloat32m1_t vloxei64_v_f32m1 (const float32_t *base,
    vuint64m2_t bindex, size_t vl);
vfloat32m2_t vloxei64_v_f32m2 (const float32_t *base,
    vuint64m4_t bindex, size_t vl);
vfloat32m4_t vloxei64_v_f32m4 (const float32_t *base,
    vuint64m8_t bindex, size_t vl);
vfloat64m1_t vloxei8_v_f64m1 (const float64_t *base, vuint8mf8_t
    bindex, size_t vl);
vfloat64m2_t vloxei8_v_f64m2 (const float64_t *base, vuint8mf4_t
    bindex, size_t vl);
vfloat64m4_t vloxei8_v_f64m4 (const float64_t *base, vuint8mf2_t
    bindex, size_t vl);
vfloat64m8_t vloxei8_v_f64m8 (const float64_t *base, vuint8m1_t
    bindex, size_t vl);
vfloat64m1_t vloxei16_v_f64m1 (const float64_t *base,
    vuint16mf4_t bindex, size_t vl);
vfloat64m2_t vloxei16_v_f64m2 (const float64_t *base,
    vuint16mf2_t bindex, size_t vl);
vfloat64m4_t vloxei16_v_f64m4 (const float64_t *base,
    vuint16m1_t bindex, size_t vl);
vfloat64m8_t vloxei16_v_f64m8 (const float64_t *base,
    vuint16m2_t bindex, size_t vl);
vfloat64m1_t vloxei32_v_f64m1 (const float64_t *base,
    vuint32mf2_t bindex, size_t vl);
vfloat64m2_t vloxei32_v_f64m2 (const float64_t *base,
    vuint32m1_t bindex, size_t vl);
vfloat64m4_t vloxei32_v_f64m4 (const float64_t *base,
    vuint32m2_t bindex, size_t vl);
vfloat64m8_t vloxei32_v_f64m8 (const float64_t *base,
    vuint32m4_t bindex, size_t vl);
vfloat64m1_t vloxei64_v_f64m1 (const float64_t *base,
    vuint64m1_t bindex, size_t vl);
vfloat64m2_t vloxei64_v_f64m2 (const float64_t *base,
    vuint64m2_t bindex, size_t vl);
vfloat64m4_t vloxei64_v_f64m4 (const float64_t *base,
    vuint64m4_t bindex, size_t vl);
vfloat64m8_t vloxei64_v_f64m8 (const float64_t *base,
    vuint64m8_t bindex, size_t vl);
vint8mf8_t vluxei8_v_i8mf8 (const int8_t *base, vuint8mf8_t
    bindex, size_t vl);
vint8mf4_t vluxei8_v_i8mf4 (const int8_t *base, vuint8mf4_t
    bindex, size_t vl);
vint8mf2_t vluxei8_v_i8mf2 (const int8_t *base, vuint8mf2_t
    bindex, size_t vl);
vint8m1_t vluxei8_v_i8m1 (const int8_t *base, vuint8m1_t bindex,
    size_t vl);
```

```
vint8m2_t vluxei8_v_i8m2 (const int8_t *base, vuint8m2_t bindex,
    size_t vl);
vint8m4_t vluxei8_v_i8m4 (const int8_t *base, vuint8m4_t bindex,
    size_t vl);
vint8m8_t vluxei8_v_i8m8 (const int8_t *base, vuint8m8_t bindex,
    size_t vl);
vint8mf8_t vluxei16_v_i8mf8 (const int8_t *base, vuint16mf4_t
    bindex, size_t vl);
vint8mf4_t vluxei16_v_i8mf4 (const int8_t *base, vuint16mf2_t
    bindex, size_t vl);
vint8mf2_t vluxei16_v_i8mf2 (const int8_t *base, vuint16m1_t
    bindex, size_t vl);
vint8m1_t vluxei16_v_i8m1 (const int8_t *base, vuint16m2_t
    bindex, size_t vl);
vint8m2_t vluxei16_v_i8m2 (const int8_t *base, vuint16m4_t
    bindex, size_t vl);
vint8m4_t vluxei16_v_i8m4 (const int8_t *base, vuint16m8_t
    bindex, size_t vl);
vint8mf8_t vluxei32_v_i8mf8 (const int8_t *base, vuint32mf2_t
    bindex, size_t vl);
vint8mf4_t vluxei32_v_i8mf4 (const int8_t *base, vuint32m1_t
    bindex, size_t vl);
vint8mf2_t vluxei32_v_i8mf2 (const int8_t *base, vuint32m2_t
    bindex, size_t vl);
vint8m1_t vluxei32_v_i8m1 (const int8_t *base, vuint32m4_t
    bindex, size_t vl);
vint8m2_t vluxei32_v_i8m2 (const int8_t *base, vuint32m8_t
    bindex, size_t vl);
vint8mf8_t vluxei64_v_i8mf8 (const int8_t *base, vuint64m1_t
    bindex, size_t vl);
vint8mf4_t vluxei64_v_i8mf4 (const int8_t *base, vuint64m2_t
    bindex, size_t vl);
vint8mf2_t vluxei64_v_i8mf2 (const int8_t *base, vuint64m4_t
    bindex, size_t vl);
vint8m1_t vluxei64_v_i8m1 (const int8_t *base, vuint64m8_t
    bindex, size_t vl);
vint16mf4_t vluxei8_v_i16mf4 (const int16_t *base, vuint8mf8_t
    bindex, size_t vl);
vint16mf2_t vluxei8_v_i16mf2 (const int16_t *base, vuint8mf4_t
    bindex, size_t vl);
vint16m1_t vluxei8_v_i16m1 (const int16_t *base, vuint8mf2_t
    bindex, size_t vl);
vint16m2_t vluxei8_v_i16m2 (const int16_t *base, vuint8m1_t
    bindex, size_t vl);
vint16m4_t vluxei8_v_i16m4 (const int16_t *base, vuint8m2_t
    bindex, size_t vl);
```

```
vint16m8_t vluxei8_v_i16m8 (const int16_t *base, vuint8m4_t
    bindex, size_t vl);
vint16mf4_t vluxei16_v_i16mf4 (const int16_t *base, vuint16mf4_t
    bindex, size_t vl);
vint16mf2_t vluxei16_v_i16mf2 (const int16_t *base, vuint16mf2_t
    bindex, size_t vl);
vint16m1_t vluxei16_v_i16m1 (const int16_t *base, vuint16m1_t
    bindex, size_t vl);
vint16m2_t vluxei16_v_i16m2 (const int16_t *base, vuint16m2_t
    bindex, size_t vl);
vint16m4_t vluxei16_v_i16m4 (const int16_t *base, vuint16m4_t
    bindex, size_t vl);
vint16m8_t vluxei16_v_i16m8 (const int16_t *base, vuint16m8_t
    bindex, size_t vl);
vint16mf4_t vluxei32_v_i16mf4 (const int16_t *base, vuint32mf2_t
    bindex, size_t vl);
vint16mf2_t vluxei32_v_i16mf2 (const int16_t *base, vuint32m1_t
    bindex, size_t vl);
vint16m1_t vluxei32_v_i16m1 (const int16_t *base, vuint32m2_t
    bindex, size_t vl);
vint16m2_t vluxei32_v_i16m2 (const int16_t *base, vuint32m4_t
    bindex, size_t vl);
vint16m4_t vluxei32_v_i16m4 (const int16_t *base, vuint32m8_t
    bindex, size_t vl);
vint16mf4_t vluxei64_v_i16mf4 (const int16_t *base, vuint64m1_t
    bindex, size_t vl);
vint16mf2_t vluxei64_v_i16mf2 (const int16_t *base, vuint64m2_t
    bindex, size_t vl);
vint16m1_t vluxei64_v_i16m1 (const int16_t *base, vuint64m4_t
    bindex, size_t vl);
vint16m2_t vluxei64_v_i16m2 (const int16_t *base, vuint64m8_t
    bindex, size_t vl);
vint32mf2_t vluxei8_v_i32mf2 (const int32_t *base, vuint8mf8_t
    bindex, size_t vl);
vint32m1_t vluxei8_v_i32m1 (const int32_t *base, vuint8mf4_t
    bindex, size_t vl);
vint32m2_t vluxei8_v_i32m2 (const int32_t *base, vuint8mf2_t
    bindex, size_t vl);
vint32m4_t vluxei8_v_i32m4 (const int32_t *base, vuint8m1_t
    bindex, size_t vl);
vint32m8_t vluxei8_v_i32m8 (const int32_t *base, vuint8m2_t
    bindex, size_t vl);
vint32mf2_t vluxei16_v_i32mf2 (const int32_t *base, vuint16mf4_t
    bindex, size_t vl);
vint32m1_t vluxei16_v_i32m1 (const int32_t *base, vuint16mf2_t
    bindex, size_t vl);
```

```
vint32m2_t vluxei16_v_i32m2 (const int32_t *base, vuint16m1_t
    bindex, size_t vl);
vint32m4_t vluxei16_v_i32m4 (const int32_t *base, vuint16m2_t
    bindex, size_t vl);
vint32m8_t vluxei16_v_i32m8 (const int32_t *base, vuint16m4_t
    bindex, size_t vl);
vint32mf2_t vluxei32_v_i32mf2 (const int32_t *base, vuint32mf2_t
    bindex, size_t vl);
vint32m1_t vluxei32_v_i32m1 (const int32_t *base, vuint32m1_t
    bindex, size_t vl);
vint32m2_t vluxei32_v_i32m2 (const int32_t *base, vuint32m2_t
    bindex, size_t vl);
vint32m4_t vluxei32_v_i32m4 (const int32_t *base, vuint32m4_t
    bindex, size_t vl);
vint32m8_t vluxei32_v_i32m8 (const int32_t *base, vuint32m8_t
    bindex, size_t vl);
vint32mf2_t vluxei64_v_i32mf2 (const int32_t *base, vuint64m1_t
    bindex, size_t vl);
vint32m1_t vluxei64_v_i32m1 (const int32_t *base, vuint64m2_t
    bindex, size_t vl);
vint32m2_t vluxei64_v_i32m2 (const int32_t *base, vuint64m4_t
    bindex, size_t vl);
vint32m4_t vluxei64_v_i32m4 (const int32_t *base, vuint64m8_t
    bindex, size_t vl);
vint64m1_t vluxei8_v_i64m1 (const int64_t *base, vuint8mf8_t
    bindex, size_t vl);
vint64m2_t vluxei8_v_i64m2 (const int64_t *base, vuint8mf4_t
    bindex, size_t vl);
vint64m4_t vluxei8_v_i64m4 (const int64_t *base, vuint8mf2_t
    bindex, size_t vl);
vint64m8_t vluxei8_v_i64m8 (const int64_t *base, vuint8m1_t
    bindex, size_t vl);
vint64m1_t vluxei16_v_i64m1 (const int64_t *base, vuint16mf4_t
    bindex, size_t vl);
vint64m2_t vluxei16_v_i64m2 (const int64_t *base, vuint16mf2_t
    bindex, size_t vl);
vint64m4_t vluxei16_v_i64m4 (const int64_t *base, vuint16m1_t
    bindex, size_t vl);
vint64m8_t vluxei16_v_i64m8 (const int64_t *base, vuint16m2_t
    bindex, size_t vl);
vint64m1_t vluxei32_v_i64m1 (const int64_t *base, vuint32mf2_t
    bindex, size_t vl);
vint64m2_t vluxei32_v_i64m2 (const int64_t *base, vuint32m1_t
    bindex, size_t vl);
vint64m4_t vluxei32_v_i64m4 (const int64_t *base, vuint32m2_t
    bindex, size_t vl);
```

```
vint64m8_t vluxei32_v_i64m8 (const int64_t *base, vuint32m4_t
    bindex, size_t vl);
vint64m1_t vluxei64_v_i64m1 (const int64_t *base, vuint64m1_t
    bindex, size_t vl);
vint64m2_t vluxei64_v_i64m2 (const int64_t *base, vuint64m2_t
    bindex, size_t vl);
vint64m4_t vluxei64_v_i64m4 (const int64_t *base, vuint64m4_t
    bindex, size_t vl);
vint64m8_t vluxei64_v_i64m8 (const int64_t *base, vuint64m8_t
    bindex, size_t vl);
vuint8mf8_t vluxei8_v_u8mf8 (const uint8_t *base, vuint8mf8_t
    bindex, size_t vl);
vuint8mf4_t vluxei8_v_u8mf4 (const uint8_t *base, vuint8mf4_t
    bindex, size_t vl);
vuint8mf2_t vluxei8_v_u8mf2 (const uint8_t *base, vuint8mf2_t
    bindex, size_t vl);
vuint8m1_t vluxei8_v_u8m1 (const uint8_t *base, vuint8m1_t
    bindex, size_t vl);
vuint8m2_t vluxei8_v_u8m2 (const uint8_t *base, vuint8m2_t
    bindex, size_t vl);
vuint8m4_t vluxei8_v_u8m4 (const uint8_t *base, vuint8m4_t
    bindex, size_t vl);
vuint8m8_t vluxei8_v_u8m8 (const uint8_t *base, vuint8m8_t
    bindex, size_t vl);
vuint8mf8_t vluxei16_v_u8mf8 (const uint8_t *base, vuint16mf4_t
    bindex, size_t vl);
vuint8mf4_t vluxei16_v_u8mf4 (const uint8_t *base, vuint16mf2_t
    bindex, size_t vl);
vuint8mf2_t vluxei16_v_u8mf2 (const uint8_t *base, vuint16m1_t
    bindex, size_t vl);
vuint8m1_t vluxei16_v_u8m1 (const uint8_t *base, vuint16m2_t
    bindex, size_t vl);
vuint8m2_t vluxei16_v_u8m2 (const uint8_t *base, vuint16m4_t
    bindex, size_t vl);
vuint8m4_t vluxei16_v_u8m4 (const uint8_t *base, vuint16m8_t
    bindex, size_t vl);
vuint8mf8_t vluxei32_v_u8mf8 (const uint8_t *base, vuint32mf2_t
    bindex, size_t vl);
vuint8mf4_t vluxei32_v_u8mf4 (const uint8_t *base, vuint32m1_t
    bindex, size_t vl);
vuint8mf2_t vluxei32_v_u8mf2 (const uint8_t *base, vuint32m2_t
    bindex, size_t vl);
vuint8m1_t vluxei32_v_u8m1 (const uint8_t *base, vuint32m4_t
    bindex, size_t vl);
vuint8m2_t vluxei32_v_u8m2 (const uint8_t *base, vuint32m8_t
    bindex, size_t vl);
```

```
vuint8mf8_t vluxei64_v_u8mf8 (const uint8_t *base, vuint64m1_t
    bindex, size_t vl);
vuint8mf4_t vluxei64_v_u8mf4 (const uint8_t *base, vuint64m2_t
    bindex, size_t vl);
vuint8mf2_t vluxei64_v_u8mf2 (const uint8_t *base, vuint64m4_t
    bindex, size_t vl);
vuint8m1_t vluxei64_v_u8m1 (const uint8_t *base, vuint64m8_t
    bindex, size_t vl);
vuint16mf4_t vluxei8_v_u16mf4 (const uint16_t *base, vuint8mf8_t
    bindex, size_t vl);
vuint16mf2_t vluxei8_v_u16mf2 (const uint16_t *base, vuint8mf4_t
    bindex, size_t vl);
vuint16m1_t vluxei8_v_u16m1 (const uint16_t *base, vuint8mf2_t
    bindex, size_t vl);
vuint16m2_t vluxei8_v_u16m2 (const uint16_t *base, vuint8m1_t
    bindex, size_t vl);
vuint16m4_t vluxei8_v_u16m4 (const uint16_t *base, vuint8m2_t
    bindex, size_t vl);
vuint16m8_t vluxei8_v_u16m8 (const uint16_t *base, vuint8m4_t
    bindex, size_t vl);
vuint16mf4_t vluxei16_v_u16mf4 (const uint16_t *base,
    vuint16mf4_t bindex, size_t vl);
vuint16mf2_t vluxei16_v_u16mf2 (const uint16_t *base,
    vuint16mf2_t bindex, size_t vl);
vuint16m1_t vluxei16_v_u16m1 (const uint16_t *base, vuint16m1_t
    bindex, size_t vl);
vuint16m2_t vluxei16_v_u16m2 (const uint16_t *base, vuint16m2_t
    bindex, size_t vl);
vuint16m4_t vluxei16_v_u16m4 (const uint16_t *base, vuint16m4_t
    bindex, size_t vl);
vuint16m8_t vluxei16_v_u16m8 (const uint16_t *base, vuint16m8_t
    bindex, size_t vl);
vuint16mf4_t vluxei32_v_u16mf4 (const uint16_t *base,
    vuint32mf2_t bindex, size_t vl);
vuint16mf2_t vluxei32_v_u16mf2 (const uint16_t *base,
    vuint32m1_t bindex, size_t vl);
vuint16m1_t vluxei32_v_u16m1 (const uint16_t *base, vuint32m2_t
    bindex, size_t vl);
vuint16m2_t vluxei32_v_u16m2 (const uint16_t *base, vuint32m4_t
    bindex, size_t vl);
vuint16m4_t vluxei32_v_u16m4 (const uint16_t *base, vuint32m8_t
    bindex, size_t vl);
vuint16mf4_t vluxei64_v_u16mf4 (const uint16_t *base,
    vuint64m1_t bindex, size_t vl);
vuint16mf2_t vluxei64_v_u16mf2 (const uint16_t *base,
    vuint64m2_t bindex, size_t vl);
```

```
vuint16m1_t vluxei64_v_u16m1 (const uint16_t *base, vuint64m4_t
    bindex, size_t vl);
vuint16m2_t vluxei64_v_u16m2 (const uint16_t *base, vuint64m8_t
    bindex, size_t vl);
vuint32mf2_t vluxei8_v_u32mf2 (const uint32_t *base, vuint8mf8_t
    bindex, size_t vl);
vuint32m1_t vluxei8_v_u32m1 (const uint32_t *base, vuint8mf4_t
    bindex, size_t vl);
vuint32m2_t vluxei8_v_u32m2 (const uint32_t *base, vuint8mf2_t
    bindex, size_t vl);
vuint32m4_t vluxei8_v_u32m4 (const uint32_t *base, vuint8m1_t
    bindex, size_t vl);
vuint32m8_t vluxei8_v_u32m8 (const uint32_t *base, vuint8m2_t
    bindex, size_t vl);
vuint32mf2_t vluxei16_v_u32mf2 (const uint32_t *base,
    vuint16mf4_t bindex, size_t vl);
vuint32m1_t vluxei16_v_u32m1 (const uint32_t *base, vuint16mf2_t
    bindex, size_t vl);
vuint32m2_t vluxei16_v_u32m2 (const uint32_t *base, vuint16m1_t
    bindex, size_t vl);
vuint32m4_t vluxei16_v_u32m4 (const uint32_t *base, vuint16m2_t
    bindex, size_t vl);
vuint32m8_t vluxei16_v_u32m8 (const uint32_t *base, vuint16m4_t
    bindex, size_t vl);
vuint32mf2_t vluxei32_v_u32mf2 (const uint32_t *base,
    vuint32mf2_t bindex, size_t vl);
vuint32m1_t vluxei32_v_u32m1 (const uint32_t *base, vuint32m1_t
    bindex, size_t vl);
vuint32m2_t vluxei32_v_u32m2 (const uint32_t *base, vuint32m2_t
    bindex, size_t vl);
vuint32m4_t vluxei32_v_u32m4 (const uint32_t *base, vuint32m4_t
    bindex, size_t vl);
vuint32m8_t vluxei32_v_u32m8 (const uint32_t *base, vuint32m8_t
    bindex, size_t vl);
vuint32mf2_t vluxei64_v_u32mf2 (const uint32_t *base,
    vuint64m1_t bindex, size_t vl);
vuint32m1_t vluxei64_v_u32m1 (const uint32_t *base, vuint64m2_t
    bindex, size_t vl);
vuint32m2_t vluxei64_v_u32m2 (const uint32_t *base, vuint64m4_t
    bindex, size_t vl);
vuint32m4_t vluxei64_v_u32m4 (const uint32_t *base, vuint64m8_t
    bindex, size_t vl);
vuint64m1_t vluxei8_v_u64m1 (const uint64_t *base, vuint8mf8_t
    bindex, size_t vl);
vuint64m2_t vluxei8_v_u64m2 (const uint64_t *base, vuint8mf4_t
    bindex, size_t vl);
```

```
vuint64m4_t vluxei8_v_u64m4 (const uint64_t *base, vuint8mf2_t
    bindex, size_t vl);
vuint64m8_t vluxei8_v_u64m8 (const uint64_t *base, vuint8m1_t
    bindex, size_t vl);
vuint64m1_t vluxei16_v_u64m1 (const uint64_t *base, vuint16mf4_t
    bindex, size_t vl);
vuint64m2_t vluxei16_v_u64m2 (const uint64_t *base, vuint16mf2_t
    bindex, size_t vl);
vuint64m4_t vluxei16_v_u64m4 (const uint64_t *base, vuint16m1_t
    bindex, size_t vl);
vuint64m8_t vluxei16_v_u64m8 (const uint64_t *base, vuint16m2_t
    bindex, size_t vl);
vuint64m1_t vluxei32_v_u64m1 (const uint64_t *base, vuint32mf2_t
    bindex, size_t vl);
vuint64m2_t vluxei32_v_u64m2 (const uint64_t *base, vuint32m1_t
    bindex, size_t vl);
vuint64m4_t vluxei32_v_u64m4 (const uint64_t *base, vuint32m2_t
    bindex, size_t vl);
vuint64m8_t vluxei32_v_u64m8 (const uint64_t *base, vuint32m4_t
    bindex, size_t vl);
vuint64m1_t vluxei64_v_u64m1 (const uint64_t *base, vuint64m1_t
    bindex, size_t vl);
vuint64m2_t vluxei64_v_u64m2 (const uint64_t *base, vuint64m2_t
    bindex, size_t vl);
vuint64m4_t vluxei64_v_u64m4 (const uint64_t *base, vuint64m4_t
    bindex, size_t vl);
vuint64m8_t vluxei64_v_u64m8 (const uint64_t *base, vuint64m8_t
    bindex, size_t vl);
vfloat16mf4_t vluxei8_v_f16mf4 (const float16_t *base,
    vuint8mf8_t bindex, size_t vl);
vfloat16mf2_t vluxei8_v_f16mf2 (const float16_t *base,
    vuint8mf4_t bindex, size_t vl);
vfloat16m1_t vluxei8_v_f16m1 (const float16_t *base, vuint8mf2_t
    bindex, size_t vl);
vfloat16m2_t vluxei8_v_f16m2 (const float16_t *base, vuint8m1_t
    bindex, size_t vl);
vfloat16m4_t vluxei8_v_f16m4 (const float16_t *base, vuint8m2_t
    bindex, size_t vl);
vfloat16m8_t vluxei8_v_f16m8 (const float16_t *base, vuint8m4_t
    bindex, size_t vl);
vfloat16mf4_t vluxei16_v_f16mf4 (const float16_t *base,
    vuint16mf4_t bindex, size_t vl);
vfloat16mf2_t vluxei16_v_f16mf2 (const float16_t *base,
    vuint16mf2_t bindex, size_t vl);
vfloat16m1_t vluxei16_v_f16m1 (const float16_t *base,
    vuint16m1_t bindex, size_t vl);
```

```
vfloat16m2_t vluxei16_v_f16m2 (const float16_t *base,
    vuint16m2_t bindex, size_t vl);
vfloat16m4_t vluxei16_v_f16m4 (const float16_t *base,
    vuint16m4_t bindex, size_t vl);
vfloat16m8_t vluxei16_v_f16m8 (const float16_t *base,
    vuint16m8_t bindex, size_t vl);
vfloat16mf4_t vluxei32_v_f16mf4 (const float16_t *base,
    vuint32mf2_t bindex, size_t vl);
vfloat16mf2_t vluxei32_v_f16mf2 (const float16_t *base,
    vuint32m1_t bindex, size_t vl);
vfloat16m1_t vluxei32_v_f16m1 (const float16_t *base,
    vuint32m2_t bindex, size_t vl);
vfloat16m2_t vluxei32_v_f16m2 (const float16_t *base,
    vuint32m4_t bindex, size_t vl);
vfloat16m4_t vluxei32_v_f16m4 (const float16_t *base,
    vuint32m8_t bindex, size_t vl);
vfloat16mf4_t vluxei64_v_f16mf4 (const float16_t *base,
    vuint64m1_t bindex, size_t vl);
vfloat16mf2_t vluxei64_v_f16mf2 (const float16_t *base,
    vuint64m2_t bindex, size_t vl);
vfloat16m1_t vluxei64_v_f16m1 (const float16_t *base,
    vuint64m4_t bindex, size_t vl);
vfloat16m2_t vluxei64_v_f16m2 (const float16_t *base,
    vuint64m8_t bindex, size_t vl);
vfloat32mf2_t vluxei8_v_f32mf2 (const float32_t *base,
    vuint8mf8_t bindex, size_t vl);
vfloat32m1_t vluxei8_v_f32m1 (const float32_t *base, vuint8mf4_t
    bindex, size_t vl);
vfloat32m2_t vluxei8_v_f32m2 (const float32_t *base, vuint8mf2_t
    bindex, size_t vl);
vfloat32m4_t vluxei8_v_f32m4 (const float32_t *base, vuint8m1_t
    bindex, size_t vl);
vfloat32m8_t vluxei8_v_f32m8 (const float32_t *base, vuint8m2_t
    bindex, size_t vl);
vfloat32mf2_t vluxei16_v_f32mf2 (const float32_t *base,
    vuint16mf4_t bindex, size_t vl);
vfloat32m1_t vluxei16_v_f32m1 (const float32_t *base,
    vuint16mf2_t bindex, size_t vl);
vfloat32m2_t vluxei16_v_f32m2 (const float32_t *base,
    vuint16m1_t bindex, size_t vl);
vfloat32m4_t vluxei16_v_f32m4 (const float32_t *base,
    vuint16m2_t bindex, size_t vl);
vfloat32m8_t vluxei16_v_f32m8 (const float32_t *base,
    vuint16m4_t bindex, size_t vl);
vfloat32mf2_t vluxei32_v_f32mf2 (const float32_t *base,
    vuint32mf2_t bindex, size_t vl);
```

```
vfloat32m1_t vluxei32_v_f32m1 (const float32_t *base,
    vuint32m1_t bindex, size_t vl);
vfloat32m2_t vluxei32_v_f32m2 (const float32_t *base,
    vuint32m2_t bindex, size_t vl);
vfloat32m4_t vluxei32_v_f32m4 (const float32_t *base,
    vuint32m4_t bindex, size_t vl);
vfloat32m8_t vluxei32_v_f32m8 (const float32_t *base,
    vuint32m8_t bindex, size_t vl);
vfloat32mf2_t vluxei64_v_f32mf2 (const float32_t *base,
    vuint64m1_t bindex, size_t vl);
vfloat32m1_t vluxei64_v_f32m1 (const float32_t *base,
    vuint64m2_t bindex, size_t vl);
vfloat32m2_t vluxei64_v_f32m2 (const float32_t *base,
    vuint64m4_t bindex, size_t vl);
vfloat32m4_t vluxei64_v_f32m4 (const float32_t *base,
    vuint64m8_t bindex, size_t vl);
vfloat64m1_t vluxei8_v_f64m1 (const float64_t *base, vuint8mf8_t
    bindex, size_t vl);
vfloat64m2_t vluxei8_v_f64m2 (const float64_t *base, vuint8mf4_t
    bindex, size_t vl);
vfloat64m4_t vluxei8_v_f64m4 (const float64_t *base, vuint8mf2_t
    bindex, size_t vl);
vfloat64m8_t vluxei8_v_f64m8 (const float64_t *base, vuint8m1_t
    bindex, size_t vl);
vfloat64m1_t vluxei16_v_f64m1 (const float64_t *base,
    vuint16mf4_t bindex, size_t vl);
vfloat64m2_t vluxei16_v_f64m2 (const float64_t *base,
    vuint16mf2_t bindex, size_t vl);
vfloat64m4_t vluxei16_v_f64m4 (const float64_t *base,
    vuint16m1_t bindex, size_t vl);
vfloat64m8_t vluxei16_v_f64m8 (const float64_t *base,
    vuint16m2_t bindex, size_t vl);
vfloat64m1_t vluxei32_v_f64m1 (const float64_t *base,
    vuint32mf2_t bindex, size_t vl);
vfloat64m2_t vluxei32_v_f64m2 (const float64_t *base,
    vuint32m1_t bindex, size_t vl);
vfloat64m4_t vluxei32_v_f64m4 (const float64_t *base,
    vuint32m2_t bindex, size_t vl);
vfloat64m8_t vluxei32_v_f64m8 (const float64_t *base,
    vuint32m4_t bindex, size_t vl);
vfloat64m1_t vluxei64_v_f64m1 (const float64_t *base,
    vuint64m1_t bindex, size_t vl);
vfloat64m2_t vluxei64_v_f64m2 (const float64_t *base,
    vuint64m2_t bindex, size_t vl);
vfloat64m4_t vluxei64_v_f64m4 (const float64_t *base,
    vuint64m4_t bindex, size_t vl);
```

```
vfloat64m8_t vluxei64_v_f64m8 (const float64_t *base,
    vuint64m8_t bindex, size_t vl);
// masked functions
vint8mf8_t vloxei8_v_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, const int8_t *base, vuint8mf8_t bindex, size_t
    vl);
vint8mf4_t vloxei8_v_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, const int8_t *base, vuint8mf4_t bindex, size_t
    vl);
vint8mf2_t vloxei8_v_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, const int8_t *base, vuint8mf2_t bindex, size_t
    vl);
vint8m1_t vloxei8_v_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    const int8_t *base, vuint8m1_t bindex, size_t vl);
vint8m2_t vloxei8_v_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    const int8_t *base, vuint8m2_t bindex, size_t vl);
vint8m4_t vloxei8_v_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    const int8_t *base, vuint8m4_t bindex, size_t vl);
vint8m8_t vloxei8_v_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    const int8_t *base, vuint8m8_t bindex, size_t vl);
vint8mf8_t vloxei16_v_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, const int8_t *base, vuint16mf4_t bindex, size_t
    vl);
vint8mf4_t vloxei16_v_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, const int8_t *base, vuint16mf2_t bindex, size_t
    vl);
vint8mf2_t vloxei16_v_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, const int8_t *base, vuint16m1_t bindex, size_t
    vl);
vint8m1_t vloxei16_v_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    const int8_t *base, vuint16m2_t bindex, size_t vl);
vint8m2_t vloxei16_v_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    const int8_t *base, vuint16m4_t bindex, size_t vl);
vint8m4_t vloxei16_v_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    const int8_t *base, vuint16m8_t bindex, size_t vl);
vint8mf8_t vloxei32_v_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, const int8_t *base, vuint32mf2_t bindex, size_t
    vl);
vint8mf4_t vloxei32_v_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, const int8_t *base, vuint32m1_t bindex, size_t
    vl);
vint8mf2_t vloxei32_v_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, const int8_t *base, vuint32m2_t bindex, size_t
    vl);
vint8m1_t vloxei32_v_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    const int8_t *base, vuint32m4_t bindex, size_t vl);
```

```
vint8m2_t vloxei32_v_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    const int8_t *base, vuint32m8_t bindex, size_t vl);
vint8mf8_t vloxei64_v_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, const int8_t *base, vuint64m1_t bindex, size_t
    vl);
vint8mf4_t vloxei64_v_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, const int8_t *base, vuint64m2_t bindex, size_t
    vl);
vint8mf2_t vloxei64_v_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, const int8_t *base, vuint64m4_t bindex, size_t
    vl);
vint8m1_t vloxei64_v_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    const int8_t *base, vuint64m8_t bindex, size_t vl);
vint16mf4_t vloxei8_v_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, const int16_t *base, vuint8mf8_t bindex, size_t
    vl);
vint16mf2_t vloxei8_v_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, const int16_t *base, vuint8mf4_t bindex, size_t
    vl);
vint16m1_t vloxei8_v_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, const int16_t *base, vuint8mf2_t bindex, size_t
    vl);
vint16m2_t vloxei8_v_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, const int16_t *base, vuint8m1_t bindex, size_t
    vl);
vint16m4_t vloxei8_v_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, const int16_t *base, vuint8m2_t bindex, size_t
    vl);
vint16m8_t vloxei8_v_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, const int16_t *base, vuint8m4_t bindex, size_t
    vl);
vint16mf4_t vloxei16_v_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, const int16_t *base, vuint16mf4_t bindex, size_t
    vl);
vint16mf2_t vloxei16_v_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, const int16_t *base, vuint16mf2_t bindex, size_t
    vl);
vint16m1_t vloxei16_v_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, const int16_t *base, vuint16m1_t bindex, size_t
    vl);
vint16m2_t vloxei16_v_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, const int16_t *base, vuint16m2_t bindex, size_t
    vl);
vint16m4_t vloxei16_v_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, const int16_t *base, vuint16m4_t bindex, size_t
    vl);
```

```
vint16m8_t vloxei16_v_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, const int16_t *base, vuint16m8_t bindex, size_t
    vl);
vint16mf4_t vloxei32_v_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, const int16_t *base, vuint32mf2_t bindex, size_t
    vl);
vint16mf2_t vloxei32_v_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, const int16_t *base, vuint32m1_t bindex, size_t
    vl);
vint16m1_t vloxei32_v_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, const int16_t *base, vuint32m2_t bindex, size_t
    vl);
vint16m2_t vloxei32_v_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, const int16_t *base, vuint32m4_t bindex, size_t
    vl);
vint16m4_t vloxei32_v_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, const int16_t *base, vuint32m8_t bindex, size_t
    vl);
vint16mf4_t vloxei64_v_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, const int16_t *base, vuint64m1_t bindex, size_t
    vl);
vint16mf2_t vloxei64_v_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, const int16_t *base, vuint64m2_t bindex, size_t
    vl);
vint16m1_t vloxei64_v_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, const int16_t *base, vuint64m4_t bindex, size_t
    vl);
vint16m2_t vloxei64_v_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, const int16_t *base, vuint64m8_t bindex, size_t
    vl);
vint32mf2_t vloxei8_v_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, const int32_t *base, vuint8mf8_t bindex, size_t
    vl);
vint32m1_t vloxei8_v_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, const int32_t *base, vuint8mf4_t bindex, size_t
    vl);
vint32m2_t vloxei8_v_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, const int32_t *base, vuint8mf2_t bindex, size_t
    vl);
vint32m4_t vloxei8_v_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, const int32_t *base, vuint8m1_t bindex, size_t
    vl);
vint32m8_t vloxei8_v_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, const int32_t *base, vuint8m2_t bindex, size_t
    vl);
```

```
vint32mf2_t vloxei16_v_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, const int32_t *base, vuint16mf4_t bindex, size_t
    vl);
vint32m1_t vloxei16_v_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, const int32_t *base, vuint16mf2_t bindex, size_t
    vl);
vint32m2_t vloxei16_v_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, const int32_t *base, vuint16m1_t bindex, size_t
    vl);
vint32m4_t vloxei16_v_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, const int32_t *base, vuint16m2_t bindex, size_t
    vl);
vint32m8_t vloxei16_v_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, const int32_t *base, vuint16m4_t bindex, size_t
    vl);
vint32mf2_t vloxei32_v_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, const int32_t *base, vuint32mf2_t bindex, size_t
    vl);
vint32m1_t vloxei32_v_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, const int32_t *base, vuint32m1_t bindex, size_t
    vl);
vint32m2_t vloxei32_v_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, const int32_t *base, vuint32m2_t bindex, size_t
    vl);
vint32m4_t vloxei32_v_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, const int32_t *base, vuint32m4_t bindex, size_t
    vl);
vint32m8_t vloxei32_v_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, const int32_t *base, vuint32m8_t bindex, size_t
    vl);
vint32mf2_t vloxei64_v_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, const int32_t *base, vuint64m1_t bindex, size_t
    vl);
vint32m1_t vloxei64_v_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, const int32_t *base, vuint64m2_t bindex, size_t
    vl);
vint32m2_t vloxei64_v_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, const int32_t *base, vuint64m4_t bindex, size_t
    vl);
vint32m4_t vloxei64_v_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, const int32_t *base, vuint64m8_t bindex, size_t
    vl);
vint64m1_t vloxei8_v_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, const int64_t *base, vuint8mf8_t bindex, size_t
    vl);
```

```
vint64m2_t vloxei8_v_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, const int64_t *base, vuint8mf4_t bindex, size_t
    vl);
vint64m4_t vloxei8_v_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, const int64_t *base, vuint8mf2_t bindex, size_t
    vl);
vint64m8_t vloxei8_v_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, const int64_t *base, vuint8m1_t bindex, size_t
    vl);
vint64m1_t vloxei16_v_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, const int64_t *base, vuint16mf4_t bindex, size_t
    vl);
vint64m2_t vloxei16_v_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, const int64_t *base, vuint16mf2_t bindex, size_t
    vl);
vint64m4_t vloxei16_v_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, const int64_t *base, vuint16m1_t bindex, size_t
    vl);
vint64m8_t vloxei16_v_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, const int64_t *base, vuint16m2_t bindex, size_t
    vl);
vint64m1_t vloxei32_v_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, const int64_t *base, vuint32mf2_t bindex, size_t
    vl);
vint64m2_t vloxei32_v_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, const int64_t *base, vuint32m1_t bindex, size_t
    vl);
vint64m4_t vloxei32_v_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, const int64_t *base, vuint32m2_t bindex, size_t
    vl);
vint64m8_t vloxei32_v_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, const int64_t *base, vuint32m4_t bindex, size_t
    vl);
vint64m1_t vloxei64_v_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, const int64_t *base, vuint64m1_t bindex, size_t
    vl);
vint64m2_t vloxei64_v_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, const int64_t *base, vuint64m2_t bindex, size_t
    vl);
vint64m4_t vloxei64_v_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, const int64_t *base, vuint64m4_t bindex, size_t
    vl);
vint64m8_t vloxei64_v_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, const int64_t *base, vuint64m8_t bindex, size_t
    vl);
```

```
vuint8mf8_t vloxei8_v_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, const uint8_t *base, vuint8mf8_t bindex, size_t
    vl);
vuint8mf4_t vloxei8_v_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, const uint8_t *base, vuint8mf4_t bindex, size_t
    vl);
vuint8mf2_t vloxei8_v_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, const uint8_t *base, vuint8mf2_t bindex, size_t
    vl);
vuint8m1_t vloxei8_v_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, const uint8_t *base, vuint8m1_t bindex, size_t
    vl);
vuint8m2_t vloxei8_v_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, const uint8_t *base, vuint8m2_t bindex, size_t
    vl);
vuint8m4_t vloxei8_v_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, const uint8_t *base, vuint8m4_t bindex, size_t
    vl);
vuint8m8_t vloxei8_v_u8m8_m (vbool1_t mask, vuint8m8_t
    maskedoff, const uint8_t *base, vuint8m8_t bindex, size_t
    vl);
vuint8mf8_t vloxei16_v_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, const uint8_t *base, vuint16mf4_t bindex, size_t
    vl);
vuint8mf4_t vloxei16_v_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, const uint8_t *base, vuint16mf2_t bindex, size_t
    vl);
vuint8mf2_t vloxei16_v_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, const uint8_t *base, vuint16m1_t bindex, size_t
    vl);
vuint8m1_t vloxei16_v_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, const uint8_t *base, vuint16m2_t bindex, size_t
    vl);
vuint8m2_t vloxei16_v_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, const uint8_t *base, vuint16m4_t bindex, size_t
    vl);
vuint8m4_t vloxei16_v_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, const uint8_t *base, vuint16m8_t bindex, size_t
    vl);
vuint8mf8_t vloxei32_v_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, const uint8_t *base, vuint32mf2_t bindex, size_t
    vl);
vuint8mf4_t vloxei32_v_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, const uint8_t *base, vuint32m1_t bindex, size_t
    vl);
```

```
vuint8mf2_t vloxei32_v_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, const uint8_t *base, vuint32m2_t bindex, size_t
    vl);
vuint8m1_t vloxei32_v_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, const uint8_t *base, vuint32m4_t bindex, size_t
    vl);
vuint8m2_t vloxei32_v_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, const uint8_t *base, vuint32m8_t bindex, size_t
    vl);
vuint8mf8_t vloxei64_v_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, const uint8_t *base, vuint64m1_t bindex, size_t
    vl);
vuint8mf4_t vloxei64_v_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, const uint8_t *base, vuint64m2_t bindex, size_t
    vl);
vuint8mf2_t vloxei64_v_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, const uint8_t *base, vuint64m4_t bindex, size_t
    vl);
vuint8m1_t vloxei64_v_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, const uint8_t *base, vuint64m8_t bindex, size_t
    vl);
vuint16mf4_t vloxei8_v_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, const uint16_t *base, vuint8mf8_t bindex, size_t
    vl);
vuint16mf2_t vloxei8_v_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, const uint16_t *base, vuint8mf4_t bindex, size_t
    vl);
vuint16m1_t vloxei8_v_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, const uint16_t *base, vuint8mf2_t bindex, size_t
    vl);
vuint16m2_t vloxei8_v_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, const uint16_t *base, vuint8m1_t bindex, size_t
    vl);
vuint16m4_t vloxei8_v_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, const uint16_t *base, vuint8m2_t bindex, size_t
    vl);
vuint16m8_t vloxei8_v_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, const uint16_t *base, vuint8m4_t bindex, size_t
    vl);
vuint16mf4_t vloxei16_v_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, const uint16_t *base, vuint16mf4_t bindex, size_t
    vl);
vuint16mf2_t vloxei16_v_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, const uint16_t *base, vuint16mf2_t bindex, size_t
    vl);
```

```
vuint16m1_t vloxei16_v_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, const uint16_t *base, vuint16m1_t bindex, size_t
    vl);
vuint16m2_t vloxei16_v_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, const uint16_t *base, vuint16m2_t bindex, size_t
    vl);
vuint16m4_t vloxei16_v_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, const uint16_t *base, vuint16m4_t bindex, size_t
    vl);
vuint16m8_t vloxei16_v_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, const uint16_t *base, vuint16m8_t bindex, size_t
    vl);
vuint16mf4_t vloxei32_v_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, const uint16_t *base, vuint32mf2_t bindex, size_t
    vl);
vuint16mf2_t vloxei32_v_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, const uint16_t *base, vuint32m1_t bindex, size_t
    vl);
vuint16m1_t vloxei32_v_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, const uint16_t *base, vuint32m2_t bindex, size_t
    vl);
vuint16m2_t vloxei32_v_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, const uint16_t *base, vuint32m4_t bindex, size_t
    vl);
vuint16m4_t vloxei32_v_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, const uint16_t *base, vuint32m8_t bindex, size_t
    vl);
vuint16mf4_t vloxei64_v_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, const uint16_t *base, vuint64m1_t bindex, size_t
    vl);
vuint16mf2_t vloxei64_v_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, const uint16_t *base, vuint64m2_t bindex, size_t
    vl);
vuint16m1_t vloxei64_v_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, const uint16_t *base, vuint64m4_t bindex, size_t
    vl);
vuint16m2_t vloxei64_v_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, const uint16_t *base, vuint64m8_t bindex, size_t
    vl);
vuint32mf2_t vloxei8_v_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, const uint32_t *base, vuint8mf8_t bindex, size_t
    vl);
vuint32m1_t vloxei8_v_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, const uint32_t *base, vuint8mf4_t bindex, size_t
    vl);
```

```
vuint32m2_t vloxei8_v_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, const uint32_t *base, vuint8mf2_t bindex, size_t
    vl);
vuint32m4_t vloxei8_v_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, const uint32_t *base, vuint8m1_t bindex, size_t
    vl);
vuint32m8_t vloxei8_v_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, const uint32_t *base, vuint8m2_t bindex, size_t
    vl);
vuint32mf2_t vloxei16_v_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, const uint32_t *base, vuint16mf4_t bindex, size_t
    vl);
vuint32m1_t vloxei16_v_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, const uint32_t *base, vuint16mf2_t bindex, size_t
    vl);
vuint32m2_t vloxei16_v_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, const uint32_t *base, vuint16m1_t bindex, size_t
    vl);
vuint32m4_t vloxei16_v_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, const uint32_t *base, vuint16m2_t bindex, size_t
    vl);
vuint32m8_t vloxei16_v_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, const uint32_t *base, vuint16m4_t bindex, size_t
    vl);
vuint32mf2_t vloxei32_v_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, const uint32_t *base, vuint32mf2_t bindex, size_t
    vl);
vuint32m1_t vloxei32_v_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, const uint32_t *base, vuint32m1_t bindex, size_t
    vl);
vuint32m2_t vloxei32_v_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, const uint32_t *base, vuint32m2_t bindex, size_t
    vl);
vuint32m4_t vloxei32_v_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, const uint32_t *base, vuint32m4_t bindex, size_t
    vl);
vuint32m8_t vloxei32_v_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, const uint32_t *base, vuint32m8_t bindex, size_t
    vl);
vuint32mf2_t vloxei64_v_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, const uint32_t *base, vuint64m1_t bindex, size_t
    vl);
vuint32m1_t vloxei64_v_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, const uint32_t *base, vuint64m2_t bindex, size_t
    vl);
```

```
vuint32m2_t vloxei64_v_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, const uint32_t *base, vuint64m4_t bindex, size_t
    vl);
vuint32m4_t vloxei64_v_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, const uint32_t *base, vuint64m8_t bindex, size_t
    vl);
vuint64m1_t vloxei8_v_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, const uint64_t *base, vuint8mf8_t bindex, size_t
    vl);
vuint64m2_t vloxei8_v_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, const uint64_t *base, vuint8mf4_t bindex, size_t
    vl);
vuint64m4_t vloxei8_v_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, const uint64_t *base, vuint8mf2_t bindex, size_t
    vl);
vuint64m8_t vloxei8_v_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, const uint64_t *base, vuint8m1_t bindex, size_t
    vl);
vuint64m1_t vloxei16_v_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, const uint64_t *base, vuint16mf4_t bindex, size_t
    vl);
vuint64m2_t vloxei16_v_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, const uint64_t *base, vuint16mf2_t bindex, size_t
    vl);
vuint64m4_t vloxei16_v_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, const uint64_t *base, vuint16m1_t bindex, size_t
    vl);
vuint64m8_t vloxei16_v_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, const uint64_t *base, vuint16m2_t bindex, size_t
    vl);
vuint64m1_t vloxei32_v_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, const uint64_t *base, vuint32mf2_t bindex, size_t
    vl);
vuint64m2_t vloxei32_v_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, const uint64_t *base, vuint32m1_t bindex, size_t
    vl);
vuint64m4_t vloxei32_v_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, const uint64_t *base, vuint32m2_t bindex, size_t
    vl);
vuint64m8_t vloxei32_v_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, const uint64_t *base, vuint32m4_t bindex, size_t
    vl);
vuint64m1_t vloxei64_v_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, const uint64_t *base, vuint64m1_t bindex, size_t
    vl);
```

```
vuint64m2_t vloxei64_v_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, const uint64_t *base, vuint64m2_t bindex, size_t
    vl);
vuint64m4_t vloxei64_v_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, const uint64_t *base, vuint64m4_t bindex, size_t
    vl);
vuint64m8_t vloxei64_v_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, const uint64_t *base, vuint64m8_t bindex, size_t
    vl);
vfloat16mf4_t vloxei8_v_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, const float16_t *base, vuint8mf8_t bindex, size_t
    vl);
vfloat16mf2_t vloxei8_v_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, const float16_t *base, vuint8mf4_t bindex, size_t
    vl);
vfloat16m1_t vloxei8_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, const float16_t *base, vuint8mf2_t bindex, size_t
    vl);
vfloat16m2_t vloxei8_v_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, const float16_t *base, vuint8m1_t bindex, size_t
    vl);
vfloat16m4_t vloxei8_v_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, const float16_t *base, vuint8m2_t bindex, size_t
    vl);
vfloat16m8_t vloxei8_v_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, const float16_t *base, vuint8m4_t bindex, size_t
    vl);
vfloat16mf4_t vloxei16_v_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, const float16_t *base, vuint16mf4_t bindex,
    size_t vl);
vfloat16mf2_t vloxei16_v_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, const float16_t *base, vuint16mf2_t bindex,
    size_t vl);
vfloat16m1_t vloxei16_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, const float16_t *base, vuint16m1_t bindex, size_t
    vl);
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    maskedoff, const float16_t *base, vuint16m2_t bindex, size_t
    vl);
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    maskedoff, const float16_t *base, vuint16m4_t bindex, size_t
    vl);
vfloat16m8_t vloxei16_v_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, const float16_t *base, vuint16m8_t bindex, size_t
    vl);
```

```
vfloat16mf4_t vloxei32_v_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, const float16_t *base, vuint32mf2_t bindex,
    size_t vl);
vfloat16mf2_t vloxei32_v_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, const float16_t *base, vuint32m1_t bindex, size_t
    vl);
vfloat16m1_t vloxei32_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, const float16_t *base, vuint32m2_t bindex, size_t
    vl);
vfloat16m2_t vloxei32_v_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, const float16_t *base, vuint32m4_t bindex, size_t
    vl);
vfloat16m4_t vloxei32_v_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, const float16_t *base, vuint32m8_t bindex, size_t
    vl);
vfloat16mf4_t vloxei64_v_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, const float16_t *base, vuint64m1_t bindex, size_t
    vl);
vfloat16mf2_t vloxei64_v_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, const float16_t *base, vuint64m2_t bindex, size_t
    vl);
vfloat16m1_t vloxei64_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, const float16_t *base, vuint64m4_t bindex, size_t
    vl);
vfloat16m2_t vloxei64_v_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, const float16_t *base, vuint64m8_t bindex, size_t
    vl);
vfloat32mf2_t vloxei8_v_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, const float32_t *base, vuint8mf8_t bindex, size_t
    vl);
vfloat32m1_t vloxei8_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, const float32_t *base, vuint8mf4_t bindex, size_t
    vl);
vfloat32m2_t vloxei8_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, const float32_t *base, vuint8mf2_t bindex, size_t
    vl);
vfloat32m4_t vloxei8_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, const float32_t *base, vuint8m1_t bindex, size_t
    vl);
vfloat32m8_t vloxei8_v_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, const float32_t *base, vuint8m2_t bindex, size_t
    vl);
vfloat32mf2_t vloxei16_v_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, const float32_t *base, vuint16mf4_t bindex,
    size_t vl);
```

```
vfloat32m1_t vloxei16_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, const float32_t *base, vuint16mf2_t bindex,
    size_t vl);
vfloat32m2_t vloxei16_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, const float32_t *base, vuint16m1_t bindex, size_t
    vl);
vfloat32m4_t vloxei16_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, const float32_t *base, vuint16m2_t bindex, size_t
    vl);
vfloat32m8_t vloxei16_v_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, const float32_t *base, vuint16m4_t bindex, size_t
    vl);
vfloat32mf2_t vloxei32_v_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, const float32_t *base, vuint32mf2_t bindex,
    size_t vl);
vfloat32m1_t vloxei32_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, const float32_t *base, vuint32m1_t bindex, size_t
    vl);
vfloat32m2_t vloxei32_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, const float32_t *base, vuint32m2_t bindex, size_t
    vl);
vfloat32m4_t vloxei32_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, const float32_t *base, vuint32m4_t bindex, size_t
    vl);
vfloat32m8_t vloxei32_v_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, const float32_t *base, vuint32m8_t bindex, size_t
    vl);
vfloat32mf2_t vloxei64_v_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, const float32_t *base, vuint64m1_t bindex, size_t
    vl);
vfloat32m1_t vloxei64_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, const float32_t *base, vuint64m2_t bindex, size_t
    vl);
vfloat32m2_t vloxei64_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, const float32_t *base, vuint64m4_t bindex, size_t
    vl);
vfloat32m4_t vloxei64_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, const float32_t *base, vuint64m8_t bindex, size_t
    vl);
vfloat64m1_t vloxei8_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, const float64_t *base, vuint8mf8_t bindex, size_t
    vl);
vfloat64m2_t vloxei8_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, const float64_t *base, vuint8mf4_t bindex, size_t
    vl);
```

```
vfloat64m4_t vloxei8_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, const float64_t *base, vuint8mf2_t bindex, size_t
    vl);
vfloat64m8_t vloxei8_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, const float64_t *base, vuint8m1_t bindex, size_t
    vl);
vfloat64m1_t vloxei16_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, const float64_t *base, vuint16mf4_t bindex,
    size_t vl);
vfloat64m2_t vloxei16_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, const float64_t *base, vuint16mf2_t bindex,
    size_t vl);
vfloat64m4_t vloxei16_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, const float64_t *base, vuint16m1_t bindex, size_t
    vl);
vfloat64m8_t vloxei16_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, const float64_t *base, vuint16m2_t bindex, size_t
    vl);
vfloat64m1_t vloxei32_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, const float64_t *base, vuint32mf2_t bindex,
    size_t vl);
vfloat64m2_t vloxei32_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, const float64_t *base, vuint32m1_t bindex, size_t
    vl);
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    maskedoff, const float64_t *base, vuint32m2_t bindex, size_t
    vl);
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    vl);
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    maskedoff, const float64_t *base, vuint64m1_t bindex, size_t
    vl);
vfloat64m2_t vloxei64_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, const float64_t *base, vuint64m2_t bindex, size_t
    vl);
vfloat64m4_t vloxei64_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, const float64_t *base, vuint64m4_t bindex, size_t
    vl);
vfloat64m8_t vloxei64_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, const float64_t *base, vuint64m8_t bindex, size_t
    vl);
vint8mf8_t vluxei8_v_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, const int8_t *base, vuint8mf8_t bindex, size_t
    vl);
```

```
vint8mf4_t vluxei8_v_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, const int8_t *base, vuint8mf4_t bindex, size_t
    vl);
vint8mf2_t vluxei8_v_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, const int8_t *base, vuint8mf2_t bindex, size_t
    vl);
vint8m1_t vluxei8_v_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    const int8_t *base, vuint8m1_t bindex, size_t vl);
vint8m2_t vluxei8_v_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    const int8_t *base, vuint8m2_t bindex, size_t vl);
vint8m4_t vluxei8_v_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    const int8_t *base, vuint8m4_t bindex, size_t vl);
vint8m8_t vluxei8_v_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    const int8_t *base, vuint8m8_t bindex, size_t vl);
vint8mf8_t vluxei16_v_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, const int8_t *base, vuint16mf4_t bindex, size_t
    vl);
vint8mf4_t vluxei16_v_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, const int8_t *base, vuint16mf2_t bindex, size_t
    vl);
vint8mf2_t vluxei16_v_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, const int8_t *base, vuint16m1_t bindex, size_t
    vl);
vint8m1_t vluxei16_v_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    const int8_t *base, vuint16m2_t bindex, size_t vl);
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    const int8_t *base, vuint16m8_t bindex, size_t vl);
vint8mf8_t vluxei32_v_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, const int8_t *base, vuint32mf2_t bindex, size_t
    vl);
vint8mf4_t vluxei32_v_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, const int8_t *base, vuint32m1_t bindex, size_t
    vl);
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    maskedoff, const int8_t *base, vuint32m2_t bindex, size_t
    vl);
vint8m1_t vluxei32_v_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    const int8_t *base, vuint32m4_t bindex, size_t vl);
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    const int8_t *base, vuint32m8_t bindex, size_t vl);
vint8mf8_t vluxei64_v_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, const int8_t *base, vuint64m1_t bindex, size_t
    vl);
```

```
vint8mf4_t vluxei64_v_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, const int8_t *base, vuint64m2_t bindex, size_t
    vl);
vint8mf2_t vluxei64_v_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, const int8_t *base, vuint64m4_t bindex, size_t
    vl);
vint8m1_t vluxei64_v_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    const int8_t *base, vuint64m8_t bindex, size_t vl);
vint16mf4_t vluxei8_v_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, const int16_t *base, vuint8mf8_t bindex, size_t
    vl);
vint16mf2_t vluxei8_v_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, const int16_t *base, vuint8mf4_t bindex, size_t
    vl);
vint16m1_t vluxei8_v_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, const int16_t *base, vuint8mf2_t bindex, size_t
    vl);
vint16m2_t vluxei8_v_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, const int16_t *base, vuint8m1_t bindex, size_t
    vl);
vint16m4_t vluxei8_v_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, const int16_t *base, vuint8m2_t bindex, size_t
    vl);
vint16m8_t vluxei8_v_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, const int16_t *base, vuint8m4_t bindex, size_t
    vl);
vint16mf4_t vluxei16_v_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, const int16_t *base, vuint16mf4_t bindex, size_t
    vl);
vint16mf2_t vluxei16_v_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, const int16_t *base, vuint16mf2_t bindex, size_t
    vl);
vint16m1_t vluxei16_v_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, const int16_t *base, vuint16m1_t bindex, size_t
    vl);
vint16m2_t vluxei16_v_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, const int16_t *base, vuint16m2_t bindex, size_t
    vl);
vint16m4_t vluxei16_v_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, const int16_t *base, vuint16m4_t bindex, size_t
    vl);
vint16m8_t vluxei16_v_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, const int16_t *base, vuint16m8_t bindex, size_t
    vl);
vint16mf4_t vluxei32_v_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, const int16_t *base, vuint32mf2_t bindex, size_t
```

```
    vl);
vint16mf2_t vluxei32_v_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, const int16_t *base, vuint32m1_t bindex, size_t
    vl);
vint16m1_t vluxei32_v_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, const int16_t *base, vuint32m2_t bindex, size_t
    vl);
vint16m2_t vluxei32_v_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, const int16_t *base, vuint32m4_t bindex, size_t
    vl);
vint16m4_t vluxei32_v_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, const int16_t *base, vuint32m8_t bindex, size_t
    vl);
vint16mf4_t vluxei64_v_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, const int16_t *base, vuint64m1_t bindex, size_t
    vl);
vint16mf2_t vluxei64_v_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, const int16_t *base, vuint64m2_t bindex, size_t
    vl);
vint16m1_t vluxei64_v_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, const int16_t *base, vuint64m4_t bindex, size_t
    vl);
vint16m2_t vluxei64_v_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, const int16_t *base, vuint64m8_t bindex, size_t
    vl);
vint32mf2_t vluxei8_v_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, const int32_t *base, vuint8mf8_t bindex, size_t
    vl);
vint32m1_t vluxei8_v_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, const int32_t *base, vuint8mf4_t bindex, size_t
    vl);
vint32m2_t vluxei8_v_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, const int32_t *base, vuint8mf2_t bindex, size_t
    vl);
vint32m4_t vluxei8_v_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, const int32_t *base, vuint8m1_t bindex, size_t
    vl);
vint32m8_t vluxei8_v_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, const int32_t *base, vuint8m2_t bindex, size_t
    vl);
vint32mf2_t vluxei16_v_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, const int32_t *base, vuint16mf4_t bindex, size_t
    vl);
vint32m1_t vluxei16_v_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, const int32_t *base, vuint16mf2_t bindex, size_t
    vl);
```

```
vint32m2_t vluxei16_v_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, const int32_t *base, vuint16m1_t bindex, size_t
    vl);
vint32m4_t vluxei16_v_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, const int32_t *base, vuint16m2_t bindex, size_t
    vl);
vint32m8_t vluxei16_v_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, const int32_t *base, vuint16m4_t bindex, size_t
    vl);
vint32mf2_t vluxei32_v_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, const int32_t *base, vuint32mf2_t bindex, size_t
    vl);
vint32m1_t vluxei32_v_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, const int32_t *base, vuint32m1_t bindex, size_t
    vl);
vint32m2_t vluxei32_v_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, const int32_t *base, vuint32m2_t bindex, size_t
    vl);
vint32m4_t vluxei32_v_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, const int32_t *base, vuint32m4_t bindex, size_t
    vl);
vint32m8_t vluxei32_v_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, const int32_t *base, vuint32m8_t bindex, size_t
    vl);
vint32mf2_t vluxei64_v_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, const int32_t *base, vuint64m1_t bindex, size_t
    vl);
vint32m1_t vluxei64_v_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, const int32_t *base, vuint64m2_t bindex, size_t
    vl);
vint32m2_t vluxei64_v_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, const int32_t *base, vuint64m4_t bindex, size_t
    vl);
vint32m4_t vluxei64_v_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, const int32_t *base, vuint64m8_t bindex, size_t
    vl);
vint64m1_t vluxei8_v_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, const int64_t *base, vuint8mf8_t bindex, size_t
    vl);
vint64m2_t vluxei8_v_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, const int64_t *base, vuint8mf4_t bindex, size_t
    vl);
vint64m4_t vluxei8_v_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, const int64_t *base, vuint8mf2_t bindex, size_t
    vl);
```

```
vint64m8_t vluxei8_v_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, const int64_t *base, vuint8m1_t bindex, size_t
    vl);
vint64m1_t vluxei16_v_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, const int64_t *base, vuint16mf4_t bindex, size_t
    vl);
vint64m2_t vluxei16_v_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, const int64_t *base, vuint16mf2_t bindex, size_t
    vl);
vint64m4_t vluxei16_v_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, const int64_t *base, vuint16m1_t bindex, size_t
    vl);
vint64m8_t vluxei16_v_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, const int64_t *base, vuint16m2_t bindex, size_t
    vl);
vint64m1_t vluxei32_v_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, const int64_t *base, vuint32mf2_t bindex, size_t
    vl);
vint64m2_t vluxei32_v_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, const int64_t *base, vuint32m1_t bindex, size_t
    vl);
vint64m4_t vluxei32_v_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, const int64_t *base, vuint32m2_t bindex, size_t
    vl);
vint64m8_t vluxei32_v_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, const int64_t *base, vuint32m4_t bindex, size_t
    vl);
vint64m1_t vluxei64_v_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, const int64_t *base, vuint64m1_t bindex, size_t
    vl);
vint64m2_t vluxei64_v_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, const int64_t *base, vuint64m2_t bindex, size_t
    vl);
vint64m4_t vluxei64_v_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, const int64_t *base, vuint64m4_t bindex, size_t
    vl);
vint64m8_t vluxei64_v_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, const int64_t *base, vuint64m8_t bindex, size_t
    vl);
vuint8mf8_t vluxei8_v_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, const uint8_t *base, vuint8mf8_t bindex, size_t
    vl);
vuint8mf4_t vluxei8_v_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, const uint8_t *base, vuint8mf4_t bindex, size_t
    vl);
```

```
vuint8mf2_t vluxei8_v_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, const uint8_t *base, vuint8mf2_t bindex, size_t
    vl);
vuint8m1_t vluxei8_v_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, const uint8_t *base, vuint8m1_t bindex, size_t
    vl);
vuint8m2_t vluxei8_v_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, const uint8_t *base, vuint8m2_t bindex, size_t
    vl);
vuint8m4_t vluxei8_v_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, const uint8_t *base, vuint8m4_t bindex, size_t
    vl);
vuint8m8_t vluxei8_v_u8m8_m (vbool1_t mask, vuint8m8_t
    maskedoff, const uint8_t *base, vuint8m8_t bindex, size_t
    vl);
vuint8mf8_t vluxei16_v_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, const uint8_t *base, vuint16mf4_t bindex, size_t
    vl);
vuint8mf4_t vluxei16_v_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, const uint8_t *base, vuint16mf2_t bindex, size_t
    vl);
vuint8mf2_t vluxei16_v_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, const uint8_t *base, vuint16m1_t bindex, size_t
    vl);
vuint8m1_t vluxei16_v_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, const uint8_t *base, vuint16m2_t bindex, size_t
    vl);
vuint8m2_t vluxei16_v_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, const uint8_t *base, vuint16m4_t bindex, size_t
    vl);
vuint8m4_t vluxei16_v_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, const uint8_t *base, vuint16m8_t bindex, size_t
    vl);
vuint8mf8_t vluxei32_v_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, const uint8_t *base, vuint32mf2_t bindex, size_t
    vl);
vuint8mf4_t vluxei32_v_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, const uint8_t *base, vuint32m1_t bindex, size_t
    vl);
vuint8mf2_t vluxei32_v_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, const uint8_t *base, vuint32m2_t bindex, size_t
    vl);
vuint8m1_t vluxei32_v_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, const uint8_t *base, vuint32m4_t bindex, size_t
    vl);
```

```
vuint8m2_t vluxei32_v_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, const uint8_t *base, vuint32m8_t bindex, size_t
    vl);
vuint8mf8_t vluxei64_v_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, const uint8_t *base, vuint64m1_t bindex, size_t
    vl);
vuint8mf4_t vluxei64_v_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, const uint8_t *base, vuint64m2_t bindex, size_t
    vl);
vuint8mf2_t vluxei64_v_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, const uint8_t *base, vuint64m4_t bindex, size_t
    vl);
vuint8m1_t vluxei64_v_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, const uint8_t *base, vuint64m8_t bindex, size_t
    vl);
vuint16mf4_t vluxei8_v_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, const uint16_t *base, vuint8mf8_t bindex, size_t
    vl);
vuint16mf2_t vluxei8_v_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, const uint16_t *base, vuint8mf4_t bindex, size_t
    vl);
vuint16m1_t vluxei8_v_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, const uint16_t *base, vuint8mf2_t bindex, size_t
    vl);
vuint16m2_t vluxei8_v_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, const uint16_t *base, vuint8m1_t bindex, size_t
    vl);
vuint16m4_t vluxei8_v_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, const uint16_t *base, vuint8m2_t bindex, size_t
    vl);
vuint16m8_t vluxei8_v_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, const uint16_t *base, vuint8m4_t bindex, size_t
    vl);
vuint16mf4_t vluxei16_v_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, const uint16_t *base, vuint16mf4_t bindex, size_t
    vl);
vuint16mf2_t vluxei16_v_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, const uint16_t *base, vuint16mf2_t bindex, size_t
    vl);
vuint16m1_t vluxei16_v_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, const uint16_t *base, vuint16m1_t bindex, size_t
    vl);
vuint16m2_t vluxei16_v_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, const uint16_t *base, vuint16m2_t bindex, size_t
    vl);
```

```
vuint16m4_t vluxei16_v_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, const uint16_t *base, vuint16m4_t bindex, size_t
    vl);
vuint16m8_t vluxei16_v_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, const uint16_t *base, vuint16m8_t bindex, size_t
    vl);
vuint16mf4_t vluxei32_v_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, const uint16_t *base, vuint32mf2_t bindex, size_t
    vl);
vuint16mf2_t vluxei32_v_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, const uint16_t *base, vuint32m1_t bindex, size_t
    vl);
vuint16m1_t vluxei32_v_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, const uint16_t *base, vuint32m2_t bindex, size_t
    vl);
vuint16m2_t vluxei32_v_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, const uint16_t *base, vuint32m4_t bindex, size_t
    vl);
vuint16m4_t vluxei32_v_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, const uint16_t *base, vuint32m8_t bindex, size_t
    vl);
vuint16mf4_t vluxei64_v_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, const uint16_t *base, vuint64m1_t bindex, size_t
    vl);
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    maskedoff, const uint16_t *base, vuint64m2_t bindex, size_t
    vl);
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    maskedoff, const uint16_t *base, vuint64m4_t bindex, size_t
    vl);
vuint16m2_t vluxei64_v_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, const uint16_t *base, vuint64m8_t bindex, size_t
    vl);
vuint32mf2_t vluxei8_v_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, const uint32_t *base, vuint8mf8_t bindex, size_t
    vl);
vuint32m1_t vluxei8_v_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, const uint32_t *base, vuint8mf4_t bindex, size_t
    vl);
vuint32m2_t vluxei8_v_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, const uint32_t *base, vuint8mf2_t bindex, size_t
    vl);
vuint32m4_t vluxei8_v_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, const uint32_t *base, vuint8m1_t bindex, size_t
    vl);
```

```
vuint32m8_t vluxei8_v_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, const uint32_t *base, vuint8m2_t bindex, size_t
    vl);
vuint32mf2_t vluxei16_v_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, const uint32_t *base, vuint16mf4_t bindex, size_t
    vl);
vuint32m1_t vluxei16_v_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, const uint32_t *base, vuint16mf2_t bindex, size_t
    vl);
vuint32m2_t vluxei16_v_u32m2_m (vbool16_t mask, vuint32m2_t
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    vl);
vuint32m4_t vluxei16_v_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, const uint32_t *base, vuint16m2_t bindex, size_t
    vl);
vuint32m8_t vluxei16_v_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, const uint32_t *base, vuint16m4_t bindex, size_t
    vl);
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    maskedoff, const uint32_t *base, vuint32mf2_t bindex, size_t
    vl);
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    maskedoff, const uint32_t *base, vuint32m1_t bindex, size_t
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vuint32m2_t vluxei32_v_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, const uint32_t *base, vuint32m2_t bindex, size_t
    vl);
vuint32m4_t vluxei32_v_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, const uint32_t *base, vuint32m4_t bindex, size_t
    vl);
vuint32m8_t vluxei32_v_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, const uint32_t *base, vuint32m8_t bindex, size_t
    vl);
vuint32mf2_t vluxei64_v_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, const uint32_t *base, vuint64m1_t bindex, size_t
    vl);
vuint32m1_t vluxei64_v_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, const uint32_t *base, vuint64m2_t bindex, size_t
    vl);
vuint32m2_t vluxei64_v_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, const uint32_t *base, vuint64m4_t bindex, size_t
    vl);
vuint32m4_t vluxei64_v_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, const uint32_t *base, vuint64m8_t bindex, size_t
    vl);
```

```
vuint64m1_t vluxei8_v_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, const uint64_t *base, vuint8mf8_t bindex, size_t
    vl);
vuint64m2_t vluxei8_v_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, const uint64_t *base, vuint8mf4_t bindex, size_t
    vl);
vuint64m4_t vluxei8_v_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, const uint64_t *base, vuint8mf2_t bindex, size_t
    vl);
vuint64m8_t vluxei8_v_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, const uint64_t *base, vuint8m1_t bindex, size_t
    vl);
vuint64m1_t vluxei16_v_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, const uint64_t *base, vuint16mf4_t bindex, size_t
    vl);
vuint64m2_t vluxei16_v_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, const uint64_t *base, vuint16mf2_t bindex, size_t
    vl);
vuint64m4_t vluxei16_v_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, const uint64_t *base, vuint16m1_t bindex, size_t
    vl);
vuint64m8_t vluxei16_v_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, const uint64_t *base, vuint16m2_t bindex, size_t
    vl);
vuint64m1_t vluxei32_v_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, const uint64_t *base, vuint32mf2_t bindex, size_t
    vl);
vuint64m2_t vluxei32_v_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, const uint64_t *base, vuint32m1_t bindex, size_t
    vl);
vuint64m4_t vluxei32_v_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, const uint64_t *base, vuint32m2_t bindex, size_t
    vl);
vuint64m8_t vluxei32_v_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, const uint64_t *base, vuint32m4_t bindex, size_t
    vl);
vuint64m1_t vluxei64_v_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, const uint64_t *base, vuint64m1_t bindex, size_t
    vl);
vuint64m2_t vluxei64_v_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, const uint64_t *base, vuint64m2_t bindex, size_t
    vl);
vuint64m4_t vluxei64_v_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, const uint64_t *base, vuint64m4_t bindex, size_t
    vl);
```

```
vuint64m8_t vluxei64_v_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, const uint64_t *base, vuint64m8_t bindex, size_t
    vl);
vfloat16mf4_t vluxei8_v_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, const float16_t *base, vuint8mf8_t bindex, size_t
    vl);
vfloat16mf2_t vluxei8_v_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, const float16_t *base, vuint8mf4_t bindex, size_t
    vl);
vfloat16m1_t vluxei8_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, const float16_t *base, vuint8mf2_t bindex, size_t
    vl);
vfloat16m2_t vluxei8_v_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, const float16_t *base, vuint8m1_t bindex, size_t
    vl);
vfloat16m4_t vluxei8_v_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, const float16_t *base, vuint8m2_t bindex, size_t
    vl);
vfloat16m8_t vluxei8_v_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, const float16_t *base, vuint8m4_t bindex, size_t
    vl);
vfloat16mf4_t vluxei16_v_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, const float16_t *base, vuint16mf4_t bindex,
    size_t vl);
vfloat16mf2_t vluxei16_v_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, const float16_t *base, vuint16mf2_t bindex,
    size_t vl);
vfloat16m1_t vluxei16_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, const float16_t *base, vuint16m1_t bindex, size_t
    vl);
vfloat16m2_t vluxei16_v_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, const float16_t *base, vuint16m2_t bindex, size_t
    vl);
vfloat16m4_t vluxei16_v_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, const float16_t *base, vuint16m4_t bindex, size_t
    vl);
vfloat16m8_t vluxei16_v_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, const float16_t *base, vuint16m8_t bindex, size_t
    vl);
vfloat16mf4_t vluxei32_v_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, const float16_t *base, vuint32mf2_t bindex,
    size_t vl);
vfloat16mf2_t vluxei32_v_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, const float16_t *base, vuint32m1_t bindex, size_t
    vl);
```

```
vfloat16m1_t vluxei32_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, const float16_t *base, vuint32m2_t bindex, size_t
    vl);
vfloat16m2_t vluxei32_v_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, const float16_t *base, vuint32m4_t bindex, size_t
    vl);
vfloat16m4_t vluxei32_v_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, const float16_t *base, vuint32m8_t bindex, size_t
    vl);
vfloat16mf4_t vluxei64_v_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, const float16_t *base, vuint64m1_t bindex, size_t
    vl);
vfloat16mf2_t vluxei64_v_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, const float16_t *base, vuint64m2_t bindex, size_t
    vl);
vfloat16m1_t vluxei64_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, const float16_t *base, vuint64m4_t bindex, size_t
    vl);
vfloat16m2_t vluxei64_v_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, const float16_t *base, vuint64m8_t bindex, size_t
    vl);
vfloat32mf2_t vluxei8_v_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, const float32_t *base, vuint8mf8_t bindex, size_t
    vl);
vfloat32m1_t vluxei8_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, const float32_t *base, vuint8mf4_t bindex, size_t
    vl);
vfloat32m2_t vluxei8_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, const float32_t *base, vuint8mf2_t bindex, size_t
    vl);
vfloat32m4_t vluxei8_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, const float32_t *base, vuint8m1_t bindex, size_t
    vl);
vfloat32m8_t vluxei8_v_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, const float32_t *base, vuint8m2_t bindex, size_t
    vl);
vfloat32mf2_t vluxei16_v_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, const float32_t *base, vuint16mf4_t bindex,
    size_t vl);
vfloat32m1_t vluxei16_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, const float32_t *base, vuint16mf2_t bindex,
    size_t vl);
vfloat32m2_t vluxei16_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, const float32_t *base, vuint16m1_t bindex, size_t
    vl);
```

```
vfloat32m4_t vluxei16_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, const float32_t *base, vuint16m2_t bindex, size_t
    vl);
vfloat32m8_t vluxei16_v_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, const float32_t *base, vuint16m4_t bindex, size_t
    vl);
vfloat32mf2_t vluxei32_v_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, const float32_t *base, vuint32mf2_t bindex,
    size_t vl);
vfloat32m1_t vluxei32_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, const float32_t *base, vuint32m1_t bindex, size_t
    vl);
vfloat32m2_t vluxei32_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, const float32_t *base, vuint32m2_t bindex, size_t
    vl);
vfloat32m4_t vluxei32_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, const float32_t *base, vuint32m4_t bindex, size_t
    vl);
vfloat32m8_t vluxei32_v_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, const float32_t *base, vuint32m8_t bindex, size_t
    vl);
vfloat32mf2_t vluxei64_v_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, const float32_t *base, vuint64m1_t bindex, size_t
    vl);
vfloat32m1_t vluxei64_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, const float32_t *base, vuint64m2_t bindex, size_t
    vl);
vfloat32m2_t vluxei64_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, const float32_t *base, vuint64m4_t bindex, size_t
    vl);
vfloat32m4_t vluxei64_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, const float32_t *base, vuint64m8_t bindex, size_t
    vl);
vfloat64m1_t vluxei8_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, const float64_t *base, vuint8mf8_t bindex, size_t
    vl);
vfloat64m2_t vluxei8_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, const float64_t *base, vuint8mf4_t bindex, size_t
    vl);
vfloat64m4_t vluxei8_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, const float64_t *base, vuint8mf2_t bindex, size_t
    vl);
vfloat64m8_t vluxei8_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, const float64_t *base, vuint8m1_t bindex, size_t
    vl);
```

```
vfloat64m1_t vluxei16_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, const float64_t *base, vuint16mf4_t bindex,
    size_t vl);
vfloat64m2_t vluxei16_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, const float64_t *base, vuint16mf2_t bindex,
    size_t vl);
vfloat64m4_t vluxei16_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, const float64_t *base, vuint16m1_t bindex, size_t
    vl);
vfloat64m8_t vluxei16_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, const float64_t *base, vuint16m2_t bindex, size_t
    vl);
vfloat64m1_t vluxei32_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, const float64_t *base, vuint32mf2_t bindex,
    size_t vl);
vfloat64m2_t vluxei32_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, const float64_t *base, vuint32m1_t bindex, size_t
    vl);
vfloat64m4_t vluxei32_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, const float64_t *base, vuint32m2_t bindex, size_t
    vl);
vfloat64m8_t vluxei32_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, const float64_t *base, vuint32m4_t bindex, size_t
    vl);
vfloat64m1_t vluxei64_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, const float64_t *base, vuint64m1_t bindex, size_t
    vl);
vfloat64m2_t vluxei64_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, const float64_t *base, vuint64m2_t bindex, size_t
    vl);
vfloat64m4_t vluxei64_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, const float64_t *base, vuint64m4_t bindex, size_t
    vl);
vfloat64m8_t vluxei64_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, const float64_t *base, vuint64m8_t bindex, size_t
    vl);
```

Vector Indexed Store Functions:

Prototypes:

```
void vsoxei8_v_i8mf8 (int8_t *base, vuint8mf8_t bindex,
    vint8mf8_t value, size_t vl);
void vsoxei8_v_i8mf4 (int8_t *base, vuint8mf4_t bindex,
    vint8mf4_t value, size_t vl);
```

```c
void vsoxei8_v_i8mf2 (int8_t *base, vuint8mf2_t bindex,
    vint8mf2_t value, size_t vl);
void vsoxei8_v_i8m1 (int8_t *base, vuint8m1_t bindex, vint8m1_t
    value, size_t vl);
void vsoxei8_v_i8m2 (int8_t *base, vuint8m2_t bindex, vint8m2_t
    value, size_t vl);
void vsoxei8_v_i8m4 (int8_t *base, vuint8m4_t bindex, vint8m4_t
    value, size_t vl);
void vsoxei8_v_i8m8 (int8_t *base, vuint8m8_t bindex, vint8m8_t
    value, size_t vl);
void vsoxei16_v_i8mf8 (int8_t *base, vuint16mf4_t bindex,
    vint8mf8_t value, size_t vl);
void vsoxei16_v_i8mf4 (int8_t *base, vuint16mf2_t bindex,
    vint8mf4_t value, size_t vl);
void vsoxei16_v_i8mf2 (int8_t *base, vuint16m1_t bindex,
    vint8mf2_t value, size_t vl);
void vsoxei16_v_i8m1 (int8_t *base, vuint16m2_t bindex,
    vint8m1_t value, size_t vl);
void vsoxei16_v_i8m2 (int8_t *base, vuint16m4_t bindex,
    vint8m2_t value, size_t vl);
void vsoxei16_v_i8m4 (int8_t *base, vuint16m8_t bindex,
    vint8m4_t value, size_t vl);
void vsoxei32_v_i8mf8 (int8_t *base, vuint32mf2_t bindex,
    vint8mf8_t value, size_t vl);
void vsoxei32_v_i8mf4 (int8_t *base, vuint32m1_t bindex,
    vint8mf4_t value, size_t vl);
void vsoxei32_v_i8mf2 (int8_t *base, vuint32m2_t bindex,
    vint8mf2_t value, size_t vl);
void vsoxei32_v_i8m1 (int8_t *base, vuint32m4_t bindex,
    vint8m1_t value, size_t vl);
void vsoxei32_v_i8m2 (int8_t *base, vuint32m8_t bindex,
    vint8m2_t value, size_t vl);
void vsoxei64_v_i8mf8 (int8_t *base, vuint64m1_t bindex,
    vint8mf8_t value, size_t vl);
void vsoxei64_v_i8mf4 (int8_t *base, vuint64m2_t bindex,
    vint8mf4_t value, size_t vl);
void vsoxei64_v_i8mf2 (int8_t *base, vuint64m4_t bindex,
    vint8mf2_t value, size_t vl);
void vsoxei64_v_i8m1 (int8_t *base, vuint64m8_t bindex,
    vint8m1_t value, size_t vl);
void vsoxei8_v_i16mf4 (int16_t *base, vuint8mf8_t bindex,
    vint16mf4_t value, size_t vl);
void vsoxei8_v_i16mf2 (int16_t *base, vuint8mf4_t bindex,
    vint16mf2_t value, size_t vl);
void vsoxei8_v_i16m1 (int16_t *base, vuint8mf2_t bindex,
    vint16m1_t value, size_t vl);
```

```
void vsoxei8_v_i16m2 (int16_t *base, vuint8m1_t bindex,
    vint16m2_t value, size_t vl);
void vsoxei8_v_i16m4 (int16_t *base, vuint8m2_t bindex,
    vint16m4_t value, size_t vl);
void vsoxei8_v_i16m8 (int16_t *base, vuint8m4_t bindex,
    vint16m8_t value, size_t vl);
void vsoxei16_v_i16mf4 (int16_t *base, vuint16mf4_t bindex,
    vint16mf4_t value, size_t vl);
void vsoxei16_v_i16mf2 (int16_t *base, vuint16mf2_t bindex,
    vint16mf2_t value, size_t vl);
void vsoxei16_v_i16m1 (int16_t *base, vuint16m1_t bindex,
    vint16m1_t value, size_t vl);
void vsoxei16_v_i16m2 (int16_t *base, vuint16m2_t bindex,
    vint16m2_t value, size_t vl);
void vsoxei16_v_i16m4 (int16_t *base, vuint16m4_t bindex,
    vint16m4_t value, size_t vl);
void vsoxei16_v_i16m8 (int16_t *base, vuint16m8_t bindex,
    vint16m8_t value, size_t vl);
void vsoxei32_v_i16mf4 (int16_t *base, vuint32mf2_t bindex,
    vint16mf4_t value, size_t vl);
void vsoxei32_v_i16mf2 (int16_t *base, vuint32m1_t bindex,
    vint16mf2_t value, size_t vl);
void vsoxei32_v_i16m1 (int16_t *base, vuint32m2_t bindex,
    vint16m1_t value, size_t vl);
void vsoxei32_v_i16m2 (int16_t *base, vuint32m4_t bindex,
    vint16m2_t value, size_t vl);
void vsoxei32_v_i16m4 (int16_t *base, vuint32m8_t bindex,
    vint16m4_t value, size_t vl);
void vsoxei64_v_i16mf4 (int16_t *base, vuint64m1_t bindex,
    vint16mf4_t value, size_t vl);
void vsoxei64_v_i16mf2 (int16_t *base, vuint64m2_t bindex,
    vint16mf2_t value, size_t vl);
void vsoxei64_v_i16m1 (int16_t *base, vuint64m4_t bindex,
    vint16m1_t value, size_t vl);
void vsoxei64_v_i16m2 (int16_t *base, vuint64m8_t bindex,
    vint16m2_t value, size_t vl);
void vsoxei8_v_i32mf2 (int32_t *base, vuint8mf8_t bindex,
    vint32mf2_t value, size_t vl);
void vsoxei8_v_i32m1 (int32_t *base, vuint8mf4_t bindex,
    vint32m1_t value, size_t vl);
void vsoxei8_v_i32m2 (int32_t *base, vuint8mf2_t bindex,
    vint32m2_t value, size_t vl);
void vsoxei8_v_i32m4 (int32_t *base, vuint8m1_t bindex,
    vint32m4_t value, size_t vl);
void vsoxei8_v_i32m8 (int32_t *base, vuint8m2_t bindex,
    vint32m8_t value, size_t vl);
```

```
void vsoxei16_v_i32mf2 (int32_t *base, vuint16mf4_t bindex,
    vint32mf2_t value, size_t vl);
void vsoxei16_v_i32m1 (int32_t *base, vuint16mf2_t bindex,
    vint32m1_t value, size_t vl);
void vsoxei16_v_i32m2 (int32_t *base, vuint16m1_t bindex,
    vint32m2_t value, size_t vl);
void vsoxei16_v_i32m4 (int32_t *base, vuint16m2_t bindex,
    vint32m4_t value, size_t vl);
void vsoxei16_v_i32m8 (int32_t *base, vuint16m4_t bindex,
    vint32m8_t value, size_t vl);
void vsoxei32_v_i32mf2 (int32_t *base, vuint32mf2_t bindex,
    vint32mf2_t value, size_t vl);
void vsoxei32_v_i32m1 (int32_t *base, vuint32m1_t bindex,
    vint32m1_t value, size_t vl);
void vsoxei32_v_i32m2 (int32_t *base, vuint32m2_t bindex,
    vint32m2_t value, size_t vl);
void vsoxei32_v_i32m4 (int32_t *base, vuint32m4_t bindex,
    vint32m4_t value, size_t vl);
void vsoxei32_v_i32m8 (int32_t *base, vuint32m8_t bindex,
    vint32m8_t value, size_t vl);
void vsoxei64_v_i32mf2 (int32_t *base, vuint64m1_t bindex,
    vint32mf2_t value, size_t vl);
void vsoxei64_v_i32m1 (int32_t *base, vuint64m2_t bindex,
    vint32m1_t value, size_t vl);
void vsoxei64_v_i32m2 (int32_t *base, vuint64m4_t bindex,
    vint32m2_t value, size_t vl);
void vsoxei64_v_i32m4 (int32_t *base, vuint64m8_t bindex,
    vint32m4_t value, size_t vl);
void vsoxei8_v_i64m1 (int64_t *base, vuint8mf8_t bindex,
    vint64m1_t value, size_t vl);
void vsoxei8_v_i64m2 (int64_t *base, vuint8mf4_t bindex,
    vint64m2_t value, size_t vl);
void vsoxei8_v_i64m4 (int64_t *base, vuint8mf2_t bindex,
    vint64m4_t value, size_t vl);
void vsoxei8_v_i64m8 (int64_t *base, vuint8m1_t bindex,
    vint64m8_t value, size_t vl);
void vsoxei16_v_i64m1 (int64_t *base, vuint16mf4_t bindex,
    vint64m1_t value, size_t vl);
void vsoxei16_v_i64m2 (int64_t *base, vuint16mf2_t bindex,
    vint64m2_t value, size_t vl);
void vsoxei16_v_i64m4 (int64_t *base, vuint16m1_t bindex,
    vint64m4_t value, size_t vl);
void vsoxei16_v_i64m8 (int64_t *base, vuint16m2_t bindex,
    vint64m8_t value, size_t vl);
void vsoxei32_v_i64m1 (int64_t *base, vuint32mf2_t bindex,
    vint64m1_t value, size_t vl);
```

```
void vsoxei32_v_i64m2 (int64_t *base, vuint32m1_t bindex,
    vint64m2_t value, size_t vl);
void vsoxei32_v_i64m4 (int64_t *base, vuint32m2_t bindex,
    vint64m4_t value, size_t vl);
void vsoxei32_v_i64m8 (int64_t *base, vuint32m4_t bindex,
    vint64m8_t value, size_t vl);
void vsoxei64_v_i64m1 (int64_t *base, vuint64m1_t bindex,
    vint64m1_t value, size_t vl);
void vsoxei64_v_i64m2 (int64_t *base, vuint64m2_t bindex,
    vint64m2_t value, size_t vl);
void vsoxei64_v_i64m4 (int64_t *base, vuint64m4_t bindex,
    vint64m4_t value, size_t vl);
void vsoxei64_v_i64m8 (int64_t *base, vuint64m8_t bindex,
    vint64m8_t value, size_t vl);
void vsoxei8_v_u8mf8 (uint8_t *base, vuint8mf8_t bindex,
    vuint8mf8_t value, size_t vl);
void vsoxei8_v_u8mf4 (uint8_t *base, vuint8mf4_t bindex,
    vuint8mf4_t value, size_t vl);
void vsoxei8_v_u8mf2 (uint8_t *base, vuint8mf2_t bindex,
    vuint8mf2_t value, size_t vl);
void vsoxei8_v_u8m1 (uint8_t *base, vuint8m1_t bindex,
    vuint8m1_t value, size_t vl);
void vsoxei8_v_u8m2 (uint8_t *base, vuint8m2_t bindex,
    vuint8m2_t value, size_t vl);
void vsoxei8_v_u8m4 (uint8_t *base, vuint8m4_t bindex,
    vuint8m4_t value, size_t vl);
void vsoxei8_v_u8m8 (uint8_t *base, vuint8m8_t bindex,
    vuint8m8_t value, size_t vl);
void vsoxei16_v_u8mf8 (uint8_t *base, vuint16mf4_t bindex,
    vuint8mf8_t value, size_t vl);
void vsoxei16_v_u8mf4 (uint8_t *base, vuint16mf2_t bindex,
    vuint8mf4_t value, size_t vl);
void vsoxei16_v_u8mf2 (uint8_t *base, vuint16m1_t bindex,
    vuint8mf2_t value, size_t vl);
void vsoxei16_v_u8m1 (uint8_t *base, vuint16m2_t bindex,
    vuint8m1_t value, size_t vl);
void vsoxei16_v_u8m2 (uint8_t *base, vuint16m4_t bindex,
    vuint8m2_t value, size_t vl);
void vsoxei16_v_u8m4 (uint8_t *base, vuint16m8_t bindex,
    vuint8m4_t value, size_t vl);
void vsoxei32_v_u8mf8 (uint8_t *base, vuint32mf2_t bindex,
    vuint8mf8_t value, size_t vl);
void vsoxei32_v_u8mf4 (uint8_t *base, vuint32m1_t bindex,
    vuint8mf4_t value, size_t vl);
void vsoxei32_v_u8mf2 (uint8_t *base, vuint32m2_t bindex,
    vuint8mf2_t value, size_t vl);
```

```
void vsoxei32_v_u8m1 (uint8_t *base, vuint32m4_t bindex,
    vuint8m1_t value, size_t vl);
void vsoxei32_v_u8m2 (uint8_t *base, vuint32m8_t bindex,
    vuint8m2_t value, size_t vl);
void vsoxei64_v_u8mf8 (uint8_t *base, vuint64m1_t bindex,
    vuint8mf8_t value, size_t vl);
void vsoxei64_v_u8mf4 (uint8_t *base, vuint64m2_t bindex,
    vuint8mf4_t value, size_t vl);
void vsoxei64_v_u8mf2 (uint8_t *base, vuint64m4_t bindex,
    vuint8mf2_t value, size_t vl);
void vsoxei64_v_u8m1 (uint8_t *base, vuint64m8_t bindex,
    vuint8m1_t value, size_t vl);
void vsoxei8_v_u16mf4 (uint16_t *base, vuint8mf8_t bindex,
    vuint16mf4_t value, size_t vl);
void vsoxei8_v_u16mf2 (uint16_t *base, vuint8mf4_t bindex,
    vuint16mf2_t value, size_t vl);
void vsoxei8_v_u16m1 (uint16_t *base, vuint8mf2_t bindex,
    vuint16m1_t value, size_t vl);
void vsoxei8_v_u16m2 (uint16_t *base, vuint8m1_t bindex,
    vuint16m2_t value, size_t vl);
void vsoxei8_v_u16m4 (uint16_t *base, vuint8m2_t bindex,
    vuint16m4_t value, size_t vl);
void vsoxei8_v_u16m8 (uint16_t *base, vuint8m4_t bindex,
    vuint16m8_t value, size_t vl);
void vsoxei16_v_u16mf4 (uint16_t *base, vuint16mf4_t bindex,
    vuint16mf4_t value, size_t vl);
void vsoxei16_v_u16mf2 (uint16_t *base, vuint16mf2_t bindex,
    vuint16mf2_t value, size_t vl);
void vsoxei16_v_u16m1 (uint16_t *base, vuint16m1_t bindex,
    vuint16m1_t value, size_t vl);
void vsoxei16_v_u16m2 (uint16_t *base, vuint16m2_t bindex,
    vuint16m2_t value, size_t vl);
void vsoxei16_v_u16m4 (uint16_t *base, vuint16m4_t bindex,
    vuint16m4_t value, size_t vl);
void vsoxei16_v_u16m8 (uint16_t *base, vuint16m8_t bindex,
    vuint16m8_t value, size_t vl);
void vsoxei32_v_u16mf4 (uint16_t *base, vuint32mf2_t bindex,
    vuint16mf4_t value, size_t vl);
void vsoxei32_v_u16mf2 (uint16_t *base, vuint32m1_t bindex,
    vuint16mf2_t value, size_t vl);
void vsoxei32_v_u16m1 (uint16_t *base, vuint32m2_t bindex,
    vuint16m1_t value, size_t vl);
void vsoxei32_v_u16m2 (uint16_t *base, vuint32m4_t bindex,
    vuint16m2_t value, size_t vl);
void vsoxei32_v_u16m4 (uint16_t *base, vuint32m8_t bindex,
    vuint16m4_t value, size_t vl);
```

```
void vsoxei64_v_u16mf4 (uint16_t *base, vuint64m1_t bindex,
    vuint16mf4_t value, size_t vl);
void vsoxei64_v_u16mf2 (uint16_t *base, vuint64m2_t bindex,
    vuint16mf2_t value, size_t vl);
void vsoxei64_v_u16m1 (uint16_t *base, vuint64m4_t bindex,
    vuint16m1_t value, size_t vl);
void vsoxei64_v_u16m2 (uint16_t *base, vuint64m8_t bindex,
    vuint16m2_t value, size_t vl);
void vsoxei8_v_u32mf2 (uint32_t *base, vuint8mf8_t bindex,
    vuint32mf2_t value, size_t vl);
void vsoxei8_v_u32m1 (uint32_t *base, vuint8mf4_t bindex,
    vuint32m1_t value, size_t vl);
void vsoxei8_v_u32m2 (uint32_t *base, vuint8mf2_t bindex,
    vuint32m2_t value, size_t vl);
void vsoxei8_v_u32m4 (uint32_t *base, vuint8m1_t bindex,
    vuint32m4_t value, size_t vl);
void vsoxei8_v_u32m8 (uint32_t *base, vuint8m2_t bindex,
    vuint32m8_t value, size_t vl);
void vsoxei16_v_u32mf2 (uint32_t *base, vuint16mf4_t bindex,
    vuint32mf2_t value, size_t vl);
void vsoxei16_v_u32m1 (uint32_t *base, vuint16mf2_t bindex,
    vuint32m1_t value, size_t vl);
void vsoxei16_v_u32m2 (uint32_t *base, vuint16m1_t bindex,
    vuint32m2_t value, size_t vl);
void vsoxei16_v_u32m4 (uint32_t *base, vuint16m2_t bindex,
    vuint32m4_t value, size_t vl);
void vsoxei16_v_u32m8 (uint32_t *base, vuint16m4_t bindex,
    vuint32m8_t value, size_t vl);
void vsoxei32_v_u32mf2 (uint32_t *base, vuint32mf2_t bindex,
    vuint32mf2_t value, size_t vl);
void vsoxei32_v_u32m1 (uint32_t *base, vuint32m1_t bindex,
    vuint32m1_t value, size_t vl);
void vsoxei32_v_u32m2 (uint32_t *base, vuint32m2_t bindex,
    vuint32m2_t value, size_t vl);
void vsoxei32_v_u32m4 (uint32_t *base, vuint32m4_t bindex,
    vuint32m4_t value, size_t vl);
void vsoxei32_v_u32m8 (uint32_t *base, vuint32m8_t bindex,
    vuint32m8_t value, size_t vl);
void vsoxei64_v_u32mf2 (uint32_t *base, vuint64m1_t bindex,
    vuint32mf2_t value, size_t vl);
void vsoxei64_v_u32m1 (uint32_t *base, vuint64m2_t bindex,
    vuint32m1_t value, size_t vl);
void vsoxei64_v_u32m2 (uint32_t *base, vuint64m4_t bindex,
    vuint32m2_t value, size_t vl);
void vsoxei64_v_u32m4 (uint32_t *base, vuint64m8_t bindex,
    vuint32m4_t value, size_t vl);
```

```c
void vsoxei8_v_u64m1 (uint64_t *base, vuint8mf8_t bindex,
    vuint64m1_t value, size_t vl);
void vsoxei8_v_u64m2 (uint64_t *base, vuint8mf4_t bindex,
    vuint64m2_t value, size_t vl);
void vsoxei8_v_u64m4 (uint64_t *base, vuint8mf2_t bindex,
    vuint64m4_t value, size_t vl);
void vsoxei8_v_u64m8 (uint64_t *base, vuint8m1_t bindex,
    vuint64m8_t value, size_t vl);
void vsoxei16_v_u64m1 (uint64_t *base, vuint16mf4_t bindex,
    vuint64m1_t value, size_t vl);
void vsoxei16_v_u64m2 (uint64_t *base, vuint16mf2_t bindex,
    vuint64m2_t value, size_t vl);
void vsoxei16_v_u64m4 (uint64_t *base, vuint16m1_t bindex,
    vuint64m4_t value, size_t vl);
void vsoxei16_v_u64m8 (uint64_t *base, vuint16m2_t bindex,
    vuint64m8_t value, size_t vl);
void vsoxei32_v_u64m1 (uint64_t *base, vuint32mf2_t bindex,
    vuint64m1_t value, size_t vl);
void vsoxei32_v_u64m2 (uint64_t *base, vuint32m1_t bindex,
    vuint64m2_t value, size_t vl);
void vsoxei32_v_u64m4 (uint64_t *base, vuint32m2_t bindex,
    vuint64m4_t value, size_t vl);
void vsoxei32_v_u64m8 (uint64_t *base, vuint32m4_t bindex,
    vuint64m8_t value, size_t vl);
void vsoxei64_v_u64m1 (uint64_t *base, vuint64m1_t bindex,
    vuint64m1_t value, size_t vl);
void vsoxei64_v_u64m2 (uint64_t *base, vuint64m2_t bindex,
    vuint64m2_t value, size_t vl);
void vsoxei64_v_u64m4 (uint64_t *base, vuint64m4_t bindex,
    vuint64m4_t value, size_t vl);
void vsoxei64_v_u64m8 (uint64_t *base, vuint64m8_t bindex,
    vuint64m8_t value, size_t vl);
void vsoxei8_v_f16mf4 (float16_t *base, vuint8mf8_t bindex,
    vfloat16mf4_t value, size_t vl);
void vsoxei8_v_f16mf2 (float16_t *base, vuint8mf4_t bindex,
    vfloat16mf2_t value, size_t vl);
void vsoxei8_v_f16m1 (float16_t *base, vuint8mf2_t bindex,
    vfloat16m1_t value, size_t vl);
void vsoxei8_v_f16m2 (float16_t *base, vuint8m1_t bindex,
    vfloat16m2_t value, size_t vl);
void vsoxei8_v_f16m4 (float16_t *base, vuint8m2_t bindex,
    vfloat16m4_t value, size_t vl);
void vsoxei8_v_f16m8 (float16_t *base, vuint8m4_t bindex,
    vfloat16m8_t value, size_t vl);
void vsoxei16_v_f16mf4 (float16_t *base, vuint16mf4_t bindex,
    vfloat16mf4_t value, size_t vl);
```

```
void vsoxei16_v_f16mf2 (float16_t *base, vuint16mf2_t bindex,
    vfloat16mf2_t value, size_t vl);
void vsoxei16_v_f16m1 (float16_t *base, vuint16m1_t bindex,
    vfloat16m1_t value, size_t vl);
void vsoxei16_v_f16m2 (float16_t *base, vuint16m2_t bindex,
    vfloat16m2_t value, size_t vl);
void vsoxei16_v_f16m4 (float16_t *base, vuint16m4_t bindex,
    vfloat16m4_t value, size_t vl);
void vsoxei16_v_f16m8 (float16_t *base, vuint16m8_t bindex,
    vfloat16m8_t value, size_t vl);
void vsoxei32_v_f16mf4 (float16_t *base, vuint32mf2_t bindex,
    vfloat16mf4_t value, size_t vl);
void vsoxei32_v_f16mf2 (float16_t *base, vuint32m1_t bindex,
    vfloat16mf2_t value, size_t vl);
void vsoxei32_v_f16m1 (float16_t *base, vuint32m2_t bindex,
    vfloat16m1_t value, size_t vl);
void vsoxei32_v_f16m2 (float16_t *base, vuint32m4_t bindex,
    vfloat16m2_t value, size_t vl);
void vsoxei32_v_f16m4 (float16_t *base, vuint32m8_t bindex,
    vfloat16m4_t value, size_t vl);
void vsoxei64_v_f16mf4 (float16_t *base, vuint64m1_t bindex,
    vfloat16mf4_t value, size_t vl);
void vsoxei64_v_f16mf2 (float16_t *base, vuint64m2_t bindex,
    vfloat16mf2_t value, size_t vl);
void vsoxei64_v_f16m1 (float16_t *base, vuint64m4_t bindex,
    vfloat16m1_t value, size_t vl);
void vsoxei64_v_f16m2 (float16_t *base, vuint64m8_t bindex,
    vfloat16m2_t value, size_t vl);
void vsoxei8_v_f32mf2 (float32_t *base, vuint8mf8_t bindex,
    vfloat32mf2_t value, size_t vl);
void vsoxei8_v_f32m1 (float32_t *base, vuint8mf4_t bindex,
    vfloat32m1_t value, size_t vl);
void vsoxei8_v_f32m2 (float32_t *base, vuint8mf2_t bindex,
    vfloat32m2_t value, size_t vl);
void vsoxei8_v_f32m4 (float32_t *base, vuint8m1_t bindex,
    vfloat32m4_t value, size_t vl);
void vsoxei8_v_f32m8 (float32_t *base, vuint8m2_t bindex,
    vfloat32m8_t value, size_t vl);
void vsoxei16_v_f32mf2 (float32_t *base, vuint16mf4_t bindex,
    vfloat32mf2_t value, size_t vl);
void vsoxei16_v_f32m1 (float32_t *base, vuint16mf2_t bindex,
    vfloat32m1_t value, size_t vl);
void vsoxei16_v_f32m2 (float32_t *base, vuint16m1_t bindex,
    vfloat32m2_t value, size_t vl);
void vsoxei16_v_f32m4 (float32_t *base, vuint16m2_t bindex,
    vfloat32m4_t value, size_t vl);
```

```
void vsoxei16_v_f32m8 (float32_t *base, vuint16m4_t bindex,
    vfloat32m8_t value, size_t vl);
void vsoxei32_v_f32mf2 (float32_t *base, vuint32mf2_t bindex,
    vfloat32mf2_t value, size_t vl);
void vsoxei32_v_f32m1 (float32_t *base, vuint32m1_t bindex,
    vfloat32m1_t value, size_t vl);
void vsoxei32_v_f32m2 (float32_t *base, vuint32m2_t bindex,
    vfloat32m2_t value, size_t vl);
void vsoxei32_v_f32m4 (float32_t *base, vuint32m4_t bindex,
    vfloat32m4_t value, size_t vl);
void vsoxei32_v_f32m8 (float32_t *base, vuint32m8_t bindex,
    vfloat32m8_t value, size_t vl);
void vsoxei64_v_f32mf2 (float32_t *base, vuint64m1_t bindex,
    vfloat32mf2_t value, size_t vl);
void vsoxei64_v_f32m1 (float32_t *base, vuint64m2_t bindex,
    vfloat32m1_t value, size_t vl);
void vsoxei64_v_f32m2 (float32_t *base, vuint64m4_t bindex,
    vfloat32m2_t value, size_t vl);
void vsoxei64_v_f32m4 (float32_t *base, vuint64m8_t bindex,
    vfloat32m4_t value, size_t vl);
void vsoxei8_v_f64m1 (float64_t *base, vuint8mf8_t bindex,
    vfloat64m1_t value, size_t vl);
void vsoxei8_v_f64m2 (float64_t *base, vuint8mf4_t bindex,
    vfloat64m2_t value, size_t vl);
void vsoxei8_v_f64m4 (float64_t *base, vuint8mf2_t bindex,
    vfloat64m4_t value, size_t vl);
void vsoxei8_v_f64m8 (float64_t *base, vuint8m1_t bindex,
    vfloat64m8_t value, size_t vl);
void vsoxei16_v_f64m1 (float64_t *base, vuint16mf4_t bindex,
    vfloat64m1_t value, size_t vl);
void vsoxei16_v_f64m2 (float64_t *base, vuint16mf2_t bindex,
    vfloat64m2_t value, size_t vl);
void vsoxei16_v_f64m4 (float64_t *base, vuint16m1_t bindex,
    vfloat64m4_t value, size_t vl);
void vsoxei16_v_f64m8 (float64_t *base, vuint16m2_t bindex,
    vfloat64m8_t value, size_t vl);
void vsoxei32_v_f64m1 (float64_t *base, vuint32mf2_t bindex,
    vfloat64m1_t value, size_t vl);
void vsoxei32_v_f64m2 (float64_t *base, vuint32m1_t bindex,
    vfloat64m2_t value, size_t vl);
void vsoxei32_v_f64m4 (float64_t *base, vuint32m2_t bindex,
    vfloat64m4_t value, size_t vl);
void vsoxei32_v_f64m8 (float64_t *base, vuint32m4_t bindex,
    vfloat64m8_t value, size_t vl);
void vsoxei64_v_f64m1 (float64_t *base, vuint64m1_t bindex,
    vfloat64m1_t value, size_t vl);
```

```
void vsoxei64_v_f64m2 (float64_t *base, vuint64m2_t bindex,
    vfloat64m2_t value, size_t vl);
void vsoxei64_v_f64m4 (float64_t *base, vuint64m4_t bindex,
    vfloat64m4_t value, size_t vl);
void vsoxei64_v_f64m8 (float64_t *base, vuint64m8_t bindex,
    vfloat64m8_t value, size_t vl);
void vsuxei8_v_i8mf8 (int8_t *base, vuint8mf8_t bindex,
    vint8mf8_t value, size_t vl);
void vsuxei8_v_i8mf4 (int8_t *base, vuint8mf4_t bindex,
    vint8mf4_t value, size_t vl);
void vsuxei8_v_i8mf2 (int8_t *base, vuint8mf2_t bindex,
    vint8mf2_t value, size_t vl);
void vsuxei8_v_i8m1 (int8_t *base, vuint8m1_t bindex, vint8m1_t
    value, size_t vl);
void vsuxei8_v_i8m2 (int8_t *base, vuint8m2_t bindex, vint8m2_t
    value, size_t vl);
void vsuxei8_v_i8m4 (int8_t *base, vuint8m4_t bindex, vint8m4_t
    value, size_t vl);
void vsuxei8_v_i8m8 (int8_t *base, vuint8m8_t bindex, vint8m8_t
    value, size_t vl);
void vsuxei16_v_i8mf8 (int8_t *base, vuint16mf4_t bindex,
    vint8mf8_t value, size_t vl);
void vsuxei16_v_i8mf4 (int8_t *base, vuint16mf2_t bindex,
    vint8mf4_t value, size_t vl);
void vsuxei16_v_i8mf2 (int8_t *base, vuint16m1_t bindex,
    vint8mf2_t value, size_t vl);
void vsuxei16_v_i8m1 (int8_t *base, vuint16m2_t bindex,
    vint8m1_t value, size_t vl);
void vsuxei16_v_i8m2 (int8_t *base, vuint16m4_t bindex,
    vint8m2_t value, size_t vl);
void vsuxei16_v_i8m4 (int8_t *base, vuint16m8_t bindex,
    vint8m4_t value, size_t vl);
void vsuxei32_v_i8mf8 (int8_t *base, vuint32mf2_t bindex,
    vint8mf8_t value, size_t vl);
void vsuxei32_v_i8mf4 (int8_t *base, vuint32m1_t bindex,
    vint8mf4_t value, size_t vl);
void vsuxei32_v_i8mf2 (int8_t *base, vuint32m2_t bindex,
    vint8mf2_t value, size_t vl);
void vsuxei32_v_i8m1 (int8_t *base, vuint32m4_t bindex,
    vint8m1_t value, size_t vl);
void vsuxei32_v_i8m2 (int8_t *base, vuint32m8_t bindex,
    vint8m2_t value, size_t vl);
void vsuxei64_v_i8mf8 (int8_t *base, vuint64m1_t bindex,
    vint8mf8_t value, size_t vl);
void vsuxei64_v_i8mf4 (int8_t *base, vuint64m2_t bindex,
    vint8mf4_t value, size_t vl);
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```
void vsuxei64_v_i8mf2 (int8_t *base, vuint64m4_t bindex,
    vint8mf2_t value, size_t vl);
void vsuxei64_v_i8m1 (int8_t *base, vuint64m8_t bindex,
    vint8m1_t value, size_t vl);
void vsuxei8_v_i16mf4 (int16_t *base, vuint8mf8_t bindex,
    vint16mf4_t value, size_t vl);
void vsuxei8_v_i16mf2 (int16_t *base, vuint8mf4_t bindex,
    vint16mf2_t value, size_t vl);
void vsuxei8_v_i16m1 (int16_t *base, vuint8mf2_t bindex,
    vint16m1_t value, size_t vl);
void vsuxei8_v_i16m2 (int16_t *base, vuint8m1_t bindex,
    vint16m2_t value, size_t vl);
void vsuxei8_v_i16m4 (int16_t *base, vuint8m2_t bindex,
    vint16m4_t value, size_t vl);
void vsuxei8_v_i16m8 (int16_t *base, vuint8m4_t bindex,
    vint16m8_t value, size_t vl);
void vsuxei16_v_i16mf4 (int16_t *base, vuint16mf4_t bindex,
    vint16mf4_t value, size_t vl);
void vsuxei16_v_i16mf2 (int16_t *base, vuint16mf2_t bindex,
    vint16mf2_t value, size_t vl);
void vsuxei16_v_i16m1 (int16_t *base, vuint16m1_t bindex,
    vint16m1_t value, size_t vl);
void vsuxei16_v_i16m2 (int16_t *base, vuint16m2_t bindex,
    vint16m2_t value, size_t vl);
void vsuxei16_v_i16m4 (int16_t *base, vuint16m4_t bindex,
    vint16m4_t value, size_t vl);
void vsuxei16_v_i16m8 (int16_t *base, vuint16m8_t bindex,
    vint16m8_t value, size_t vl);
void vsuxei32_v_i16mf4 (int16_t *base, vuint32mf2_t bindex,
    vint16mf4_t value, size_t vl);
void vsuxei32_v_i16mf2 (int16_t *base, vuint32m1_t bindex,
    vint16mf2_t value, size_t vl);
void vsuxei32_v_i16m1 (int16_t *base, vuint32m2_t bindex,
    vint16m1_t value, size_t vl);
void vsuxei32_v_i16m2 (int16_t *base, vuint32m4_t bindex,
    vint16m2_t value, size_t vl);
void vsuxei32_v_i16m4 (int16_t *base, vuint32m8_t bindex,
    vint16m4_t value, size_t vl);
void vsuxei64_v_i16mf4 (int16_t *base, vuint64m1_t bindex,
    vint16mf4_t value, size_t vl);
void vsuxei64_v_i16mf2 (int16_t *base, vuint64m2_t bindex,
    vint16mf2_t value, size_t vl);
void vsuxei64_v_i16m1 (int16_t *base, vuint64m4_t bindex,
    vint16m1_t value, size_t vl);
void vsuxei64_v_i16m2 (int16_t *base, vuint64m8_t bindex,
    vint16m2_t value, size_t vl);
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```
void vsuxei8_v_i32mf2 (int32_t *base, vuint8mf8_t bindex,
    vint32mf2_t value, size_t vl);
void vsuxei8_v_i32m1 (int32_t *base, vuint8mf4_t bindex,
    vint32m1_t value, size_t vl);
void vsuxei8_v_i32m2 (int32_t *base, vuint8mf2_t bindex,
    vint32m2_t value, size_t vl);
void vsuxei8_v_i32m4 (int32_t *base, vuint8m1_t bindex,
    vint32m4_t value, size_t vl);
void vsuxei8_v_i32m8 (int32_t *base, vuint8m2_t bindex,
    vint32m8_t value, size_t vl);
void vsuxei16_v_i32mf2 (int32_t *base, vuint16mf4_t bindex,
    vint32mf2_t value, size_t vl);
void vsuxei16_v_i32m1 (int32_t *base, vuint16mf2_t bindex,
    vint32m1_t value, size_t vl);
void vsuxei16_v_i32m2 (int32_t *base, vuint16m1_t bindex,
    vint32m2_t value, size_t vl);
void vsuxei16_v_i32m4 (int32_t *base, vuint16m2_t bindex,
    vint32m4_t value, size_t vl);
void vsuxei16_v_i32m8 (int32_t *base, vuint16m4_t bindex,
    vint32m8_t value, size_t vl);
void vsuxei32_v_i32mf2 (int32_t *base, vuint32mf2_t bindex,
    vint32mf2_t value, size_t vl);
void vsuxei32_v_i32m1 (int32_t *base, vuint32m1_t bindex,
    vint32m1_t value, size_t vl);
void vsuxei32_v_i32m2 (int32_t *base, vuint32m2_t bindex,
    vint32m2_t value, size_t vl);
void vsuxei32_v_i32m4 (int32_t *base, vuint32m4_t bindex,
    vint32m4_t value, size_t vl);
void vsuxei32_v_i32m8 (int32_t *base, vuint32m8_t bindex,
    vint32m8_t value, size_t vl);
void vsuxei64_v_i32mf2 (int32_t *base, vuint64m1_t bindex,
    vint32mf2_t value, size_t vl);
void vsuxei64_v_i32m1 (int32_t *base, vuint64m2_t bindex,
    vint32m1_t value, size_t vl);
void vsuxei64_v_i32m2 (int32_t *base, vuint64m4_t bindex,
    vint32m2_t value, size_t vl);
void vsuxei64_v_i32m4 (int32_t *base, vuint64m8_t bindex,
    vint32m4_t value, size_t vl);
void vsuxei8_v_i64m1 (int64_t *base, vuint8mf8_t bindex,
    vint64m1_t value, size_t vl);
void vsuxei8_v_i64m2 (int64_t *base, vuint8mf4_t bindex,
    vint64m2_t value, size_t vl);
void vsuxei8_v_i64m4 (int64_t *base, vuint8mf2_t bindex,
    vint64m4_t value, size_t vl);
void vsuxei8_v_i64m8 (int64_t *base, vuint8m1_t bindex,
    vint64m8_t value, size_t vl);
```

```
void vsuxei16_v_i64m1 (int64_t *base, vuint16mf4_t bindex,
    vint64m1_t value, size_t vl);
void vsuxei16_v_i64m2 (int64_t *base, vuint16mf2_t bindex,
    vint64m2_t value, size_t vl);
void vsuxei16_v_i64m4 (int64_t *base, vuint16m1_t bindex,
    vint64m4_t value, size_t vl);
void vsuxei16_v_i64m8 (int64_t *base, vuint16m2_t bindex,
    vint64m8_t value, size_t vl);
void vsuxei32_v_i64m1 (int64_t *base, vuint32mf2_t bindex,
    vint64m1_t value, size_t vl);
void vsuxei32_v_i64m2 (int64_t *base, vuint32m1_t bindex,
    vint64m2_t value, size_t vl);
void vsuxei32_v_i64m4 (int64_t *base, vuint32m2_t bindex,
    vint64m4_t value, size_t vl);
void vsuxei32_v_i64m8 (int64_t *base, vuint32m4_t bindex,
    vint64m8_t value, size_t vl);
void vsuxei64_v_i64m1 (int64_t *base, vuint64m1_t bindex,
    vint64m1_t value, size_t vl);
void vsuxei64_v_i64m2 (int64_t *base, vuint64m2_t bindex,
    vint64m2_t value, size_t vl);
void vsuxei64_v_i64m4 (int64_t *base, vuint64m4_t bindex,
    vint64m4_t value, size_t vl);
void vsuxei64_v_i64m8 (int64_t *base, vuint64m8_t bindex,
    vint64m8_t value, size_t vl);
void vsuxei8_v_u8mf8 (uint8_t *base, vuint8mf8_t bindex,
    vuint8mf8_t value, size_t vl);
void vsuxei8_v_u8mf4 (uint8_t *base, vuint8mf4_t bindex,
    vuint8mf4_t value, size_t vl);
void vsuxei8_v_u8mf2 (uint8_t *base, vuint8mf2_t bindex,
    vuint8mf2_t value, size_t vl);
void vsuxei8_v_u8m1 (uint8_t *base, vuint8m1_t bindex,
    vuint8m1_t value, size_t vl);
void vsuxei8_v_u8m2 (uint8_t *base, vuint8m2_t bindex,
    vuint8m2_t value, size_t vl);
void vsuxei8_v_u8m4 (uint8_t *base, vuint8m4_t bindex,
    vuint8m4_t value, size_t vl);
void vsuxei8_v_u8m8 (uint8_t *base, vuint8m8_t bindex,
    vuint8m8_t value, size_t vl);
void vsuxei16_v_u8mf8 (uint8_t *base, vuint16mf4_t bindex,
    vuint8mf8_t value, size_t vl);
void vsuxei16_v_u8mf4 (uint8_t *base, vuint16mf2_t bindex,
    vuint8mf4_t value, size_t vl);
void vsuxei16_v_u8mf2 (uint8_t *base, vuint16m1_t bindex,
    vuint8mf2_t value, size_t vl);
void vsuxei16_v_u8m1 (uint8_t *base, vuint16m2_t bindex,
    vuint8m1_t value, size_t vl);
```

```
void vsuxei16_v_u8m2 (uint8_t *base, vuint16m4_t bindex,
    vuint8m2_t value, size_t vl);
void vsuxei16_v_u8m4 (uint8_t *base, vuint16m8_t bindex,
    vuint8m4_t value, size_t vl);
void vsuxei32_v_u8mf8 (uint8_t *base, vuint32mf2_t bindex,
    vuint8mf8_t value, size_t vl);
void vsuxei32_v_u8mf4 (uint8_t *base, vuint32m1_t bindex,
    vuint8mf4_t value, size_t vl);
void vsuxei32_v_u8mf2 (uint8_t *base, vuint32m2_t bindex,
    vuint8mf2_t value, size_t vl);
void vsuxei32_v_u8m1 (uint8_t *base, vuint32m4_t bindex,
    vuint8m1_t value, size_t vl);
void vsuxei32_v_u8m2 (uint8_t *base, vuint32m8_t bindex,
    vuint8m2_t value, size_t vl);
void vsuxei64_v_u8mf8 (uint8_t *base, vuint64m1_t bindex,
    vuint8mf8_t value, size_t vl);
void vsuxei64_v_u8mf4 (uint8_t *base, vuint64m2_t bindex,
    vuint8mf4_t value, size_t vl);
void vsuxei64_v_u8mf2 (uint8_t *base, vuint64m4_t bindex,
    vuint8mf2_t value, size_t vl);
void vsuxei64_v_u8m1 (uint8_t *base, vuint64m8_t bindex,
    vuint8m1_t value, size_t vl);
void vsuxei8_v_u16mf4 (uint16_t *base, vuint8mf8_t bindex,
    vuint16mf4_t value, size_t vl);
void vsuxei8_v_u16mf2 (uint16_t *base, vuint8mf4_t bindex,
    vuint16mf2_t value, size_t vl);
void vsuxei8_v_u16m1 (uint16_t *base, vuint8mf2_t bindex,
    vuint16m1_t value, size_t vl);
void vsuxei8_v_u16m2 (uint16_t *base, vuint8m1_t bindex,
    vuint16m2_t value, size_t vl);
void vsuxei8_v_u16m4 (uint16_t *base, vuint8m2_t bindex,
    vuint16m4_t value, size_t vl);
void vsuxei8_v_u16m8 (uint16_t *base, vuint8m4_t bindex,
    vuint16m8_t value, size_t vl);
void vsuxei16_v_u16mf4 (uint16_t *base, vuint16mf4_t bindex,
    vuint16mf4_t value, size_t vl);
void vsuxei16_v_u16mf2 (uint16_t *base, vuint16mf2_t bindex,
    vuint16mf2_t value, size_t vl);
void vsuxei16_v_u16m1 (uint16_t *base, vuint16m1_t bindex,
    vuint16m1_t value, size_t vl);
void vsuxei16_v_u16m2 (uint16_t *base, vuint16m2_t bindex,
    vuint16m2_t value, size_t vl);
void vsuxei16_v_u16m4 (uint16_t *base, vuint16m4_t bindex,
    vuint16m4_t value, size_t vl);
void vsuxei16_v_u16m8 (uint16_t *base, vuint16m8_t bindex,
    vuint16m8_t value, size_t vl);
```

```
void vsuxei32_v_u16mf4 (uint16_t *base, vuint32mf2_t bindex,
    vuint16mf4_t value, size_t vl);
void vsuxei32_v_u16mf2 (uint16_t *base, vuint32m1_t bindex,
    vuint16mf2_t value, size_t vl);
void vsuxei32_v_u16m1 (uint16_t *base, vuint32m2_t bindex,
    vuint16m1_t value, size_t vl);
void vsuxei32_v_u16m2 (uint16_t *base, vuint32m4_t bindex,
    vuint16m2_t value, size_t vl);
void vsuxei32_v_u16m4 (uint16_t *base, vuint32m8_t bindex,
    vuint16m4_t value, size_t vl);
void vsuxei64_v_u16mf4 (uint16_t *base, vuint64m1_t bindex,
    vuint16mf4_t value, size_t vl);
void vsuxei64_v_u16mf2 (uint16_t *base, vuint64m2_t bindex,
    vuint16mf2_t value, size_t vl);
void vsuxei64_v_u16m1 (uint16_t *base, vuint64m4_t bindex,
    vuint16m1_t value, size_t vl);
void vsuxei64_v_u16m2 (uint16_t *base, vuint64m8_t bindex,
    vuint16m2_t value, size_t vl);
void vsuxei8_v_u32mf2 (uint32_t *base, vuint8mf8_t bindex,
    vuint32mf2_t value, size_t vl);
void vsuxei8_v_u32m1 (uint32_t *base, vuint8mf4_t bindex,
    vuint32m1_t value, size_t vl);
void vsuxei8_v_u32m2 (uint32_t *base, vuint8mf2_t bindex,
    vuint32m2_t value, size_t vl);
void vsuxei8_v_u32m4 (uint32_t *base, vuint8m1_t bindex,
    vuint32m4_t value, size_t vl);
void vsuxei8_v_u32m8 (uint32_t *base, vuint8m2_t bindex,
    vuint32m8_t value, size_t vl);
void vsuxei16_v_u32mf2 (uint32_t *base, vuint16mf4_t bindex,
    vuint32mf2_t value, size_t vl);
void vsuxei16_v_u32m1 (uint32_t *base, vuint16mf2_t bindex,
    vuint32m1_t value, size_t vl);
void vsuxei16_v_u32m2 (uint32_t *base, vuint16m1_t bindex,
    vuint32m2_t value, size_t vl);
void vsuxei16_v_u32m4 (uint32_t *base, vuint16m2_t bindex,
    vuint32m4_t value, size_t vl);
void vsuxei16_v_u32m8 (uint32_t *base, vuint16m4_t bindex,
    vuint32m8_t value, size_t vl);
void vsuxei32_v_u32mf2 (uint32_t *base, vuint32mf2_t bindex,
    vuint32mf2_t value, size_t vl);
void vsuxei32_v_u32m1 (uint32_t *base, vuint32m1_t bindex,
    vuint32m1_t value, size_t vl);
void vsuxei32_v_u32m2 (uint32_t *base, vuint32m2_t bindex,
    vuint32m2_t value, size_t vl);
void vsuxei32_v_u32m4 (uint32_t *base, vuint32m4_t bindex,
    vuint32m4_t value, size_t vl);
```

```
void vsuxei32_v_u32m8 (uint32_t *base, vuint32m8_t bindex,
    vuint32m8_t value, size_t vl);
void vsuxei64_v_u32mf2 (uint32_t *base, vuint64m1_t bindex,
    vuint32mf2_t value, size_t vl);
void vsuxei64_v_u32m1 (uint32_t *base, vuint64m2_t bindex,
    vuint32m1_t value, size_t vl);
void vsuxei64_v_u32m2 (uint32_t *base, vuint64m4_t bindex,
    vuint32m2_t value, size_t vl);
void vsuxei64_v_u32m4 (uint32_t *base, vuint64m8_t bindex,
    vuint32m4_t value, size_t vl);
void vsuxei8_v_u64m1 (uint64_t *base, vuint8mf8_t bindex,
    vuint64m1_t value, size_t vl);
void vsuxei8_v_u64m2 (uint64_t *base, vuint8mf4_t bindex,
    vuint64m2_t value, size_t vl);
void vsuxei8_v_u64m4 (uint64_t *base, vuint8mf2_t bindex,
    vuint64m4_t value, size_t vl);
void vsuxei8_v_u64m8 (uint64_t *base, vuint8m1_t bindex,
    vuint64m8_t value, size_t vl);
void vsuxei16_v_u64m1 (uint64_t *base, vuint16mf4_t bindex,
    vuint64m1_t value, size_t vl);
void vsuxei16_v_u64m2 (uint64_t *base, vuint16mf2_t bindex,
    vuint64m2_t value, size_t vl);
void vsuxei16_v_u64m4 (uint64_t *base, vuint16m1_t bindex,
    vuint64m4_t value, size_t vl);
void vsuxei16_v_u64m8 (uint64_t *base, vuint16m2_t bindex,
    vuint64m8_t value, size_t vl);
void vsuxei32_v_u64m1 (uint64_t *base, vuint32mf2_t bindex,
    vuint64m1_t value, size_t vl);
void vsuxei32_v_u64m2 (uint64_t *base, vuint32m1_t bindex,
    vuint64m2_t value, size_t vl);
void vsuxei32_v_u64m4 (uint64_t *base, vuint32m2_t bindex,
    vuint64m4_t value, size_t vl);
void vsuxei32_v_u64m8 (uint64_t *base, vuint32m4_t bindex,
    vuint64m8_t value, size_t vl);
void vsuxei64_v_u64m1 (uint64_t *base, vuint64m1_t bindex,
    vuint64m1_t value, size_t vl);
void vsuxei64_v_u64m2 (uint64_t *base, vuint64m2_t bindex,
    vuint64m2_t value, size_t vl);
void vsuxei64_v_u64m4 (uint64_t *base, vuint64m4_t bindex,
    vuint64m4_t value, size_t vl);
void vsuxei64_v_u64m8 (uint64_t *base, vuint64m8_t bindex,
    vuint64m8_t value, size_t vl);
void vsuxei8_v_f16mf4 (float16_t *base, vuint8mf8_t bindex,
    vfloat16mf4_t value, size_t vl);
void vsuxei8_v_f16mf2 (float16_t *base, vuint8mf4_t bindex,
    vfloat16mf2_t value, size_t vl);
```

```
void vsuxei8_v_f16m1 (float16_t *base, vuint8mf2_t bindex,
    vfloat16m1_t value, size_t vl);
void vsuxei8_v_f16m2 (float16_t *base, vuint8m1_t bindex,
    vfloat16m2_t value, size_t vl);
void vsuxei8_v_f16m4 (float16_t *base, vuint8m2_t bindex,
    vfloat16m4_t value, size_t vl);
void vsuxei8_v_f16m8 (float16_t *base, vuint8m4_t bindex,
    vfloat16m8_t value, size_t vl);
void vsuxei16_v_f16mf4 (float16_t *base, vuint16mf4_t bindex,
    vfloat16mf4_t value, size_t vl);
void vsuxei16_v_f16mf2 (float16_t *base, vuint16mf2_t bindex,
    vfloat16mf2_t value, size_t vl);
void vsuxei16_v_f16m1 (float16_t *base, vuint16m1_t bindex,
    vfloat16m1_t value, size_t vl);
void vsuxei16_v_f16m2 (float16_t *base, vuint16m2_t bindex,
    vfloat16m2_t value, size_t vl);
void vsuxei16_v_f16m4 (float16_t *base, vuint16m4_t bindex,
    vfloat16m4_t value, size_t vl);
void vsuxei16_v_f16m8 (float16_t *base, vuint16m8_t bindex,
    vfloat16m8_t value, size_t vl);
void vsuxei32_v_f16mf4 (float16_t *base, vuint32mf2_t bindex,
    vfloat16mf4_t value, size_t vl);
void vsuxei32_v_f16mf2 (float16_t *base, vuint32m1_t bindex,
    vfloat16mf2_t value, size_t vl);
void vsuxei32_v_f16m1 (float16_t *base, vuint32m2_t bindex,
    vfloat16m1_t value, size_t vl);
void vsuxei32_v_f16m2 (float16_t *base, vuint32m4_t bindex,
    vfloat16m2_t value, size_t vl);
void vsuxei32_v_f16m4 (float16_t *base, vuint32m8_t bindex,
    vfloat16m4_t value, size_t vl);
void vsuxei64_v_f16mf4 (float16_t *base, vuint64m1_t bindex,
    vfloat16mf4_t value, size_t vl);
void vsuxei64_v_f16mf2 (float16_t *base, vuint64m2_t bindex,
    vfloat16mf2_t value, size_t vl);
void vsuxei64_v_f16m1 (float16_t *base, vuint64m4_t bindex,
    vfloat16m1_t value, size_t vl);
void vsuxei64_v_f16m2 (float16_t *base, vuint64m8_t bindex,
    vfloat16m2_t value, size_t vl);
void vsuxei8_v_f32mf2 (float32_t *base, vuint8mf8_t bindex,
    vfloat32mf2_t value, size_t vl);
void vsuxei8_v_f32m1 (float32_t *base, vuint8mf4_t bindex,
    vfloat32m1_t value, size_t vl);
void vsuxei8_v_f32m2 (float32_t *base, vuint8mf2_t bindex,
    vfloat32m2_t value, size_t vl);
void vsuxei8_v_f32m4 (float32_t *base, vuint8m1_t bindex,
    vfloat32m4_t value, size_t vl);
```

```
void vsuxei8_v_f32m8 (float32_t *base, vuint8m2_t bindex,
    vfloat32m8_t value, size_t vl);
void vsuxei16_v_f32mf2 (float32_t *base, vuint16mf4_t bindex,
    vfloat32mf2_t value, size_t vl);
void vsuxei16_v_f32m1 (float32_t *base, vuint16mf2_t bindex,
    vfloat32m1_t value, size_t vl);
void vsuxei16_v_f32m2 (float32_t *base, vuint16m1_t bindex,
    vfloat32m2_t value, size_t vl);
void vsuxei16_v_f32m4 (float32_t *base, vuint16m2_t bindex,
    vfloat32m4_t value, size_t vl);
void vsuxei16_v_f32m8 (float32_t *base, vuint16m4_t bindex,
    vfloat32m8_t value, size_t vl);
void vsuxei32_v_f32mf2 (float32_t *base, vuint32mf2_t bindex,
    vfloat32mf2_t value, size_t vl);
void vsuxei32_v_f32m1 (float32_t *base, vuint32m1_t bindex,
    vfloat32m1_t value, size_t vl);
void vsuxei32_v_f32m2 (float32_t *base, vuint32m2_t bindex,
    vfloat32m2_t value, size_t vl);
void vsuxei32_v_f32m4 (float32_t *base, vuint32m4_t bindex,
    vfloat32m4_t value, size_t vl);
void vsuxei32_v_f32m8 (float32_t *base, vuint32m8_t bindex,
    vfloat32m8_t value, size_t vl);
void vsuxei64_v_f32mf2 (float32_t *base, vuint64m1_t bindex,
    vfloat32mf2_t value, size_t vl);
void vsuxei64_v_f32m1 (float32_t *base, vuint64m2_t bindex,
    vfloat32m1_t value, size_t vl);
void vsuxei64_v_f32m2 (float32_t *base, vuint64m4_t bindex,
    vfloat32m2_t value, size_t vl);
void vsuxei64_v_f32m4 (float32_t *base, vuint64m8_t bindex,
    vfloat32m4_t value, size_t vl);
void vsuxei8_v_f64m1 (float64_t *base, vuint8mf8_t bindex,
    vfloat64m1_t value, size_t vl);
void vsuxei8_v_f64m2 (float64_t *base, vuint8mf4_t bindex,
    vfloat64m2_t value, size_t vl);
void vsuxei8_v_f64m4 (float64_t *base, vuint8mf2_t bindex,
    vfloat64m4_t value, size_t vl);
void vsuxei8_v_f64m8 (float64_t *base, vuint8m1_t bindex,
    vfloat64m8_t value, size_t vl);
void vsuxei16_v_f64m1 (float64_t *base, vuint16mf4_t bindex,
    vfloat64m1_t value, size_t vl);
void vsuxei16_v_f64m2 (float64_t *base, vuint16mf2_t bindex,
    vfloat64m2_t value, size_t vl);
void vsuxei16_v_f64m4 (float64_t *base, vuint16m1_t bindex,
    vfloat64m4_t value, size_t vl);
void vsuxei16_v_f64m8 (float64_t *base, vuint16m2_t bindex,
    vfloat64m8_t value, size_t vl);
```

```c
void vsuxei32_v_f64m1 (float64_t *base, vuint32mf2_t bindex,
    vfloat64m1_t value, size_t vl);
void vsuxei32_v_f64m2 (float64_t *base, vuint32m1_t bindex,
    vfloat64m2_t value, size_t vl);
void vsuxei32_v_f64m4 (float64_t *base, vuint32m2_t bindex,
    vfloat64m4_t value, size_t vl);
void vsuxei32_v_f64m8 (float64_t *base, vuint32m4_t bindex,
    vfloat64m8_t value, size_t vl);
void vsuxei64_v_f64m1 (float64_t *base, vuint64m1_t bindex,
    vfloat64m1_t value, size_t vl);
void vsuxei64_v_f64m2 (float64_t *base, vuint64m2_t bindex,
    vfloat64m2_t value, size_t vl);
void vsuxei64_v_f64m4 (float64_t *base, vuint64m4_t bindex,
    vfloat64m4_t value, size_t vl);
void vsuxei64_v_f64m8 (float64_t *base, vuint64m8_t bindex,
    vfloat64m8_t value, size_t vl);
// masked functions
void vsoxei8_v_i8mf8_m (vbool64_t mask, int8_t *base,
    vuint8mf8_t bindex, vint8mf8_t value, size_t vl);
void vsoxei8_v_i8mf4_m (vbool32_t mask, int8_t *base,
    vuint8mf4_t bindex, vint8mf4_t value, size_t vl);
void vsoxei8_v_i8mf2_m (vbool16_t mask, int8_t *base,
    vuint8mf2_t bindex, vint8mf2_t value, size_t vl);
void vsoxei8_v_i8m1_m (vbool8_t mask, int8_t *base, vuint8m1_t
    bindex, vint8m1_t value, size_t vl);
void vsoxei8_v_i8m2_m (vbool4_t mask, int8_t *base, vuint8m2_t
    bindex, vint8m2_t value, size_t vl);
void vsoxei8_v_i8m4_m (vbool2_t mask, int8_t *base, vuint8m4_t
    bindex, vint8m4_t value, size_t vl);
void vsoxei8_v_i8m8_m (vbool1_t mask, int8_t *base, vuint8m8_t
    bindex, vint8m8_t value, size_t vl);
void vsoxei16_v_i8mf8_m (vbool64_t mask, int8_t *base,
    vuint16mf4_t bindex, vint8mf8_t value, size_t vl);
void vsoxei16_v_i8mf4_m (vbool32_t mask, int8_t *base,
    vuint16mf2_t bindex, vint8mf4_t value, size_t vl);
void vsoxei16_v_i8mf2_m (vbool16_t mask, int8_t *base,
    vuint16m1_t bindex, vint8mf2_t value, size_t vl);
void vsoxei16_v_i8m1_m (vbool8_t mask, int8_t *base, vuint16m2_t
    bindex, vint8m1_t value, size_t vl);
void vsoxei16_v_i8m2_m (vbool4_t mask, int8_t *base, vuint16m4_t
    bindex, vint8m2_t value, size_t vl);
void vsoxei16_v_i8m4_m (vbool2_t mask, int8_t *base, vuint16m8_t
    bindex, vint8m4_t value, size_t vl);
void vsoxei32_v_i8mf8_m (vbool64_t mask, int8_t *base,
    vuint32mf2_t bindex, vint8mf8_t value, size_t vl);
```

```
void vsoxei32_v_i8mf4_m (vbool32_t mask, int8_t *base,
    vuint32m1_t bindex, vint8mf4_t value, size_t vl);
void vsoxei32_v_i8mf2_m (vbool16_t mask, int8_t *base,
    vuint32m2_t bindex, vint8mf2_t value, size_t vl);
void vsoxei32_v_i8m1_m (vbool8_t mask, int8_t *base, vuint32m4_t
    bindex, vint8m1_t value, size_t vl);
void vsoxei32_v_i8m2_m (vbool4_t mask, int8_t *base, vuint32m8_t
    bindex, vint8m2_t value, size_t vl);
void vsoxei64_v_i8mf8_m (vbool64_t mask, int8_t *base,
    vuint64m1_t bindex, vint8mf8_t value, size_t vl);
void vsoxei64_v_i8mf4_m (vbool32_t mask, int8_t *base,
    vuint64m2_t bindex, vint8mf4_t value, size_t vl);
void vsoxei64_v_i8mf2_m (vbool16_t mask, int8_t *base,
    vuint64m4_t bindex, vint8mf2_t value, size_t vl);
void vsoxei64_v_i8m1_m (vbool8_t mask, int8_t *base, vuint64m8_t
    bindex, vint8m1_t value, size_t vl);
void vsoxei8_v_i16mf4_m (vbool64_t mask, int16_t *base,
    vuint8mf8_t bindex, vint16mf4_t value, size_t vl);
void vsoxei8_v_i16mf2_m (vbool32_t mask, int16_t *base,
    vuint8mf4_t bindex, vint16mf2_t value, size_t vl);
void vsoxei8_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint8mf2_t bindex, vint16m1_t value, size_t vl);
void vsoxei8_v_i16m2_m (vbool8_t mask, int16_t *base, vuint8m1_t
    bindex, vint16m2_t value, size_t vl);
void vsoxei8_v_i16m4_m (vbool4_t mask, int16_t *base, vuint8m2_t
    bindex, vint16m4_t value, size_t vl);
void vsoxei8_v_i16m8_m (vbool2_t mask, int16_t *base, vuint8m4_t
    bindex, vint16m8_t value, size_t vl);
void vsoxei16_v_i16mf4_m (vbool64_t mask, int16_t *base,
    vuint16mf4_t bindex, vint16mf4_t value, size_t vl);
void vsoxei16_v_i16mf2_m (vbool32_t mask, int16_t *base,
    vuint16mf2_t bindex, vint16mf2_t value, size_t vl);
void vsoxei16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint16m1_t bindex, vint16m1_t value, size_t vl);
void vsoxei16_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint16m2_t bindex, vint16m2_t value, size_t vl);
void vsoxei16_v_i16m4_m (vbool4_t mask, int16_t *base,
    vuint16m4_t bindex, vint16m4_t value, size_t vl);
void vsoxei16_v_i16m8_m (vbool2_t mask, int16_t *base,
    vuint16m8_t bindex, vint16m8_t value, size_t vl);
void vsoxei32_v_i16mf4_m (vbool64_t mask, int16_t *base,
    vuint32mf2_t bindex, vint16mf4_t value, size_t vl);
void vsoxei32_v_i16mf2_m (vbool32_t mask, int16_t *base,
    vuint32m1_t bindex, vint16mf2_t value, size_t vl);
void vsoxei32_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint32m2_t bindex, vint16m1_t value, size_t vl);
```

```
void vsoxei32_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint32m4_t bindex, vint16m2_t value, size_t vl);
void vsoxei32_v_i16m4_m (vbool4_t mask, int16_t *base,
    vuint32m8_t bindex, vint16m4_t value, size_t vl);
void vsoxei64_v_i16mf4_m (vbool64_t mask, int16_t *base,
    vuint64m1_t bindex, vint16mf4_t value, size_t vl);
void vsoxei64_v_i16mf2_m (vbool32_t mask, int16_t *base,
    vuint64m2_t bindex, vint16mf2_t value, size_t vl);
void vsoxei64_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint64m4_t bindex, vint16m1_t value, size_t vl);
void vsoxei64_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint64m8_t bindex, vint16m2_t value, size_t vl);
void vsoxei8_v_i32mf2_m (vbool64_t mask, int32_t *base,
    vuint8mf8_t bindex, vint32mf2_t value, size_t vl);
void vsoxei8_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint8mf4_t bindex, vint32m1_t value, size_t vl);
void vsoxei8_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint8mf2_t bindex, vint32m2_t value, size_t vl);
void vsoxei8_v_i32m4_m (vbool8_t mask, int32_t *base, vuint8m1_t
    bindex, vint32m4_t value, size_t vl);
void vsoxei8_v_i32m8_m (vbool4_t mask, int32_t *base, vuint8m2_t
    bindex, vint32m8_t value, size_t vl);
void vsoxei16_v_i32mf2_m (vbool64_t mask, int32_t *base,
    vuint16mf4_t bindex, vint32mf2_t value, size_t vl);
void vsoxei16_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint16mf2_t bindex, vint32m1_t value, size_t vl);
void vsoxei16_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint16m1_t bindex, vint32m2_t value, size_t vl);
void vsoxei16_v_i32m4_m (vbool8_t mask, int32_t *base,
    vuint16m2_t bindex, vint32m4_t value, size_t vl);
void vsoxei16_v_i32m8_m (vbool4_t mask, int32_t *base,
    vuint16m4_t bindex, vint32m8_t value, size_t vl);
void vsoxei32_v_i32mf2_m (vbool64_t mask, int32_t *base,
    vuint32mf2_t bindex, vint32mf2_t value, size_t vl);
void vsoxei32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint32m1_t bindex, vint32m1_t value, size_t vl);
void vsoxei32_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint32m2_t bindex, vint32m2_t value, size_t vl);
void vsoxei32_v_i32m4_m (vbool8_t mask, int32_t *base,
    vuint32m4_t bindex, vint32m4_t value, size_t vl);
void vsoxei32_v_i32m8_m (vbool4_t mask, int32_t *base,
    vuint32m8_t bindex, vint32m8_t value, size_t vl);
void vsoxei64_v_i32mf2_m (vbool64_t mask, int32_t *base,
    vuint64m1_t bindex, vint32mf2_t value, size_t vl);
void vsoxei64_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint64m2_t bindex, vint32m1_t value, size_t vl);
```

```
void vsoxei64_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint64m4_t bindex, vint32m2_t value, size_t vl);
void vsoxei64_v_i32m4_m (vbool8_t mask, int32_t *base,
    vuint64m8_t bindex, vint32m4_t value, size_t vl);
void vsoxei8_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint8mf8_t bindex, vint64m1_t value, size_t vl);
void vsoxei8_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint8mf4_t bindex, vint64m2_t value, size_t vl);
void vsoxei8_v_i64m4_m (vbool16_t mask, int64_t *base,
    vuint8mf2_t bindex, vint64m4_t value, size_t vl);
void vsoxei8_v_i64m8_m (vbool8_t mask, int64_t *base, vuint8m1_t
    bindex, vint64m8_t value, size_t vl);
void vsoxei16_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint16mf4_t bindex, vint64m1_t value, size_t vl);
void vsoxei16_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint16mf2_t bindex, vint64m2_t value, size_t vl);
void vsoxei16_v_i64m4_m (vbool16_t mask, int64_t *base,
    vuint16m1_t bindex, vint64m4_t value, size_t vl);
void vsoxei16_v_i64m8_m (vbool8_t mask, int64_t *base,
    vuint16m2_t bindex, vint64m8_t value, size_t vl);
void vsoxei32_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint32mf2_t bindex, vint64m1_t value, size_t vl);
void vsoxei32_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint32m1_t bindex, vint64m2_t value, size_t vl);
void vsoxei32_v_i64m4_m (vbool16_t mask, int64_t *base,
    vuint32m2_t bindex, vint64m4_t value, size_t vl);
void vsoxei32_v_i64m8_m (vbool8_t mask, int64_t *base,
    vuint32m4_t bindex, vint64m8_t value, size_t vl);
void vsoxei64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint64m1_t bindex, vint64m1_t value, size_t vl);
void vsoxei64_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint64m2_t bindex, vint64m2_t value, size_t vl);
void vsoxei64_v_i64m4_m (vbool16_t mask, int64_t *base,
    vuint64m4_t bindex, vint64m4_t value, size_t vl);
void vsoxei64_v_i64m8_m (vbool8_t mask, int64_t *base,
    vuint64m8_t bindex, vint64m8_t value, size_t vl);
void vsoxei8_v_u8mf8_m (vbool64_t mask, uint8_t *base,
    vuint8mf8_t bindex, vuint8mf8_t value, size_t vl);
void vsoxei8_v_u8mf4_m (vbool32_t mask, uint8_t *base,
    vuint8mf4_t bindex, vuint8mf4_t value, size_t vl);
void vsoxei8_v_u8mf2_m (vbool16_t mask, uint8_t *base,
    vuint8mf2_t bindex, vuint8mf2_t value, size_t vl);
void vsoxei8_v_u8m1_m (vbool8_t mask, uint8_t *base, vuint8m1_t
    bindex, vuint8m1_t value, size_t vl);
void vsoxei8_v_u8m2_m (vbool4_t mask, uint8_t *base, vuint8m2_t
    bindex, vuint8m2_t value, size_t vl);
```

```
void vsoxei8_v_u8m4_m (vbool2_t mask, uint8_t *base, vuint8m4_t
    bindex, vuint8m4_t value, size_t vl);
void vsoxei8_v_u8m8_m (vbool1_t mask, uint8_t *base, vuint8m8_t
    bindex, vuint8m8_t value, size_t vl);
void vsoxei16_v_u8mf8_m (vbool64_t mask, uint8_t *base,
    vuint16mf4_t bindex, vuint8mf8_t value, size_t vl);
void vsoxei16_v_u8mf4_m (vbool32_t mask, uint8_t *base,
    vuint16mf2_t bindex, vuint8mf4_t value, size_t vl);
void vsoxei16_v_u8mf2_m (vbool16_t mask, uint8_t *base,
    vuint16m1_t bindex, vuint8mf2_t value, size_t vl);
void vsoxei16_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint16m2_t bindex, vuint8m1_t value, size_t vl);
void vsoxei16_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint16m4_t bindex, vuint8m2_t value, size_t vl);
void vsoxei16_v_u8m4_m (vbool2_t mask, uint8_t *base,
    vuint16m8_t bindex, vuint8m4_t value, size_t vl);
void vsoxei32_v_u8mf8_m (vbool64_t mask, uint8_t *base,
    vuint32mf2_t bindex, vuint8mf8_t value, size_t vl);
void vsoxei32_v_u8mf4_m (vbool32_t mask, uint8_t *base,
    vuint32m1_t bindex, vuint8mf4_t value, size_t vl);
void vsoxei32_v_u8mf2_m (vbool16_t mask, uint8_t *base,
    vuint32m2_t bindex, vuint8mf2_t value, size_t vl);
void vsoxei32_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint32m4_t bindex, vuint8m1_t value, size_t vl);
void vsoxei32_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint32m8_t bindex, vuint8m2_t value, size_t vl);
void vsoxei64_v_u8mf8_m (vbool64_t mask, uint8_t *base,
    vuint64m1_t bindex, vuint8mf8_t value, size_t vl);
void vsoxei64_v_u8mf4_m (vbool32_t mask, uint8_t *base,
    vuint64m2_t bindex, vuint8mf4_t value, size_t vl);
void vsoxei64_v_u8mf2_m (vbool16_t mask, uint8_t *base,
    vuint64m4_t bindex, vuint8mf2_t value, size_t vl);
void vsoxei64_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint64m8_t bindex, vuint8m1_t value, size_t vl);
void vsoxei8_v_u16mf4_m (vbool64_t mask, uint16_t *base,
    vuint8mf8_t bindex, vuint16mf4_t value, size_t vl);
void vsoxei8_v_u16mf2_m (vbool32_t mask, uint16_t *base,
    vuint8mf4_t bindex, vuint16mf2_t value, size_t vl);
void vsoxei8_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint8mf2_t bindex, vuint16m1_t value, size_t vl);
void vsoxei8_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint8m1_t bindex, vuint16m2_t value, size_t vl);
void vsoxei8_v_u16m4_m (vbool4_t mask, uint16_t *base,
    vuint8m2_t bindex, vuint16m4_t value, size_t vl);
void vsoxei8_v_u16m8_m (vbool2_t mask, uint16_t *base,
    vuint8m4_t bindex, vuint16m8_t value, size_t vl);
```

```
void vsoxei16_v_u16mf4_m (vbool64_t mask, uint16_t *base,
    vuint16mf4_t bindex, vuint16mf4_t value, size_t vl);
void vsoxei16_v_u16mf2_m (vbool32_t mask, uint16_t *base,
    vuint16mf2_t bindex, vuint16mf2_t value, size_t vl);
void vsoxei16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t bindex, vuint16m1_t value, size_t vl);
void vsoxei16_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint16m2_t bindex, vuint16m2_t value, size_t vl);
void vsoxei16_v_u16m4_m (vbool4_t mask, uint16_t *base,
    vuint16m4_t bindex, vuint16m4_t value, size_t vl);
void vsoxei16_v_u16m8_m (vbool2_t mask, uint16_t *base,
    vuint16m8_t bindex, vuint16m8_t value, size_t vl);
void vsoxei32_v_u16mf4_m (vbool64_t mask, uint16_t *base,
    vuint32mf2_t bindex, vuint16mf4_t value, size_t vl);
void vsoxei32_v_u16mf2_m (vbool32_t mask, uint16_t *base,
    vuint32m1_t bindex, vuint16mf2_t value, size_t vl);
void vsoxei32_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint32m2_t bindex, vuint16m1_t value, size_t vl);
void vsoxei32_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint32m4_t bindex, vuint16m2_t value, size_t vl);
void vsoxei32_v_u16m4_m (vbool4_t mask, uint16_t *base,
    vuint32m8_t bindex, vuint16m4_t value, size_t vl);
void vsoxei64_v_u16mf4_m (vbool64_t mask, uint16_t *base,
    vuint64m1_t bindex, vuint16mf4_t value, size_t vl);
void vsoxei64_v_u16mf2_m (vbool32_t mask, uint16_t *base,
    vuint64m2_t bindex, vuint16mf2_t value, size_t vl);
void vsoxei64_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint64m4_t bindex, vuint16m1_t value, size_t vl);
void vsoxei64_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint64m8_t bindex, vuint16m2_t value, size_t vl);
void vsoxei8_v_u32mf2_m (vbool64_t mask, uint32_t *base,
    vuint8mf8_t bindex, vuint32mf2_t value, size_t vl);
void vsoxei8_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint8mf4_t bindex, vuint32m1_t value, size_t vl);
void vsoxei8_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint8mf2_t bindex, vuint32m2_t value, size_t vl);
void vsoxei8_v_u32m4_m (vbool8_t mask, uint32_t *base,
    vuint8m1_t bindex, vuint32m4_t value, size_t vl);
void vsoxei8_v_u32m8_m (vbool4_t mask, uint32_t *base,
    vuint8m2_t bindex, vuint32m8_t value, size_t vl);
void vsoxei16_v_u32mf2_m (vbool64_t mask, uint32_t *base,
    vuint16mf4_t bindex, vuint32mf2_t value, size_t vl);
void vsoxei16_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint16mf2_t bindex, vuint32m1_t value, size_t vl);
void vsoxei16_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint16m1_t bindex, vuint32m2_t value, size_t vl);
```

```
void vsoxei16_v_u32m4_m (vbool8_t mask, uint32_t *base,
    vuint16m2_t bindex, vuint32m4_t value, size_t vl);
void vsoxei16_v_u32m8_m (vbool4_t mask, uint32_t *base,
    vuint16m4_t bindex, vuint32m8_t value, size_t vl);
void vsoxei32_v_u32mf2_m (vbool64_t mask, uint32_t *base,
    vuint32mf2_t bindex, vuint32mf2_t value, size_t vl);
void vsoxei32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t bindex, vuint32m1_t value, size_t vl);
void vsoxei32_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint32m2_t bindex, vuint32m2_t value, size_t vl);
void vsoxei32_v_u32m4_m (vbool8_t mask, uint32_t *base,
    vuint32m4_t bindex, vuint32m4_t value, size_t vl);
void vsoxei32_v_u32m8_m (vbool4_t mask, uint32_t *base,
    vuint32m8_t bindex, vuint32m8_t value, size_t vl);
void vsoxei64_v_u32mf2_m (vbool64_t mask, uint32_t *base,
    vuint64m1_t bindex, vuint32mf2_t value, size_t vl);
void vsoxei64_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint64m2_t bindex, vuint32m1_t value, size_t vl);
void vsoxei64_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint64m4_t bindex, vuint32m2_t value, size_t vl);
void vsoxei64_v_u32m4_m (vbool8_t mask, uint32_t *base,
    vuint64m8_t bindex, vuint32m4_t value, size_t vl);
void vsoxei8_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint8mf8_t bindex, vuint64m1_t value, size_t vl);
void vsoxei8_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint8mf4_t bindex, vuint64m2_t value, size_t vl);
void vsoxei8_v_u64m4_m (vbool16_t mask, uint64_t *base,
    vuint8mf2_t bindex, vuint64m4_t value, size_t vl);
void vsoxei8_v_u64m8_m (vbool8_t mask, uint64_t *base,
    vuint8m1_t bindex, vuint64m8_t value, size_t vl);
void vsoxei16_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint16mf4_t bindex, vuint64m1_t value, size_t vl);
void vsoxei16_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint16mf2_t bindex, vuint64m2_t value, size_t vl);
void vsoxei16_v_u64m4_m (vbool16_t mask, uint64_t *base,
    vuint16m1_t bindex, vuint64m4_t value, size_t vl);
void vsoxei16_v_u64m8_m (vbool8_t mask, uint64_t *base,
    vuint16m2_t bindex, vuint64m8_t value, size_t vl);
void vsoxei32_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint32mf2_t bindex, vuint64m1_t value, size_t vl);
void vsoxei32_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint32m1_t bindex, vuint64m2_t value, size_t vl);
void vsoxei32_v_u64m4_m (vbool16_t mask, uint64_t *base,
    vuint32m2_t bindex, vuint64m4_t value, size_t vl);
void vsoxei32_v_u64m8_m (vbool8_t mask, uint64_t *base,
    vuint32m4_t bindex, vuint64m8_t value, size_t vl);
```

```
void vsoxei64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t bindex, vuint64m1_t value, size_t vl);
void vsoxei64_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint64m2_t bindex, vuint64m2_t value, size_t vl);
void vsoxei64_v_u64m4_m (vbool16_t mask, uint64_t *base,
    vuint64m4_t bindex, vuint64m4_t value, size_t vl);
void vsoxei64_v_u64m8_m (vbool8_t mask, uint64_t *base,
    vuint64m8_t bindex, vuint64m8_t value, size_t vl);
void vsoxei8_v_f16mf4_m (vbool64_t mask, float16_t *base,
    vuint8mf8_t bindex, vfloat16mf4_t value, size_t vl);
void vsoxei8_v_f16mf2_m (vbool32_t mask, float16_t *base,
    vuint8mf4_t bindex, vfloat16mf2_t value, size_t vl);
void vsoxei8_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint8mf2_t bindex, vfloat16m1_t value, size_t vl);
void vsoxei8_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint8m1_t bindex, vfloat16m2_t value, size_t vl);
void vsoxei8_v_f16m4_m (vbool4_t mask, float16_t *base,
    vuint8m2_t bindex, vfloat16m4_t value, size_t vl);
void vsoxei8_v_f16m8_m (vbool2_t mask, float16_t *base,
    vuint8m4_t bindex, vfloat16m8_t value, size_t vl);
void vsoxei16_v_f16mf4_m (vbool64_t mask, float16_t *base,
    vuint16mf4_t bindex, vfloat16mf4_t value, size_t vl);
void vsoxei16_v_f16mf2_m (vbool32_t mask, float16_t *base,
    vuint16mf2_t bindex, vfloat16mf2_t value, size_t vl);
void vsoxei16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint16m1_t bindex, vfloat16m1_t value, size_t vl);
void vsoxei16_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint16m2_t bindex, vfloat16m2_t value, size_t vl);
void vsoxei16_v_f16m4_m (vbool4_t mask, float16_t *base,
    vuint16m4_t bindex, vfloat16m4_t value, size_t vl);
void vsoxei16_v_f16m8_m (vbool2_t mask, float16_t *base,
    vuint16m8_t bindex, vfloat16m8_t value, size_t vl);
void vsoxei32_v_f16mf4_m (vbool64_t mask, float16_t *base,
    vuint32mf2_t bindex, vfloat16mf4_t value, size_t vl);
void vsoxei32_v_f16mf2_m (vbool32_t mask, float16_t *base,
    vuint32m1_t bindex, vfloat16mf2_t value, size_t vl);
void vsoxei32_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint32m2_t bindex, vfloat16m1_t value, size_t vl);
void vsoxei32_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint32m4_t bindex, vfloat16m2_t value, size_t vl);
void vsoxei32_v_f16m4_m (vbool4_t mask, float16_t *base,
    vuint32m8_t bindex, vfloat16m4_t value, size_t vl);
void vsoxei64_v_f16mf4_m (vbool64_t mask, float16_t *base,
    vuint64m1_t bindex, vfloat16mf4_t value, size_t vl);
void vsoxei64_v_f16mf2_m (vbool32_t mask, float16_t *base,
    vuint64m2_t bindex, vfloat16mf2_t value, size_t vl);
```

```
void vsoxei64_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint64m4_t bindex, vfloat16m1_t value, size_t vl);
void vsoxei64_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint64m8_t bindex, vfloat16m2_t value, size_t vl);
void vsoxei8_v_f32mf2_m (vbool64_t mask, float32_t *base,
    vuint8mf8_t bindex, vfloat32mf2_t value, size_t vl);
void vsoxei8_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint8mf4_t bindex, vfloat32m1_t value, size_t vl);
void vsoxei8_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint8mf2_t bindex, vfloat32m2_t value, size_t vl);
void vsoxei8_v_f32m4_m (vbool8_t mask, float32_t *base,
    vuint8m1_t bindex, vfloat32m4_t value, size_t vl);
void vsoxei8_v_f32m8_m (vbool4_t mask, float32_t *base,
    vuint8m2_t bindex, vfloat32m8_t value, size_t vl);
void vsoxei16_v_f32mf2_m (vbool64_t mask, float32_t *base,
    vuint16mf4_t bindex, vfloat32mf2_t value, size_t vl);
void vsoxei16_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint16mf2_t bindex, vfloat32m1_t value, size_t vl);
void vsoxei16_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint16m1_t bindex, vfloat32m2_t value, size_t vl);
void vsoxei16_v_f32m4_m (vbool8_t mask, float32_t *base,
    vuint16m2_t bindex, vfloat32m4_t value, size_t vl);
void vsoxei16_v_f32m8_m (vbool4_t mask, float32_t *base,
    vuint16m4_t bindex, vfloat32m8_t value, size_t vl);
void vsoxei32_v_f32mf2_m (vbool64_t mask, float32_t *base,
    vuint32mf2_t bindex, vfloat32mf2_t value, size_t vl);
void vsoxei32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint32m1_t bindex, vfloat32m1_t value, size_t vl);
void vsoxei32_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint32m2_t bindex, vfloat32m2_t value, size_t vl);
void vsoxei32_v_f32m4_m (vbool8_t mask, float32_t *base,
    vuint32m4_t bindex, vfloat32m4_t value, size_t vl);
void vsoxei32_v_f32m8_m (vbool4_t mask, float32_t *base,
    vuint32m8_t bindex, vfloat32m8_t value, size_t vl);
void vsoxei64_v_f32mf2_m (vbool64_t mask, float32_t *base,
    vuint64m1_t bindex, vfloat32mf2_t value, size_t vl);
void vsoxei64_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint64m2_t bindex, vfloat32m1_t value, size_t vl);
void vsoxei64_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint64m4_t bindex, vfloat32m2_t value, size_t vl);
void vsoxei64_v_f32m4_m (vbool8_t mask, float32_t *base,
    vuint64m8_t bindex, vfloat32m4_t value, size_t vl);
void vsoxei8_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint8mf8_t bindex, vfloat64m1_t value, size_t vl);
void vsoxei8_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint8mf4_t bindex, vfloat64m2_t value, size_t vl);
```

```
void vsoxei8_v_f64m4_m (vbool16_t mask, float64_t *base,
    vuint8mf2_t bindex, vfloat64m4_t value, size_t vl);
void vsoxei8_v_f64m8_m (vbool8_t mask, float64_t *base,
    vuint8m1_t bindex, vfloat64m8_t value, size_t vl);
void vsoxei16_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint16mf4_t bindex, vfloat64m1_t value, size_t vl);
void vsoxei16_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint16mf2_t bindex, vfloat64m2_t value, size_t vl);
void vsoxei16_v_f64m4_m (vbool16_t mask, float64_t *base,
    vuint16m1_t bindex, vfloat64m4_t value, size_t vl);
void vsoxei16_v_f64m8_m (vbool8_t mask, float64_t *base,
    vuint16m2_t bindex, vfloat64m8_t value, size_t vl);
void vsoxei32_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint32mf2_t bindex, vfloat64m1_t value, size_t vl);
void vsoxei32_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint32m1_t bindex, vfloat64m2_t value, size_t vl);
void vsoxei32_v_f64m4_m (vbool16_t mask, float64_t *base,
    vuint32m2_t bindex, vfloat64m4_t value, size_t vl);
void vsoxei32_v_f64m8_m (vbool8_t mask, float64_t *base,
    vuint32m4_t bindex, vfloat64m8_t value, size_t vl);
void vsoxei64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint64m1_t bindex, vfloat64m1_t value, size_t vl);
void vsoxei64_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint64m2_t bindex, vfloat64m2_t value, size_t vl);
void vsoxei64_v_f64m4_m (vbool16_t mask, float64_t *base,
    vuint64m4_t bindex, vfloat64m4_t value, size_t vl);
void vsoxei64_v_f64m8_m (vbool8_t mask, float64_t *base,
    vuint64m8_t bindex, vfloat64m8_t value, size_t vl);
void vsuxei8_v_i8mf8_m (vbool64_t mask, int8_t *base,
    vuint8mf8_t bindex, vint8mf8_t value, size_t vl);
void vsuxei8_v_i8mf4_m (vbool32_t mask, int8_t *base,
    vuint8mf4_t bindex, vint8mf4_t value, size_t vl);
void vsuxei8_v_i8mf2_m (vbool16_t mask, int8_t *base,
    vuint8mf2_t bindex, vint8mf2_t value, size_t vl);
void vsuxei8_v_i8m1_m (vbool8_t mask, int8_t *base, vuint8m1_t
    bindex, vint8m1_t value, size_t vl);
void vsuxei8_v_i8m2_m (vbool4_t mask, int8_t *base, vuint8m2_t
    bindex, vint8m2_t value, size_t vl);
void vsuxei8_v_i8m4_m (vbool2_t mask, int8_t *base, vuint8m4_t
    bindex, vint8m4_t value, size_t vl);
void vsuxei8_v_i8m8_m (vbool1_t mask, int8_t *base, vuint8m8_t
    bindex, vint8m8_t value, size_t vl);
void vsuxei16_v_i8mf8_m (vbool64_t mask, int8_t *base,
    vuint16mf4_t bindex, vint8mf8_t value, size_t vl);
void vsuxei16_v_i8mf4_m (vbool32_t mask, int8_t *base,
    vuint16mf2_t bindex, vint8mf4_t value, size_t vl);
```

```
void vsuxei16_v_i8mf2_m (vbool16_t mask, int8_t *base,
    vuint16m1_t bindex, vint8mf2_t value, size_t vl);
void vsuxei16_v_i8m1_m (vbool8_t mask, int8_t *base, vuint16m2_t
    bindex, vint8m1_t value, size_t vl);
void vsuxei16_v_i8m2_m (vbool4_t mask, int8_t *base, vuint16m4_t
    bindex, vint8m2_t value, size_t vl);
void vsuxei16_v_i8m4_m (vbool2_t mask, int8_t *base, vuint16m8_t
    bindex, vint8m4_t value, size_t vl);
void vsuxei32_v_i8mf8_m (vbool64_t mask, int8_t *base,
    vuint32mf2_t bindex, vint8mf8_t value, size_t vl);
void vsuxei32_v_i8mf4_m (vbool32_t mask, int8_t *base,
    vuint32m1_t bindex, vint8mf4_t value, size_t vl);
void vsuxei32_v_i8mf2_m (vbool16_t mask, int8_t *base,
    vuint32m2_t bindex, vint8mf2_t value, size_t vl);
void vsuxei32_v_i8m1_m (vbool8_t mask, int8_t *base, vuint32m4_t
    bindex, vint8m1_t value, size_t vl);
void vsuxei32_v_i8m2_m (vbool4_t mask, int8_t *base, vuint32m8_t
    bindex, vint8m2_t value, size_t vl);
void vsuxei64_v_i8mf8_m (vbool64_t mask, int8_t *base,
    vuint64m1_t bindex, vint8mf8_t value, size_t vl);
void vsuxei64_v_i8mf4_m (vbool32_t mask, int8_t *base,
    vuint64m2_t bindex, vint8mf4_t value, size_t vl);
void vsuxei64_v_i8mf2_m (vbool16_t mask, int8_t *base,
    vuint64m4_t bindex, vint8mf2_t value, size_t vl);
void vsuxei64_v_i8m1_m (vbool8_t mask, int8_t *base, vuint64m8_t
    bindex, vint8m1_t value, size_t vl);
void vsuxei8_v_i16mf4_m (vbool64_t mask, int16_t *base,
    vuint8mf8_t bindex, vint16mf4_t value, size_t vl);
void vsuxei8_v_i16mf2_m (vbool32_t mask, int16_t *base,
    vuint8mf4_t bindex, vint16mf2_t value, size_t vl);
void vsuxei8_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint8mf2_t bindex, vint16m1_t value, size_t vl);
void vsuxei8_v_i16m2_m (vbool8_t mask, int16_t *base, vuint8m1_t
    bindex, vint16m2_t value, size_t vl);
void vsuxei8_v_i16m4_m (vbool4_t mask, int16_t *base, vuint8m2_t
    bindex, vint16m4_t value, size_t vl);
void vsuxei8_v_i16m8_m (vbool2_t mask, int16_t *base, vuint8m4_t
    bindex, vint16m8_t value, size_t vl);
void vsuxei16_v_i16mf4_m (vbool64_t mask, int16_t *base,
    vuint16mf4_t bindex, vint16mf4_t value, size_t vl);
void vsuxei16_v_i16mf2_m (vbool32_t mask, int16_t *base,
    vuint16mf2_t bindex, vint16mf2_t value, size_t vl);
void vsuxei16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint16m1_t bindex, vint16m1_t value, size_t vl);
void vsuxei16_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint16m2_t bindex, vint16m2_t value, size_t vl);
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135

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void vsuxei16_v_i16m4_m (vbool4_t mask, int16_t *base,
    vuint16m4_t bindex, vint16m4_t value, size_t vl);
void vsuxei16_v_i16m8_m (vbool2_t mask, int16_t *base,
    vuint16m8_t bindex, vint16m8_t value, size_t vl);
void vsuxei32_v_i16mf4_m (vbool64_t mask, int16_t *base,
    vuint32mf2_t bindex, vint16mf4_t value, size_t vl);
void vsuxei32_v_i16mf2_m (vbool32_t mask, int16_t *base,
    vuint32m1_t bindex, vint16mf2_t value, size_t vl);
void vsuxei32_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint32m2_t bindex, vint16m1_t value, size_t vl);
void vsuxei32_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint32m4_t bindex, vint16m2_t value, size_t vl);
void vsuxei32_v_i16m4_m (vbool4_t mask, int16_t *base,
    vuint32m8_t bindex, vint16m4_t value, size_t vl);
void vsuxei64_v_i16mf4_m (vbool64_t mask, int16_t *base,
    vuint64m1_t bindex, vint16mf4_t value, size_t vl);
void vsuxei64_v_i16mf2_m (vbool32_t mask, int16_t *base,
    vuint64m2_t bindex, vint16mf2_t value, size_t vl);
void vsuxei64_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint64m4_t bindex, vint16m1_t value, size_t vl);
void vsuxei64_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint64m8_t bindex, vint16m2_t value, size_t vl);
void vsuxei8_v_i32mf2_m (vbool64_t mask, int32_t *base,
    vuint8mf8_t bindex, vint32mf2_t value, size_t vl);
void vsuxei8_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint8mf4_t bindex, vint32m1_t value, size_t vl);
void vsuxei8_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint8mf2_t bindex, vint32m2_t value, size_t vl);
void vsuxei8_v_i32m4_m (vbool8_t mask, int32_t *base, vuint8m1_t
    bindex, vint32m4_t value, size_t vl);
void vsuxei8_v_i32m8_m (vbool4_t mask, int32_t *base, vuint8m2_t
    bindex, vint32m8_t value, size_t vl);
void vsuxei16_v_i32mf2_m (vbool64_t mask, int32_t *base,
    vuint16mf4_t bindex, vint32mf2_t value, size_t vl);
void vsuxei16_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint16mf2_t bindex, vint32m1_t value, size_t vl);
void vsuxei16_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint16m1_t bindex, vint32m2_t value, size_t vl);
void vsuxei16_v_i32m4_m (vbool8_t mask, int32_t *base,
    vuint16m2_t bindex, vint32m4_t value, size_t vl);
void vsuxei16_v_i32m8_m (vbool4_t mask, int32_t *base,
    vuint16m4_t bindex, vint32m8_t value, size_t vl);
void vsuxei32_v_i32mf2_m (vbool64_t mask, int32_t *base,
    vuint32mf2_t bindex, vint32mf2_t value, size_t vl);
void vsuxei32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint32m1_t bindex, vint32m1_t value, size_t vl);
```

```
void vsuxei32_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint32m2_t bindex, vint32m2_t value, size_t vl);
void vsuxei32_v_i32m4_m (vbool8_t mask, int32_t *base,
    vuint32m4_t bindex, vint32m4_t value, size_t vl);
void vsuxei32_v_i32m8_m (vbool4_t mask, int32_t *base,
    vuint32m8_t bindex, vint32m8_t value, size_t vl);
void vsuxei64_v_i32mf2_m (vbool64_t mask, int32_t *base,
    vuint64m1_t bindex, vint32mf2_t value, size_t vl);
void vsuxei64_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint64m2_t bindex, vint32m1_t value, size_t vl);
void vsuxei64_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint64m4_t bindex, vint32m2_t value, size_t vl);
void vsuxei64_v_i32m4_m (vbool8_t mask, int32_t *base,
    vuint64m8_t bindex, vint32m4_t value, size_t vl);
void vsuxei8_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint8mf8_t bindex, vint64m1_t value, size_t vl);
void vsuxei8_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint8mf4_t bindex, vint64m2_t value, size_t vl);
void vsuxei8_v_i64m4_m (vbool16_t mask, int64_t *base,
    vuint8mf2_t bindex, vint64m4_t value, size_t vl);
void vsuxei8_v_i64m8_m (vbool8_t mask, int64_t *base, vuint8m1_t
    bindex, vint64m8_t value, size_t vl);
void vsuxei16_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint16mf4_t bindex, vint64m1_t value, size_t vl);
void vsuxei16_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint16mf2_t bindex, vint64m2_t value, size_t vl);
void vsuxei16_v_i64m4_m (vbool16_t mask, int64_t *base,
    vuint16m1_t bindex, vint64m4_t value, size_t vl);
void vsuxei16_v_i64m8_m (vbool8_t mask, int64_t *base,
    vuint16m2_t bindex, vint64m8_t value, size_t vl);
void vsuxei32_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint32mf2_t bindex, vint64m1_t value, size_t vl);
void vsuxei32_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint32m1_t bindex, vint64m2_t value, size_t vl);
void vsuxei32_v_i64m4_m (vbool16_t mask, int64_t *base,
    vuint32m2_t bindex, vint64m4_t value, size_t vl);
void vsuxei32_v_i64m8_m (vbool8_t mask, int64_t *base,
    vuint32m4_t bindex, vint64m8_t value, size_t vl);
void vsuxei64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint64m1_t bindex, vint64m1_t value, size_t vl);
void vsuxei64_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint64m2_t bindex, vint64m2_t value, size_t vl);
void vsuxei64_v_i64m4_m (vbool16_t mask, int64_t *base,
    vuint64m4_t bindex, vint64m4_t value, size_t vl);
void vsuxei64_v_i64m8_m (vbool8_t mask, int64_t *base,
    vuint64m8_t bindex, vint64m8_t value, size_t vl);
```

```
void vsuxei8_v_u8mf8_m (vbool64_t mask, uint8_t *base,
    vuint8mf8_t bindex, vuint8mf8_t value, size_t vl);
void vsuxei8_v_u8mf4_m (vbool32_t mask, uint8_t *base,
    vuint8mf4_t bindex, vuint8mf4_t value, size_t vl);
void vsuxei8_v_u8mf2_m (vbool16_t mask, uint8_t *base,
    vuint8mf2_t bindex, vuint8mf2_t value, size_t vl);
void vsuxei8_v_u8m1_m (vbool8_t mask, uint8_t *base, vuint8m1_t
    bindex, vuint8m1_t value, size_t vl);
void vsuxei8_v_u8m2_m (vbool4_t mask, uint8_t *base, vuint8m2_t
    bindex, vuint8m2_t value, size_t vl);
void vsuxei8_v_u8m4_m (vbool2_t mask, uint8_t *base, vuint8m4_t
    bindex, vuint8m4_t value, size_t vl);
void vsuxei8_v_u8m8_m (vbool1_t mask, uint8_t *base, vuint8m8_t
    bindex, vuint8m8_t value, size_t vl);
void vsuxei16_v_u8mf8_m (vbool64_t mask, uint8_t *base,
    vuint16mf4_t bindex, vuint8mf8_t value, size_t vl);
void vsuxei16_v_u8mf4_m (vbool32_t mask, uint8_t *base,
    vuint16mf2_t bindex, vuint8mf4_t value, size_t vl);
void vsuxei16_v_u8mf2_m (vbool16_t mask, uint8_t *base,
    vuint16m1_t bindex, vuint8mf2_t value, size_t vl);
void vsuxei16_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint16m2_t bindex, vuint8m1_t value, size_t vl);
void vsuxei16_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint16m4_t bindex, vuint8m2_t value, size_t vl);
void vsuxei16_v_u8m4_m (vbool2_t mask, uint8_t *base,
    vuint16m8_t bindex, vuint8m4_t value, size_t vl);
void vsuxei32_v_u8mf8_m (vbool64_t mask, uint8_t *base,
    vuint32mf2_t bindex, vuint8mf8_t value, size_t vl);
void vsuxei32_v_u8mf4_m (vbool32_t mask, uint8_t *base,
    vuint32m1_t bindex, vuint8mf4_t value, size_t vl);
void vsuxei32_v_u8mf2_m (vbool16_t mask, uint8_t *base,
    vuint32m2_t bindex, vuint8mf2_t value, size_t vl);
void vsuxei32_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint32m4_t bindex, vuint8m1_t value, size_t vl);
void vsuxei32_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint32m8_t bindex, vuint8m2_t value, size_t vl);
void vsuxei64_v_u8mf8_m (vbool64_t mask, uint8_t *base,
    vuint64m1_t bindex, vuint8mf8_t value, size_t vl);
void vsuxei64_v_u8mf4_m (vbool32_t mask, uint8_t *base,
    vuint64m2_t bindex, vuint8mf4_t value, size_t vl);
void vsuxei64_v_u8mf2_m (vbool16_t mask, uint8_t *base,
    vuint64m4_t bindex, vuint8mf2_t value, size_t vl);
void vsuxei64_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint64m8_t bindex, vuint8m1_t value, size_t vl);
void vsuxei8_v_u16mf4_m (vbool64_t mask, uint16_t *base,
    vuint8mf8_t bindex, vuint16mf4_t value, size_t vl);
```

```
void vsuxei8_v_u16mf2_m (vbool32_t mask, uint16_t *base,
    vuint8mf4_t bindex, vuint16mf2_t value, size_t vl);
void vsuxei8_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint8mf2_t bindex, vuint16m1_t value, size_t vl);
void vsuxei8_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint8m1_t bindex, vuint16m2_t value, size_t vl);
void vsuxei8_v_u16m4_m (vbool4_t mask, uint16_t *base,
    vuint8m2_t bindex, vuint16m4_t value, size_t vl);
void vsuxei8_v_u16m8_m (vbool2_t mask, uint16_t *base,
    vuint8m4_t bindex, vuint16m8_t value, size_t vl);
void vsuxei16_v_u16mf4_m (vbool64_t mask, uint16_t *base,
    vuint16mf4_t bindex, vuint16mf4_t value, size_t vl);
void vsuxei16_v_u16mf2_m (vbool32_t mask, uint16_t *base,
    vuint16mf2_t bindex, vuint16mf2_t value, size_t vl);
void vsuxei16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t bindex, vuint16m1_t value, size_t vl);
void vsuxei16_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint16m2_t bindex, vuint16m2_t value, size_t vl);
void vsuxei16_v_u16m4_m (vbool4_t mask, uint16_t *base,
    vuint16m4_t bindex, vuint16m4_t value, size_t vl);
void vsuxei16_v_u16m8_m (vbool2_t mask, uint16_t *base,
    vuint16m8_t bindex, vuint16m8_t value, size_t vl);
void vsuxei32_v_u16mf4_m (vbool64_t mask, uint16_t *base,
    vuint32mf2_t bindex, vuint16mf4_t value, size_t vl);
void vsuxei32_v_u16mf2_m (vbool32_t mask, uint16_t *base,
    vuint32m1_t bindex, vuint16mf2_t value, size_t vl);
void vsuxei32_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint32m2_t bindex, vuint16m1_t value, size_t vl);
void vsuxei32_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint32m4_t bindex, vuint16m2_t value, size_t vl);
void vsuxei32_v_u16m4_m (vbool4_t mask, uint16_t *base,
    vuint32m8_t bindex, vuint16m4_t value, size_t vl);
void vsuxei64_v_u16mf4_m (vbool64_t mask, uint16_t *base,
    vuint64m1_t bindex, vuint16mf4_t value, size_t vl);
void vsuxei64_v_u16mf2_m (vbool32_t mask, uint16_t *base,
    vuint64m2_t bindex, vuint16mf2_t value, size_t vl);
void vsuxei64_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint64m4_t bindex, vuint16m1_t value, size_t vl);
void vsuxei64_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint64m8_t bindex, vuint16m2_t value, size_t vl);
void vsuxei8_v_u32mf2_m (vbool64_t mask, uint32_t *base,
    vuint8mf8_t bindex, vuint32mf2_t value, size_t vl);
void vsuxei8_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint8mf4_t bindex, vuint32m1_t value, size_t vl);
void vsuxei8_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint8mf2_t bindex, vuint32m2_t value, size_t vl);
```

```
void vsuxei8_v_u32m4_m (vbool8_t mask, uint32_t *base,
    vuint8m1_t bindex, vuint32m4_t value, size_t vl);
void vsuxei8_v_u32m8_m (vbool4_t mask, uint32_t *base,
    vuint8m2_t bindex, vuint32m8_t value, size_t vl);
void vsuxei16_v_u32mf2_m (vbool64_t mask, uint32_t *base,
    vuint16mf4_t bindex, vuint32mf2_t value, size_t vl);
void vsuxei16_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint16mf2_t bindex, vuint32m1_t value, size_t vl);
void vsuxei16_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint16m1_t bindex, vuint32m2_t value, size_t vl);
void vsuxei16_v_u32m4_m (vbool8_t mask, uint32_t *base,
    vuint16m2_t bindex, vuint32m4_t value, size_t vl);
void vsuxei16_v_u32m8_m (vbool4_t mask, uint32_t *base,
    vuint16m4_t bindex, vuint32m8_t value, size_t vl);
void vsuxei32_v_u32mf2_m (vbool64_t mask, uint32_t *base,
    vuint32mf2_t bindex, vuint32mf2_t value, size_t vl);
void vsuxei32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t bindex, vuint32m1_t value, size_t vl);
void vsuxei32_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint32m2_t bindex, vuint32m2_t value, size_t vl);
void vsuxei32_v_u32m4_m (vbool8_t mask, uint32_t *base,
    vuint32m4_t bindex, vuint32m4_t value, size_t vl);
void vsuxei32_v_u32m8_m (vbool4_t mask, uint32_t *base,
    vuint32m8_t bindex, vuint32m8_t value, size_t vl);
void vsuxei64_v_u32mf2_m (vbool64_t mask, uint32_t *base,
    vuint64m1_t bindex, vuint32mf2_t value, size_t vl);
void vsuxei64_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint64m2_t bindex, vuint32m1_t value, size_t vl);
void vsuxei64_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint64m4_t bindex, vuint32m2_t value, size_t vl);
void vsuxei64_v_u32m4_m (vbool8_t mask, uint32_t *base,
    vuint64m8_t bindex, vuint32m4_t value, size_t vl);
void vsuxei8_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint8mf8_t bindex, vuint64m1_t value, size_t vl);
void vsuxei8_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint8mf4_t bindex, vuint64m2_t value, size_t vl);
void vsuxei8_v_u64m4_m (vbool16_t mask, uint64_t *base,
    vuint8mf2_t bindex, vuint64m4_t value, size_t vl);
void vsuxei8_v_u64m8_m (vbool8_t mask, uint64_t *base,
    vuint8m1_t bindex, vuint64m8_t value, size_t vl);
void vsuxei16_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint16mf4_t bindex, vuint64m1_t value, size_t vl);
void vsuxei16_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint16mf2_t bindex, vuint64m2_t value, size_t vl);
void vsuxei16_v_u64m4_m (vbool16_t mask, uint64_t *base,
    vuint16m1_t bindex, vuint64m4_t value, size_t vl);
```

```
void vsuxei16_v_u64m8_m (vbool8_t mask, uint64_t *base,
    vuint16m2_t bindex, vuint64m8_t value, size_t vl);
void vsuxei32_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint32mf2_t bindex, vuint64m1_t value, size_t vl);
void vsuxei32_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint32m1_t bindex, vuint64m2_t value, size_t vl);
void vsuxei32_v_u64m4_m (vbool16_t mask, uint64_t *base,
    vuint32m2_t bindex, vuint64m4_t value, size_t vl);
void vsuxei32_v_u64m8_m (vbool8_t mask, uint64_t *base,
    vuint32m4_t bindex, vuint64m8_t value, size_t vl);
void vsuxei64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t bindex, vuint64m1_t value, size_t vl);
void vsuxei64_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint64m2_t bindex, vuint64m2_t value, size_t vl);
void vsuxei64_v_u64m4_m (vbool16_t mask, uint64_t *base,
    vuint64m4_t bindex, vuint64m4_t value, size_t vl);
void vsuxei64_v_u64m8_m (vbool8_t mask, uint64_t *base,
    vuint64m8_t bindex, vuint64m8_t value, size_t vl);
void vsuxei8_v_f16mf4_m (vbool64_t mask, float16_t *base,
    vuint8mf8_t bindex, vfloat16mf4_t value, size_t vl);
void vsuxei8_v_f16mf2_m (vbool32_t mask, float16_t *base,
    vuint8mf4_t bindex, vfloat16mf2_t value, size_t vl);
void vsuxei8_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint8mf2_t bindex, vfloat16m1_t value, size_t vl);
void vsuxei8_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint8m1_t bindex, vfloat16m2_t value, size_t vl);
void vsuxei8_v_f16m4_m (vbool4_t mask, float16_t *base,
    vuint8m2_t bindex, vfloat16m4_t value, size_t vl);
void vsuxei8_v_f16m8_m (vbool2_t mask, float16_t *base,
    vuint8m4_t bindex, vfloat16m8_t value, size_t vl);
void vsuxei16_v_f16mf4_m (vbool64_t mask, float16_t *base,
    vuint16mf4_t bindex, vfloat16mf4_t value, size_t vl);
void vsuxei16_v_f16mf2_m (vbool32_t mask, float16_t *base,
    vuint16mf2_t bindex, vfloat16mf2_t value, size_t vl);
void vsuxei16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint16m1_t bindex, vfloat16m1_t value, size_t vl);
void vsuxei16_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint16m2_t bindex, vfloat16m2_t value, size_t vl);
void vsuxei16_v_f16m4_m (vbool4_t mask, float16_t *base,
    vuint16m4_t bindex, vfloat16m4_t value, size_t vl);
void vsuxei16_v_f16m8_m (vbool2_t mask, float16_t *base,
    vuint16m8_t bindex, vfloat16m8_t value, size_t vl);
void vsuxei32_v_f16mf4_m (vbool64_t mask, float16_t *base,
    vuint32mf2_t bindex, vfloat16mf4_t value, size_t vl);
void vsuxei32_v_f16mf2_m (vbool32_t mask, float16_t *base,
    vuint32m1_t bindex, vfloat16mf2_t value, size_t vl);
```

```c
void vsuxei32_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint32m2_t bindex, vfloat16m1_t value, size_t vl);
void vsuxei32_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint32m4_t bindex, vfloat16m2_t value, size_t vl);
void vsuxei32_v_f16m4_m (vbool4_t mask, float16_t *base,
    vuint32m8_t bindex, vfloat16m4_t value, size_t vl);
void vsuxei64_v_f16mf4_m (vbool64_t mask, float16_t *base,
    vuint64m1_t bindex, vfloat16mf4_t value, size_t vl);
void vsuxei64_v_f16mf2_m (vbool32_t mask, float16_t *base,
    vuint64m2_t bindex, vfloat16mf2_t value, size_t vl);
void vsuxei64_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint64m4_t bindex, vfloat16m1_t value, size_t vl);
void vsuxei64_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint64m8_t bindex, vfloat16m2_t value, size_t vl);
void vsuxei8_v_f32mf2_m (vbool64_t mask, float32_t *base,
    vuint8mf8_t bindex, vfloat32mf2_t value, size_t vl);
void vsuxei8_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint8mf4_t bindex, vfloat32m1_t value, size_t vl);
void vsuxei8_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint8mf2_t bindex, vfloat32m2_t value, size_t vl);
void vsuxei8_v_f32m4_m (vbool8_t mask, float32_t *base,
    vuint8m1_t bindex, vfloat32m4_t value, size_t vl);
void vsuxei8_v_f32m8_m (vbool4_t mask, float32_t *base,
    vuint8m2_t bindex, vfloat32m8_t value, size_t vl);
void vsuxei16_v_f32mf2_m (vbool64_t mask, float32_t *base,
    vuint16mf4_t bindex, vfloat32mf2_t value, size_t vl);
void vsuxei16_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint16mf2_t bindex, vfloat32m1_t value, size_t vl);
void vsuxei16_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint16m1_t bindex, vfloat32m2_t value, size_t vl);
void vsuxei16_v_f32m4_m (vbool8_t mask, float32_t *base,
    vuint16m2_t bindex, vfloat32m4_t value, size_t vl);
void vsuxei16_v_f32m8_m (vbool4_t mask, float32_t *base,
    vuint16m4_t bindex, vfloat32m8_t value, size_t vl);
void vsuxei32_v_f32mf2_m (vbool64_t mask, float32_t *base,
    vuint32mf2_t bindex, vfloat32mf2_t value, size_t vl);
void vsuxei32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint32m1_t bindex, vfloat32m1_t value, size_t vl);
void vsuxei32_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint32m2_t bindex, vfloat32m2_t value, size_t vl);
void vsuxei32_v_f32m4_m (vbool8_t mask, float32_t *base,
    vuint32m4_t bindex, vfloat32m4_t value, size_t vl);
void vsuxei32_v_f32m8_m (vbool4_t mask, float32_t *base,
    vuint32m8_t bindex, vfloat32m8_t value, size_t vl);
void vsuxei64_v_f32mf2_m (vbool64_t mask, float32_t *base,
    vuint64m1_t bindex, vfloat32mf2_t value, size_t vl);
```

```
void vsuxei64_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint64m2_t bindex, vfloat32m1_t value, size_t vl);
void vsuxei64_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint64m4_t bindex, vfloat32m2_t value, size_t vl);
void vsuxei64_v_f32m4_m (vbool8_t mask, float32_t *base,
    vuint64m8_t bindex, vfloat32m4_t value, size_t vl);
void vsuxei8_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint8mf8_t bindex, vfloat64m1_t value, size_t vl);
void vsuxei8_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint8mf4_t bindex, vfloat64m2_t value, size_t vl);
void vsuxei8_v_f64m4_m (vbool16_t mask, float64_t *base,
    vuint8mf2_t bindex, vfloat64m4_t value, size_t vl);
void vsuxei8_v_f64m8_m (vbool8_t mask, float64_t *base,
    vuint8m1_t bindex, vfloat64m8_t value, size_t vl);
void vsuxei16_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint16mf4_t bindex, vfloat64m1_t value, size_t vl);
void vsuxei16_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint16mf2_t bindex, vfloat64m2_t value, size_t vl);
void vsuxei16_v_f64m4_m (vbool16_t mask, float64_t *base,
    vuint16m1_t bindex, vfloat64m4_t value, size_t vl);
void vsuxei16_v_f64m8_m (vbool8_t mask, float64_t *base,
    vuint16m2_t bindex, vfloat64m8_t value, size_t vl);
void vsuxei32_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint32mf2_t bindex, vfloat64m1_t value, size_t vl);
void vsuxei32_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint32m1_t bindex, vfloat64m2_t value, size_t vl);
void vsuxei32_v_f64m4_m (vbool16_t mask, float64_t *base,
    vuint32m2_t bindex, vfloat64m4_t value, size_t vl);
void vsuxei32_v_f64m8_m (vbool8_t mask, float64_t *base,
    vuint32m4_t bindex, vfloat64m8_t value, size_t vl);
void vsuxei64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint64m1_t bindex, vfloat64m1_t value, size_t vl);
void vsuxei64_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint64m2_t bindex, vfloat64m2_t value, size_t vl);
void vsuxei64_v_f64m4_m (vbool16_t mask, float64_t *base,
    vuint64m4_t bindex, vfloat64m4_t value, size_t vl);
void vsuxei64_v_f64m8_m (vbool8_t mask, float64_t *base,
    vuint64m8_t bindex, vfloat64m8_t value, size_t vl);
```

Unit-stride Fault-Only-First Loads Functions:

Prototypes:

```
vint8mf8_t vle8ff_v_i8mf8 (const int8_t *base, size_t *new_vl,
    size_t vl);
```

```
vint8mf4_t vle8ff_v_i8mf4 (const int8_t *base, size_t *new_vl,
    size_t vl);
vint8mf2_t vle8ff_v_i8mf2 (const int8_t *base, size_t *new_vl,
    size_t vl);
vint8m1_t vle8ff_v_i8m1 (const int8_t *base, size_t *new_vl,
    size_t vl);
vint8m2_t vle8ff_v_i8m2 (const int8_t *base, size_t *new_vl,
    size_t vl);
vint8m4_t vle8ff_v_i8m4 (const int8_t *base, size_t *new_vl,
    size_t vl);
vint8m8_t vle8ff_v_i8m8 (const int8_t *base, size_t *new_vl,
    size_t vl);
vint16mf4_t vle16ff_v_i16mf4 (const int16_t *base, size_t
    *new_vl, size_t vl);
vint16mf2_t vle16ff_v_i16mf2 (const int16_t *base, size_t
    *new_vl, size_t vl);
vint16m1_t vle16ff_v_i16m1 (const int16_t *base, size_t *new_vl,
    size_t vl);
vint16m2_t vle16ff_v_i16m2 (const int16_t *base, size_t *new_vl,
    size_t vl);
vint16m4_t vle16ff_v_i16m4 (const int16_t *base, size_t *new_vl,
    size_t vl);
vint16m8_t vle16ff_v_i16m8 (const int16_t *base, size_t *new_vl,
    size_t vl);
vint32mf2_t vle32ff_v_i32mf2 (const int32_t *base, size_t
    *new_vl, size_t vl);
vint32m1_t vle32ff_v_i32m1 (const int32_t *base, size_t *new_vl,
    size_t vl);
vint32m2_t vle32ff_v_i32m2 (const int32_t *base, size_t *new_vl,
    size_t vl);
vint32m4_t vle32ff_v_i32m4 (const int32_t *base, size_t *new_vl,
    size_t vl);
vint32m8_t vle32ff_v_i32m8 (const int32_t *base, size_t *new_vl,
    size_t vl);
vint64m1_t vle64ff_v_i64m1 (const int64_t *base, size_t *new_vl,
    size_t vl);
vint64m2_t vle64ff_v_i64m2 (const int64_t *base, size_t *new_vl,
    size_t vl);
vint64m4_t vle64ff_v_i64m4 (const int64_t *base, size_t *new_vl,
    size_t vl);
vint64m8_t vle64ff_v_i64m8 (const int64_t *base, size_t *new_vl,
    size_t vl);
vuint8mf8_t vle8ff_v_u8mf8 (const uint8_t *base, size_t *new_vl,
    size_t vl);
vuint8mf4_t vle8ff_v_u8mf4 (const uint8_t *base, size_t *new_vl,
    size_t vl);
```

```
vuint8mf2_t vle8ff_v_u8mf2 (const uint8_t *base, size_t *new_vl,
    size_t vl);
vuint8m1_t vle8ff_v_u8m1 (const uint8_t *base, size_t *new_vl,
    size_t vl);
vuint8m2_t vle8ff_v_u8m2 (const uint8_t *base, size_t *new_vl,
    size_t vl);
vuint8m4_t vle8ff_v_u8m4 (const uint8_t *base, size_t *new_vl,
    size_t vl);
vuint8m8_t vle8ff_v_u8m8 (const uint8_t *base, size_t *new_vl,
    size_t vl);
vuint16mf4_t vle16ff_v_u16mf4 (const uint16_t *base, size_t
    *new_vl, size_t vl);
vuint16mf2_t vle16ff_v_u16mf2 (const uint16_t *base, size_t
    *new_vl, size_t vl);
vuint16m1_t vle16ff_v_u16m1 (const uint16_t *base, size_t
    *new_vl, size_t vl);
vuint16m2_t vle16ff_v_u16m2 (const uint16_t *base, size_t
    *new_vl, size_t vl);
vuint16m4_t vle16ff_v_u16m4 (const uint16_t *base, size_t
    *new_vl, size_t vl);
vuint16m8_t vle16ff_v_u16m8 (const uint16_t *base, size_t
    *new_vl, size_t vl);
vuint32mf2_t vle32ff_v_u32mf2 (const uint32_t *base, size_t
    *new_vl, size_t vl);
vuint32m1_t vle32ff_v_u32m1 (const uint32_t *base, size_t
    *new_vl, size_t vl);
vuint32m2_t vle32ff_v_u32m2 (const uint32_t *base, size_t
    *new_vl, size_t vl);
vuint32m4_t vle32ff_v_u32m4 (const uint32_t *base, size_t
    *new_vl, size_t vl);
vuint32m8_t vle32ff_v_u32m8 (const uint32_t *base, size_t
    *new_vl, size_t vl);
vuint64m1_t vle64ff_v_u64m1 (const uint64_t *base, size_t
    *new_vl, size_t vl);
vuint64m2_t vle64ff_v_u64m2 (const uint64_t *base, size_t
    *new_vl, size_t vl);
vuint64m4_t vle64ff_v_u64m4 (const uint64_t *base, size_t
    *new_vl, size_t vl);
vuint64m8_t vle64ff_v_u64m8 (const uint64_t *base, size_t
    *new_vl, size_t vl);
vfloat16mf4_t vle16ff_v_f16mf4 (const float16_t *base, size_t
    *new_vl, size_t vl);
vfloat16mf2_t vle16ff_v_f16mf2 (const float16_t *base, size_t
    *new_vl, size_t vl);
vfloat16m1_t vle16ff_v_f16m1 (const float16_t *base, size_t
    *new_vl, size_t vl);
```

```
vfloat16m2_t vle16ff_v_f16m2 (const float16_t *base, size_t
    *new_vl, size_t vl);
vfloat16m4_t vle16ff_v_f16m4 (const float16_t *base, size_t
    *new_vl, size_t vl);
vfloat16m8_t vle16ff_v_f16m8 (const float16_t *base, size_t
    *new_vl, size_t vl);
vfloat32mf2_t vle32ff_v_f32mf2 (const float32_t *base, size_t
    *new_vl, size_t vl);
vfloat32m1_t vle32ff_v_f32m1 (const float32_t *base, size_t
    *new_vl, size_t vl);
vfloat32m2_t vle32ff_v_f32m2 (const float32_t *base, size_t
    *new_vl, size_t vl);
vfloat32m4_t vle32ff_v_f32m4 (const float32_t *base, size_t
    *new_vl, size_t vl);
vfloat32m8_t vle32ff_v_f32m8 (const float32_t *base, size_t
    *new_vl, size_t vl);
vfloat64m1_t vle64ff_v_f64m1 (const float64_t *base, size_t
    *new_vl, size_t vl);
vfloat64m2_t vle64ff_v_f64m2 (const float64_t *base, size_t
    *new_vl, size_t vl);
vfloat64m4_t vle64ff_v_f64m4 (const float64_t *base, size_t
    *new_vl, size_t vl);
vfloat64m8_t vle64ff_v_f64m8 (const float64_t *base, size_t
    *new_vl, size_t vl);
// masked functions
vint8mf8_t vle8ff_v_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, const int8_t *base, size_t *new_vl, size_t vl);
vint8mf4_t vle8ff_v_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, const int8_t *base, size_t *new_vl, size_t vl);
vint8mf2_t vle8ff_v_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, const int8_t *base, size_t *new_vl, size_t vl);
vint8m1_t vle8ff_v_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    const int8_t *base, size_t *new_vl, size_t vl);
vint8m2_t vle8ff_v_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    const int8_t *base, size_t *new_vl, size_t vl);
vint8m4_t vle8ff_v_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    const int8_t *base, size_t *new_vl, size_t vl);
vint8m8_t vle8ff_v_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    const int8_t *base, size_t *new_vl, size_t vl);
vint16mf4_t vle16ff_v_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, const int16_t *base, size_t *new_vl, size_t vl);
vint16mf2_t vle16ff_v_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, const int16_t *base, size_t *new_vl, size_t vl);
vint16m1_t vle16ff_v_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, const int16_t *base, size_t *new_vl, size_t vl);
```

```
vint16m2_t vle16ff_v_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, const int16_t *base, size_t *new_vl, size_t vl);
vint16m4_t vle16ff_v_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, const int16_t *base, size_t *new_vl, size_t vl);
vint16m8_t vle16ff_v_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, const int16_t *base, size_t *new_vl, size_t vl);
vint32mf2_t vle32ff_v_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, const int32_t *base, size_t *new_vl, size_t vl);
vint32m1_t vle32ff_v_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, const int32_t *base, size_t *new_vl, size_t vl);
vint32m2_t vle32ff_v_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, const int32_t *base, size_t *new_vl, size_t vl);
vint32m4_t vle32ff_v_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, const int32_t *base, size_t *new_vl, size_t vl);
vint32m8_t vle32ff_v_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, const int32_t *base, size_t *new_vl, size_t vl);
vint64m1_t vle64ff_v_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, const int64_t *base, size_t *new_vl, size_t vl);
vint64m2_t vle64ff_v_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, const int64_t *base, size_t *new_vl, size_t vl);
vint64m4_t vle64ff_v_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, const int64_t *base, size_t *new_vl, size_t vl);
vint64m8_t vle64ff_v_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, const int64_t *base, size_t *new_vl, size_t vl);
vuint8mf8_t vle8ff_v_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, const uint8_t *base, size_t *new_vl, size_t vl);
vuint8mf4_t vle8ff_v_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, const uint8_t *base, size_t *new_vl, size_t vl);
vuint8mf2_t vle8ff_v_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, const uint8_t *base, size_t *new_vl, size_t vl);
vuint8m1_t vle8ff_v_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    const uint8_t *base, size_t *new_vl, size_t vl);
vuint8m2_t vle8ff_v_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    const uint8_t *base, size_t *new_vl, size_t vl);
vuint8m4_t vle8ff_v_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    const uint8_t *base, size_t *new_vl, size_t vl);
vuint8m8_t vle8ff_v_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    const uint8_t *base, size_t *new_vl, size_t vl);
vuint16mf4_t vle16ff_v_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, const uint16_t *base, size_t *new_vl, size_t vl);
vuint16mf2_t vle16ff_v_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, const uint16_t *base, size_t *new_vl, size_t vl);
vuint16m1_t vle16ff_v_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, const uint16_t *base, size_t *new_vl, size_t vl);
vuint16m2_t vle16ff_v_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, const uint16_t *base, size_t *new_vl, size_t vl);
```

```
vuint16m4_t vle16ff_v_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, const uint16_t *base, size_t *new_vl, size_t vl);
vuint16m8_t vle16ff_v_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, const uint16_t *base, size_t *new_vl, size_t vl);
vuint32mf2_t vle32ff_v_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, const uint32_t *base, size_t *new_vl, size_t vl);
vuint32m1_t vle32ff_v_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, const uint32_t *base, size_t *new_vl, size_t vl);
vuint32m2_t vle32ff_v_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, const uint32_t *base, size_t *new_vl, size_t vl);
vuint32m4_t vle32ff_v_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, const uint32_t *base, size_t *new_vl, size_t vl);
vuint32m8_t vle32ff_v_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, const uint32_t *base, size_t *new_vl, size_t vl);
vuint64m1_t vle64ff_v_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, const uint64_t *base, size_t *new_vl, size_t vl);
vuint64m2_t vle64ff_v_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, const uint64_t *base, size_t *new_vl, size_t vl);
vuint64m4_t vle64ff_v_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, const uint64_t *base, size_t *new_vl, size_t vl);
vuint64m8_t vle64ff_v_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, const uint64_t *base, size_t *new_vl, size_t vl);
vfloat16mf4_t vle16ff_v_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, const float16_t *base, size_t *new_vl, size_t vl);
vfloat16mf2_t vle16ff_v_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, const float16_t *base, size_t *new_vl, size_t vl);
vfloat16m1_t vle16ff_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, const float16_t *base, size_t *new_vl, size_t vl);
vfloat16m2_t vle16ff_v_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, const float16_t *base, size_t *new_vl, size_t vl);
vfloat16m4_t vle16ff_v_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, const float16_t *base, size_t *new_vl, size_t vl);
vfloat16m8_t vle16ff_v_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, const float16_t *base, size_t *new_vl, size_t vl);
vfloat32mf2_t vle32ff_v_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, const float32_t *base, size_t *new_vl, size_t vl);
vfloat32m1_t vle32ff_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, const float32_t *base, size_t *new_vl, size_t vl);
vfloat32m2_t vle32ff_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, const float32_t *base, size_t *new_vl, size_t vl);
vfloat32m4_t vle32ff_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, const float32_t *base, size_t *new_vl, size_t vl);
vfloat32m8_t vle32ff_v_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, const float32_t *base, size_t *new_vl, size_t vl);
vfloat64m1_t vle64ff_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, const float64_t *base, size_t *new_vl, size_t vl);
```

```
vfloat64m2_t vle64ff_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, const float64_t *base, size_t *new_vl, size_t vl);
vfloat64m4_t vle64ff_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, const float64_t *base, size_t *new_vl, size_t vl);
vfloat64m8_t vle64ff_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, const float64_t *base, size_t *new_vl, size_t vl);
```

Vector Load/Store Segment Instructions (Zvlsseg):

Vector Unit-Stride Segment Load Functions:

Prototypes:

```
void vlseg2e8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, const int8_t
    *base, size_t vl);
void vlseg3e8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, const int8_t *base, size_t vl);
void vlseg4e8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, const int8_t *base, size_t vl);
void vlseg5e8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, const int8_t *base,
    size_t vl);
void vlseg6e8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, const
    int8_t *base, size_t vl);
void vlseg7e8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, vint8m1_t
    *v6, const int8_t *base, size_t vl);
void vlseg8e8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, vint8m1_t
    *v6, vint8m1_t *v7, const int8_t *base, size_t vl);
void vlseg2e8_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1, const int8_t
    *base, size_t vl);
void vlseg3e8_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1, vint8m2_t
    *v2, const int8_t *base, size_t vl);
void vlseg4e8_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1, vint8m2_t
    *v2, vint8m2_t *v3, const int8_t *base, size_t vl);
void vlseg2e8_v_i8m4 (vint8m4_t *v0, vint8m4_t *v1, const int8_t
    *base, size_t vl);
void vlseg2e16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1, const
    int16_t *base, size_t vl);
void vlseg3e16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, const int16_t *base, size_t vl);
void vlseg4e16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, const int16_t *base, size_t
    vl);
```

```c
void vlseg5e16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, const
    int16_t *base, size_t vl);
void vlseg6e16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, const int16_t *base, size_t vl);
void vlseg7e16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, const int16_t *base, size_t vl);
void vlseg8e16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, vint16m1_t *v7, const int16_t *base,
    size_t vl);
void vlseg2e16_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1, const
    int16_t *base, size_t vl);
void vlseg3e16_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, const int16_t *base, size_t vl);
void vlseg4e16_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vint16m2_t *v3, const int16_t *base, size_t
    vl);
void vlseg2e16_v_i16m4 (vint16m4_t *v0, vint16m4_t *v1, const
    int16_t *base, size_t vl);
void vlseg2e32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1, const
    int32_t *base, size_t vl);
void vlseg3e32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, const int32_t *base, size_t vl);
void vlseg4e32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, const int32_t *base, size_t
    vl);
void vlseg5e32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, const
    int32_t *base, size_t vl);
void vlseg6e32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, const int32_t *base, size_t vl);
void vlseg7e32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, const int32_t *base, size_t vl);
void vlseg8e32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, vint32m1_t *v7, const int32_t *base,
    size_t vl);
void vlseg2e32_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1, const
    int32_t *base, size_t vl);
void vlseg3e32_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, const int32_t *base, size_t vl);
```

```
void vlseg4e32_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vint32m2_t *v3, const int32_t *base, size_t
    vl);
void vlseg2e32_v_i32m4 (vint32m4_t *v0, vint32m4_t *v1, const
    int32_t *base, size_t vl);
void vlseg2e64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1, const
    int64_t *base, size_t vl);
void vlseg3e64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, const int64_t *base, size_t vl);
void vlseg4e64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, const int64_t *base, size_t
    vl);
void vlseg5e64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, const
    int64_t *base, size_t vl);
void vlseg6e64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, const int64_t *base, size_t vl);
void vlseg7e64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, vint64m1_t *v6, const int64_t *base, size_t vl);
void vlseg8e64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, vint64m1_t *v6, vint64m1_t *v7, const int64_t *base,
    size_t vl);
void vlseg2e64_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1, const
    int64_t *base, size_t vl);
void vlseg3e64_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1,
    vint64m2_t *v2, const int64_t *base, size_t vl);
void vlseg4e64_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1,
    vint64m2_t *v2, vint64m2_t *v3, const int64_t *base, size_t
    vl);
void vlseg2e64_v_i64m4 (vint64m4_t *v0, vint64m4_t *v1, const
    int64_t *base, size_t vl);
void vlseg2e8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1, const
    uint8_t *base, size_t vl);
void vlseg3e8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1, vuint8m1_t
    *v2, const uint8_t *base, size_t vl);
void vlseg4e8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1, vuint8m1_t
    *v2, vuint8m1_t *v3, const uint8_t *base, size_t vl);
void vlseg5e8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1, vuint8m1_t
    *v2, vuint8m1_t *v3, vuint8m1_t *v4, const uint8_t *base,
    size_t vl);
void vlseg6e8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1, vuint8m1_t
    *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t *v5, const
    uint8_t *base, size_t vl);
```

```
void vlseg7e8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1, vuint8m1_t
    *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t *v5,
    vuint8m1_t *v6, const uint8_t *base, size_t vl);
void vlseg8e8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1, vuint8m1_t
    *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t *v5,
    vuint8m1_t *v6, vuint8m1_t *v7, const uint8_t *base, size_t
    vl);
void vlseg2e8_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1, const
    uint8_t *base, size_t vl);
void vlseg3e8_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1, vuint8m2_t
    *v2, const uint8_t *base, size_t vl);
void vlseg4e8_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1, vuint8m2_t
    *v2, vuint8m2_t *v3, const uint8_t *base, size_t vl);
void vlseg2e8_v_u8m4 (vuint8m4_t *v0, vuint8m4_t *v1, const
    uint8_t *base, size_t vl);
void vlseg2e16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1, const
    uint16_t *base, size_t vl);
void vlseg3e16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, const uint16_t *base, size_t vl);
void vlseg4e16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, const uint16_t *base,
    size_t vl);
void vlseg5e16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4, const
    uint16_t *base, size_t vl);
void vlseg6e16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, const uint16_t *base, size_t vl);
void vlseg7e16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, const uint16_t *base,
    size_t vl);
void vlseg8e16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vuint16m1_t *v7, const
    uint16_t *base, size_t vl);
void vlseg2e16_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1, const
    uint16_t *base, size_t vl);
void vlseg3e16_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, const uint16_t *base, size_t vl);
void vlseg4e16_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vuint16m2_t *v3, const uint16_t *base,
    size_t vl);
void vlseg2e16_v_u16m4 (vuint16m4_t *v0, vuint16m4_t *v1, const
    uint16_t *base, size_t vl);
```

```
void vlseg2e32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1, const
    uint32_t *base, size_t vl);
void vlseg3e32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, const uint32_t *base, size_t vl);
void vlseg4e32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, const uint32_t *base,
    size_t vl);
void vlseg5e32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4, const
    uint32_t *base, size_t vl);
void vlseg6e32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, const uint32_t *base, size_t vl);
void vlseg7e32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, const uint32_t *base,
    size_t vl);
void vlseg8e32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, vuint32m1_t *v7, const
    uint32_t *base, size_t vl);
void vlseg2e32_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1, const
    uint32_t *base, size_t vl);
void vlseg3e32_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, const uint32_t *base, size_t vl);
void vlseg4e32_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, vuint32m2_t *v3, const uint32_t *base,
    size_t vl);
void vlseg2e32_v_u32m4 (vuint32m4_t *v0, vuint32m4_t *v1, const
    uint32_t *base, size_t vl);
void vlseg2e64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1, const
    uint64_t *base, size_t vl);
void vlseg3e64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, const uint64_t *base, size_t vl);
void vlseg4e64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, const uint64_t *base,
    size_t vl);
void vlseg5e64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4, const
    uint64_t *base, size_t vl);
void vlseg6e64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, const uint64_t *base, size_t vl);
void vlseg7e64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vuint64m1_t *v6, const uint64_t *base,
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        size_t vl);
void vlseg8e64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vuint64m1_t *v6, vuint64m1_t *v7, const
    uint64_t *base, size_t vl);
void vlseg2e64_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1, const
    uint64_t *base, size_t vl);
void vlseg3e64_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, const uint64_t *base, size_t vl);
void vlseg4e64_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, vuint64m2_t *v3, const uint64_t *base,
    size_t vl);
void vlseg2e64_v_u64m4 (vuint64m4_t *v0, vuint64m4_t *v1, const
    uint64_t *base, size_t vl);
void vlseg2e16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    const float16_t *base, size_t vl);
void vlseg3e16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, const float16_t *base, size_t vl);
void vlseg4e16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, const float16_t *base,
    size_t vl);
void vlseg5e16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4, const
    float16_t *base, size_t vl);
void vlseg6e16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, const float16_t *base, size_t vl);
void vlseg7e16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, const float16_t *base,
    size_t vl);
void vlseg8e16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vfloat16m1_t *v7, const
    float16_t *base, size_t vl);
void vlseg2e16_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    const float16_t *base, size_t vl);
void vlseg3e16_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, const float16_t *base, size_t vl);
void vlseg4e16_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, const float16_t *base,
    size_t vl);
void vlseg2e16_v_f16m4 (vfloat16m4_t *v0, vfloat16m4_t *v1,
    const float16_t *base, size_t vl);
void vlseg2e32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    const float32_t *base, size_t vl);
```

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void vlseg3e32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, const float32_t *base, size_t vl);
void vlseg4e32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, const float32_t *base,
    size_t vl);
void vlseg5e32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4, const
    float32_t *base, size_t vl);
void vlseg6e32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, const float32_t *base, size_t vl);
void vlseg7e32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, const float32_t *base,
    size_t vl);
void vlseg8e32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, vfloat32m1_t *v7, const
    float32_t *base, size_t vl);
void vlseg2e32_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    const float32_t *base, size_t vl);
void vlseg3e32_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, const float32_t *base, size_t vl);
void vlseg4e32_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vfloat32m2_t *v3, const float32_t *base,
    size_t vl);
void vlseg2e32_v_f32m4 (vfloat32m4_t *v0, vfloat32m4_t *v1,
    const float32_t *base, size_t vl);
void vlseg2e64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    const float64_t *base, size_t vl);
void vlseg3e64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, const float64_t *base, size_t vl);
void vlseg4e64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, const float64_t *base,
    size_t vl);
void vlseg5e64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4, const
    float64_t *base, size_t vl);
void vlseg6e64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, const float64_t *base, size_t vl);
void vlseg7e64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, vfloat64m1_t *v6, const float64_t *base,
    size_t vl);
```

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void vlseg8e64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, vfloat64m1_t *v6, vfloat64m1_t *v7, const
    float64_t *base, size_t vl);
void vlseg2e64_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    const float64_t *base, size_t vl);
void vlseg3e64_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, const float64_t *base, size_t vl);
void vlseg4e64_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vfloat64m2_t *v3, const float64_t *base,
    size_t vl);
void vlseg2e64_v_f64m4 (vfloat64m4_t *v0, vfloat64m4_t *v1,
    const float64_t *base, size_t vl);
void vlseg2e8ff_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, const
    int8_t *base, size_t *new_vl, size_t vl);
void vlseg3e8ff_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, const int8_t *base, size_t *new_vl, size_t vl);
void vlseg4e8ff_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, const int8_t *base, size_t *new_vl,
    size_t vl);
void vlseg5e8ff_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, const int8_t *base,
    size_t *new_vl, size_t vl);
void vlseg6e8ff_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, const
    int8_t *base, size_t *new_vl, size_t vl);
void vlseg7e8ff_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, vint8m1_t
    *v6, const int8_t *base, size_t *new_vl, size_t vl);
void vlseg8e8ff_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, vint8m1_t
    *v6, vint8m1_t *v7, const int8_t *base, size_t *new_vl,
    size_t vl);
void vlseg2e8ff_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1, const
    int8_t *base, size_t *new_vl, size_t vl);
void vlseg3e8ff_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1, vint8m2_t
    *v2, const int8_t *base, size_t *new_vl, size_t vl);
void vlseg4e8ff_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1, vint8m2_t
    *v2, vint8m2_t *v3, const int8_t *base, size_t *new_vl,
    size_t vl);
void vlseg2e8ff_v_i8m4 (vint8m4_t *v0, vint8m4_t *v1, const
    int8_t *base, size_t *new_vl, size_t vl);
void vlseg2e16ff_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1, const
    int16_t *base, size_t *new_vl, size_t vl);
void vlseg3e16ff_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, const int16_t *base, size_t *new_vl, size_t
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    vl);
void vlseg4e16ff_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, const int16_t *base, size_t
    *new_vl, size_t vl);
void vlseg5e16ff_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, const
    int16_t *base, size_t *new_vl, size_t vl);
void vlseg6e16ff_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, const int16_t *base, size_t *new_vl, size_t vl);
void vlseg7e16ff_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, const int16_t *base, size_t *new_vl,
    size_t vl);
void vlseg8e16ff_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, vint16m1_t *v7, const int16_t *base,
    size_t *new_vl, size_t vl);
void vlseg2e16ff_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1, const
    int16_t *base, size_t *new_vl, size_t vl);
void vlseg3e16ff_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, const int16_t *base, size_t *new_vl, size_t
    vl);
void vlseg4e16ff_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vint16m2_t *v3, const int16_t *base, size_t
    *new_vl, size_t vl);
void vlseg2e16ff_v_i16m4 (vint16m4_t *v0, vint16m4_t *v1, const
    int16_t *base, size_t *new_vl, size_t vl);
void vlseg2e32ff_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1, const
    int32_t *base, size_t *new_vl, size_t vl);
void vlseg3e32ff_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, const int32_t *base, size_t *new_vl, size_t
    vl);
void vlseg4e32ff_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, const int32_t *base, size_t
    *new_vl, size_t vl);
void vlseg5e32ff_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, const
    int32_t *base, size_t *new_vl, size_t vl);
void vlseg6e32ff_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, const int32_t *base, size_t *new_vl, size_t vl);
void vlseg7e32ff_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, const int32_t *base, size_t *new_vl,
    size_t vl);
```

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void vlseg8e32ff_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, vint32m1_t *v7, const int32_t *base,
    size_t *new_vl, size_t vl);
void vlseg2e32ff_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1, const
    int32_t *base, size_t *new_vl, size_t vl);
void vlseg3e32ff_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, const int32_t *base, size_t *new_vl, size_t
    vl);
void vlseg4e32ff_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vint32m2_t *v3, const int32_t *base, size_t
    *new_vl, size_t vl);
void vlseg2e32ff_v_i32m4 (vint32m4_t *v0, vint32m4_t *v1, const
    int32_t *base, size_t *new_vl, size_t vl);
void vlseg2e64ff_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1, const
    int64_t *base, size_t *new_vl, size_t vl);
void vlseg3e64ff_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, const int64_t *base, size_t *new_vl, size_t
    vl);
void vlseg4e64ff_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, const int64_t *base, size_t
    *new_vl, size_t vl);
void vlseg5e64ff_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, const
    int64_t *base, size_t *new_vl, size_t vl);
void vlseg6e64ff_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, const int64_t *base, size_t *new_vl, size_t vl);
void vlseg7e64ff_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, vint64m1_t *v6, const int64_t *base, size_t *new_vl,
    size_t vl);
void vlseg8e64ff_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, vint64m1_t *v6, vint64m1_t *v7, const int64_t *base,
    size_t *new_vl, size_t vl);
void vlseg2e64ff_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1, const
    int64_t *base, size_t *new_vl, size_t vl);
void vlseg3e64ff_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1,
    vint64m2_t *v2, const int64_t *base, size_t *new_vl, size_t
    vl);
void vlseg4e64ff_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1,
    vint64m2_t *v2, vint64m2_t *v3, const int64_t *base, size_t
    *new_vl, size_t vl);
void vlseg2e64ff_v_i64m4 (vint64m4_t *v0, vint64m4_t *v1, const
    int64_t *base, size_t *new_vl, size_t vl);
```

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void vlseg2e8ff_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1, const
    uint8_t *base, size_t *new_vl, size_t vl);
void vlseg3e8ff_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, const uint8_t *base, size_t *new_vl, size_t
    vl);
void vlseg4e8ff_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, const uint8_t *base, size_t
    *new_vl, size_t vl);
void vlseg5e8ff_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, const
    uint8_t *base, size_t *new_vl, size_t vl);
void vlseg6e8ff_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, const uint8_t *base, size_t *new_vl, size_t vl);
void vlseg7e8ff_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, const uint8_t *base, size_t *new_vl,
    size_t vl);
void vlseg8e8ff_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vuint8m1_t *v7, const uint8_t *base,
    size_t *new_vl, size_t vl);
void vlseg2e8ff_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1, const
    uint8_t *base, size_t *new_vl, size_t vl);
void vlseg3e8ff_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, const uint8_t *base, size_t *new_vl, size_t
    vl);
void vlseg4e8ff_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, vuint8m2_t *v3, const uint8_t *base, size_t
    *new_vl, size_t vl);
void vlseg2e8ff_v_u8m4 (vuint8m4_t *v0, vuint8m4_t *v1, const
    uint8_t *base, size_t *new_vl, size_t vl);
void vlseg2e16ff_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    const uint16_t *base, size_t *new_vl, size_t vl);
void vlseg3e16ff_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, const uint16_t *base, size_t *new_vl,
    size_t vl);
void vlseg4e16ff_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, const uint16_t *base,
    size_t *new_vl, size_t vl);
void vlseg5e16ff_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4, const
    uint16_t *base, size_t *new_vl, size_t vl);
void vlseg6e16ff_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, const uint16_t *base, size_t *new_vl,
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                                    size_t vl);
void vlseg7e16ff_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, const uint16_t *base,
    size_t *new_vl, size_t vl);
void vlseg8e16ff_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vuint16m1_t *v7, const
    uint16_t *base, size_t *new_vl, size_t vl);
void vlseg2e16ff_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    const uint16_t *base, size_t *new_vl, size_t vl);
void vlseg3e16ff_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, const uint16_t *base, size_t *new_vl,
    size_t vl);
void vlseg4e16ff_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vuint16m2_t *v3, const uint16_t *base,
    size_t *new_vl, size_t vl);
void vlseg2e16ff_v_u16m4 (vuint16m4_t *v0, vuint16m4_t *v1,
    const uint16_t *base, size_t *new_vl, size_t vl);
void vlseg2e32ff_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    const uint32_t *base, size_t *new_vl, size_t vl);
void vlseg3e32ff_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, const uint32_t *base, size_t *new_vl,
    size_t vl);
void vlseg4e32ff_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, const uint32_t *base,
    size_t *new_vl, size_t vl);
void vlseg5e32ff_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4, const
    uint32_t *base, size_t *new_vl, size_t vl);
void vlseg6e32ff_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, const uint32_t *base, size_t *new_vl,
    size_t vl);
void vlseg7e32ff_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, const uint32_t *base,
    size_t *new_vl, size_t vl);
void vlseg8e32ff_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, vuint32m1_t *v7, const
    uint32_t *base, size_t *new_vl, size_t vl);
void vlseg2e32ff_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    const uint32_t *base, size_t *new_vl, size_t vl);
void vlseg3e32ff_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, const uint32_t *base, size_t *new_vl,
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       size_t vl);
void vlseg4e32ff_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, vuint32m2_t *v3, const uint32_t *base,
    size_t *new_vl, size_t vl);
void vlseg2e32ff_v_u32m4 (vuint32m4_t *v0, vuint32m4_t *v1,
    const uint32_t *base, size_t *new_vl, size_t vl);
void vlseg2e64ff_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    const uint64_t *base, size_t *new_vl, size_t vl);
void vlseg3e64ff_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, const uint64_t *base, size_t *new_vl,
    size_t vl);
void vlseg4e64ff_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, const uint64_t *base,
    size_t *new_vl, size_t vl);
void vlseg5e64ff_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4, const
    uint64_t *base, size_t *new_vl, size_t vl);
void vlseg6e64ff_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, const uint64_t *base, size_t *new_vl,
    size_t vl);
void vlseg7e64ff_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vuint64m1_t *v6, const uint64_t *base,
    size_t *new_vl, size_t vl);
void vlseg8e64ff_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vuint64m1_t *v6, vuint64m1_t *v7, const
    uint64_t *base, size_t *new_vl, size_t vl);
void vlseg2e64ff_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1,
    const uint64_t *base, size_t *new_vl, size_t vl);
void vlseg3e64ff_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, const uint64_t *base, size_t *new_vl,
    size_t vl);
void vlseg4e64ff_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, vuint64m2_t *v3, const uint64_t *base,
    size_t *new_vl, size_t vl);
void vlseg2e64ff_v_u64m4 (vuint64m4_t *v0, vuint64m4_t *v1,
    const uint64_t *base, size_t *new_vl, size_t vl);
void vlseg2e16ff_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    const float16_t *base, size_t *new_vl, size_t vl);
void vlseg3e16ff_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, const float16_t *base, size_t *new_vl,
    size_t vl);
void vlseg4e16ff_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, const float16_t *base,
```

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          size_t *new_vl, size_t vl);
void vlseg5e16ff_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4, const
    float16_t *base, size_t *new_vl, size_t vl);
void vlseg6e16ff_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, const float16_t *base, size_t *new_vl,
    size_t vl);
void vlseg7e16ff_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, const float16_t *base,
    size_t *new_vl, size_t vl);
void vlseg8e16ff_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vfloat16m1_t *v7, const
    float16_t *base, size_t *new_vl, size_t vl);
void vlseg2e16ff_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    const float16_t *base, size_t *new_vl, size_t vl);
void vlseg3e16ff_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, const float16_t *base, size_t *new_vl,
    size_t vl);
void vlseg4e16ff_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, const float16_t *base,
    size_t *new_vl, size_t vl);
void vlseg2e16ff_v_f16m4 (vfloat16m4_t *v0, vfloat16m4_t *v1,
    const float16_t *base, size_t *new_vl, size_t vl);
void vlseg2e32ff_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    const float32_t *base, size_t *new_vl, size_t vl);
void vlseg3e32ff_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, const float32_t *base, size_t *new_vl,
    size_t vl);
void vlseg4e32ff_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, const float32_t *base,
    size_t *new_vl, size_t vl);
void vlseg5e32ff_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4, const
    float32_t *base, size_t *new_vl, size_t vl);
void vlseg6e32ff_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, const float32_t *base, size_t *new_vl,
    size_t vl);
void vlseg7e32ff_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, const float32_t *base,
    size_t *new_vl, size_t vl);
```

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void vlseg8e32ff_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, vfloat32m1_t *v7, const
    float32_t *base, size_t *new_vl, size_t vl);
void vlseg2e32ff_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    const float32_t *base, size_t *new_vl, size_t vl);
void vlseg3e32ff_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, const float32_t *base, size_t *new_vl,
    size_t vl);
void vlseg4e32ff_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vfloat32m2_t *v3, const float32_t *base,
    size_t *new_vl, size_t vl);
void vlseg2e32ff_v_f32m4 (vfloat32m4_t *v0, vfloat32m4_t *v1,
    const float32_t *base, size_t *new_vl, size_t vl);
void vlseg2e64ff_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    const float64_t *base, size_t *new_vl, size_t vl);
void vlseg3e64ff_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, const float64_t *base, size_t *new_vl,
    size_t vl);
void vlseg4e64ff_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, const float64_t *base,
    size_t *new_vl, size_t vl);
void vlseg5e64ff_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4, const
    float64_t *base, size_t *new_vl, size_t vl);
void vlseg6e64ff_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, const float64_t *base, size_t *new_vl,
    size_t vl);
void vlseg7e64ff_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, vfloat64m1_t *v6, const float64_t *base,
    size_t *new_vl, size_t vl);
void vlseg8e64ff_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, vfloat64m1_t *v6, vfloat64m1_t *v7, const
    float64_t *base, size_t *new_vl, size_t vl);
void vlseg2e64ff_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    const float64_t *base, size_t *new_vl, size_t vl);
void vlseg3e64ff_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, const float64_t *base, size_t *new_vl,
    size_t vl);
void vlseg4e64ff_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vfloat64m2_t *v3, const float64_t *base,
    size_t *new_vl, size_t vl);
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void vlseg2e64ff_v_f64m4 (vfloat64m4_t *v0, vfloat64m4_t *v1,
    const float64_t *base, size_t *new_vl, size_t vl);
// masked functions
void vlseg2e8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1, vbool8_t
    mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1, const
    int8_t *base, size_t vl);
void vlseg3e8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t
    maskedoff1, vint8m1_t maskedoff2, const int8_t *base, size_t
    vl);
void vlseg4e8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, vint8m1_t
    maskedoff3, const int8_t *base, size_t vl);
void vlseg5e8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vbool8_t mask, vint8m1_t
    maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
    vint8m1_t maskedoff3, vint8m1_t maskedoff4, const int8_t
    *base, size_t vl);
void vlseg6e8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, vbool8_t
    mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1, vint8m1_t
    maskedoff2, vint8m1_t maskedoff3, vint8m1_t maskedoff4,
    vint8m1_t maskedoff5, const int8_t *base, size_t vl);
void vlseg7e8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, vint8m1_t
    *v6, vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t
    maskedoff1, vint8m1_t maskedoff2, vint8m1_t maskedoff3,
    vint8m1_t maskedoff4, vint8m1_t maskedoff5, vint8m1_t
    maskedoff6, const int8_t *base, size_t vl);
void vlseg8e8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, vint8m1_t
    *v6, vint8m1_t *v7, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, vint8m1_t
    maskedoff3, vint8m1_t maskedoff4, vint8m1_t maskedoff5,
    vint8m1_t maskedoff6, vint8m1_t maskedoff7, const int8_t
    *base, size_t vl);
void vlseg2e8_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1, vbool4_t
    mask, vint8m2_t maskedoff0, vint8m2_t maskedoff1, const
    int8_t *base, size_t vl);
void vlseg3e8_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1, vint8m2_t
    *v2, vbool4_t mask, vint8m2_t maskedoff0, vint8m2_t
    maskedoff1, vint8m2_t maskedoff2, const int8_t *base, size_t
    vl);
void vlseg4e8_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1, vint8m2_t
    *v2, vint8m2_t *v3, vbool4_t mask, vint8m2_t maskedoff0,
```

```
    vint8m2_t maskedoff1, vint8m2_t maskedoff2, vint8m2_t
    maskedoff3, const int8_t *base, size_t vl);
void vlseg2e8_v_i8m4_m (vint8m4_t *v0, vint8m4_t *v1, vbool2_t
    mask, vint8m4_t maskedoff0, vint8m4_t maskedoff1, const
    int8_t *base, size_t vl);
void vlseg2e16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vbool16_t mask, vint16m1_t maskedoff0, vint16m1_t
    maskedoff1, const int16_t *base, size_t vl);
void vlseg3e16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vbool16_t mask, vint16m1_t maskedoff0,
    vint16m1_t maskedoff1, vint16m1_t maskedoff2, const int16_t
    *base, size_t vl);
void vlseg4e16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vbool16_t mask, vint16m1_t
    maskedoff0, vint16m1_t maskedoff1, vint16m1_t maskedoff2,
    vint16m1_t maskedoff3, const int16_t *base, size_t vl);
void vlseg5e16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vbool16_t
    mask, vint16m1_t maskedoff0, vint16m1_t maskedoff1,
    vint16m1_t maskedoff2, vint16m1_t maskedoff3, vint16m1_t
    maskedoff4, const int16_t *base, size_t vl);
void vlseg6e16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vbool16_t mask, vint16m1_t maskedoff0, vint16m1_t
    maskedoff1, vint16m1_t maskedoff2, vint16m1_t maskedoff3,
    vint16m1_t maskedoff4, vint16m1_t maskedoff5, const int16_t
    *base, size_t vl);
void vlseg7e16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, vbool16_t mask, vint16m1_t maskedoff0,
    vint16m1_t maskedoff1, vint16m1_t maskedoff2, vint16m1_t
    maskedoff3, vint16m1_t maskedoff4, vint16m1_t maskedoff5,
    vint16m1_t maskedoff6, const int16_t *base, size_t vl);
void vlseg8e16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, vint16m1_t *v7, vbool16_t mask,
    vint16m1_t maskedoff0, vint16m1_t maskedoff1, vint16m1_t
    maskedoff2, vint16m1_t maskedoff3, vint16m1_t maskedoff4,
    vint16m1_t maskedoff5, vint16m1_t maskedoff6, vint16m1_t
    maskedoff7, const int16_t *base, size_t vl);
void vlseg2e16_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vbool8_t mask, vint16m2_t maskedoff0, vint16m2_t maskedoff1,
    const int16_t *base, size_t vl);
void vlseg3e16_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vbool8_t mask, vint16m2_t maskedoff0,
    vint16m2_t maskedoff1, vint16m2_t maskedoff2, const int16_t
```

```
    *base, size_t vl);
void vlseg4e16_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vint16m2_t *v3, vbool8_t mask, vint16m2_t
    maskedoff0, vint16m2_t maskedoff1, vint16m2_t maskedoff2,
    vint16m2_t maskedoff3, const int16_t *base, size_t vl);
void vlseg2e16_v_i16m4_m (vint16m4_t *v0, vint16m4_t *v1,
    vbool4_t mask, vint16m4_t maskedoff0, vint16m4_t maskedoff1,
    const int16_t *base, size_t vl);
void vlseg2e32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vbool32_t mask, vint32m1_t maskedoff0, vint32m1_t
    maskedoff1, const int32_t *base, size_t vl);
void vlseg3e32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vbool32_t mask, vint32m1_t maskedoff0,
    vint32m1_t maskedoff1, vint32m1_t maskedoff2, const int32_t
    *base, size_t vl);
void vlseg4e32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vbool32_t mask, vint32m1_t
    maskedoff0, vint32m1_t maskedoff1, vint32m1_t maskedoff2,
    vint32m1_t maskedoff3, const int32_t *base, size_t vl);
void vlseg5e32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vbool32_t
    mask, vint32m1_t maskedoff0, vint32m1_t maskedoff1,
    vint32m1_t maskedoff2, vint32m1_t maskedoff3, vint32m1_t
    maskedoff4, const int32_t *base, size_t vl);
void vlseg6e32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vbool32_t mask, vint32m1_t maskedoff0, vint32m1_t
    maskedoff1, vint32m1_t maskedoff2, vint32m1_t maskedoff3,
    vint32m1_t maskedoff4, vint32m1_t maskedoff5, const int32_t
    *base, size_t vl);
void vlseg7e32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, vbool32_t mask, vint32m1_t maskedoff0,
    vint32m1_t maskedoff1, vint32m1_t maskedoff2, vint32m1_t
    maskedoff3, vint32m1_t maskedoff4, vint32m1_t maskedoff5,
    vint32m1_t maskedoff6, const int32_t *base, size_t vl);
void vlseg8e32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, vint32m1_t *v7, vbool32_t mask,
    vint32m1_t maskedoff0, vint32m1_t maskedoff1, vint32m1_t
    maskedoff2, vint32m1_t maskedoff3, vint32m1_t maskedoff4,
    vint32m1_t maskedoff5, vint32m1_t maskedoff6, vint32m1_t
    maskedoff7, const int32_t *base, size_t vl);
void vlseg2e32_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
    vbool16_t mask, vint32m2_t maskedoff0, vint32m2_t
    maskedoff1, const int32_t *base, size_t vl);
```

```
void vlseg3e32_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vbool16_t mask, vint32m2_t maskedoff0,
    vint32m2_t maskedoff1, vint32m2_t maskedoff2, const int32_t
    *base, size_t vl);
void vlseg4e32_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vint32m2_t *v3, vbool16_t mask, vint32m2_t
    maskedoff0, vint32m2_t maskedoff1, vint32m2_t maskedoff2,
    vint32m2_t maskedoff3, const int32_t *base, size_t vl);
void vlseg2e32_v_i32m4_m (vint32m4_t *v0, vint32m4_t *v1,
    vbool8_t mask, vint32m4_t maskedoff0, vint32m4_t maskedoff1,
    const int32_t *base, size_t vl);
void vlseg2e64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
    vbool64_t mask, vint64m1_t maskedoff0, vint64m1_t
    maskedoff1, const int64_t *base, size_t vl);
void vlseg3e64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vbool64_t mask, vint64m1_t maskedoff0,
    vint64m1_t maskedoff1, vint64m1_t maskedoff2, const int64_t
    *base, size_t vl);
void vlseg4e64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vbool64_t mask, vint64m1_t
    maskedoff0, vint64m1_t maskedoff1, vint64m1_t maskedoff2,
    vint64m1_t maskedoff3, const int64_t *base, size_t vl);
void vlseg5e64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vbool64_t
    mask, vint64m1_t maskedoff0, vint64m1_t maskedoff1,
    vint64m1_t maskedoff2, vint64m1_t maskedoff3, vint64m1_t
    maskedoff4, const int64_t *base, size_t vl);
void vlseg6e64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, vbool64_t mask, vint64m1_t maskedoff0, vint64m1_t
    maskedoff1, vint64m1_t maskedoff2, vint64m1_t maskedoff3,
    vint64m1_t maskedoff4, vint64m1_t maskedoff5, const int64_t
    *base, size_t vl);
void vlseg7e64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, vint64m1_t *v6, vbool64_t mask, vint64m1_t maskedoff0,
    vint64m1_t maskedoff1, vint64m1_t maskedoff2, vint64m1_t
    maskedoff3, vint64m1_t maskedoff4, vint64m1_t maskedoff5,
    vint64m1_t maskedoff6, const int64_t *base, size_t vl);
void vlseg8e64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, vint64m1_t *v6, vint64m1_t *v7, vbool64_t mask,
    vint64m1_t maskedoff0, vint64m1_t maskedoff1, vint64m1_t
    maskedoff2, vint64m1_t maskedoff3, vint64m1_t maskedoff4,
    vint64m1_t maskedoff5, vint64m1_t maskedoff6, vint64m1_t
    maskedoff7, const int64_t *base, size_t vl);
```

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void vlseg2e64_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
    vbool32_t mask, vint64m2_t maskedoff0, vint64m2_t
    maskedoff1, const int64_t *base, size_t vl);
void vlseg3e64_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
    vint64m2_t *v2, vbool32_t mask, vint64m2_t maskedoff0,
    vint64m2_t maskedoff1, vint64m2_t maskedoff2, const int64_t
    *base, size_t vl);
void vlseg4e64_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
    vint64m2_t *v2, vint64m2_t *v3, vbool32_t mask, vint64m2_t
    maskedoff0, vint64m2_t maskedoff1, vint64m2_t maskedoff2,
    vint64m2_t maskedoff3, const int64_t *base, size_t vl);
void vlseg2e64_v_i64m4_m (vint64m4_t *v0, vint64m4_t *v1,
    vbool16_t mask, vint64m4_t maskedoff0, vint64m4_t
    maskedoff1, const int64_t *base, size_t vl);
void vlseg2e8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1, vbool8_t
    mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1, const
    uint8_t *base, size_t vl);
void vlseg3e8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vbool8_t mask, vuint8m1_t maskedoff0,
    vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, const uint8_t
    *base, size_t vl);
void vlseg4e8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vbool8_t mask, vuint8m1_t
    maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t maskedoff2,
    vuint8m1_t maskedoff3, const uint8_t *base, size_t vl);
void vlseg5e8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vbool8_t
    mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
    vuint8m1_t maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t
    maskedoff4, const uint8_t *base, size_t vl);
void vlseg6e8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t
    maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t maskedoff3,
    vuint8m1_t maskedoff4, vuint8m1_t maskedoff5, const uint8_t
    *base, size_t vl);
void vlseg7e8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vbool8_t mask, vuint8m1_t maskedoff0,
    vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t
    maskedoff3, vuint8m1_t maskedoff4, vuint8m1_t maskedoff5,
    vuint8m1_t maskedoff6, const uint8_t *base, size_t vl);
void vlseg8e8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vuint8m1_t *v7, vbool8_t mask,
    vuint8m1_t maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t
```

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         maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t maskedoff4,
         vuint8m1_t maskedoff5, vuint8m1_t maskedoff6, vuint8m1_t
         maskedoff7, const uint8_t *base, size_t vl);
void vlseg2e8_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1, vbool4_t
         mask, vuint8m2_t maskedoff0, vuint8m2_t maskedoff1, const
         uint8_t *base, size_t vl);
void vlseg3e8_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
         vuint8m2_t *v2, vbool4_t mask, vuint8m2_t maskedoff0,
         vuint8m2_t maskedoff1, vuint8m2_t maskedoff2, const uint8_t
         *base, size_t vl);
void vlseg4e8_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
         vuint8m2_t *v2, vuint8m2_t *v3, vbool4_t mask, vuint8m2_t
         maskedoff0, vuint8m2_t maskedoff1, vuint8m2_t maskedoff2,
         vuint8m2_t maskedoff3, const uint8_t *base, size_t vl);
void vlseg2e8_v_u8m4_m (vuint8m4_t *v0, vuint8m4_t *v1, vbool2_t
         mask, vuint8m4_t maskedoff0, vuint8m4_t maskedoff1, const
         uint8_t *base, size_t vl);
void vlseg2e16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
         vbool16_t mask, vuint16m1_t maskedoff0, vuint16m1_t
         maskedoff1, const uint16_t *base, size_t vl);
void vlseg3e16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
         vuint16m1_t *v2, vbool16_t mask, vuint16m1_t maskedoff0,
         vuint16m1_t maskedoff1, vuint16m1_t maskedoff2, const
         uint16_t *base, size_t vl);
void vlseg4e16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
         vuint16m1_t *v2, vuint16m1_t *v3, vbool16_t mask,
         vuint16m1_t maskedoff0, vuint16m1_t maskedoff1, vuint16m1_t
         maskedoff2, vuint16m1_t maskedoff3, const uint16_t *base,
         size_t vl);
void vlseg5e16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
         vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4, vbool16_t
         mask, vuint16m1_t maskedoff0, vuint16m1_t maskedoff1,
         vuint16m1_t maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t
         maskedoff4, const uint16_t *base, size_t vl);
void vlseg6e16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
         vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
         vuint16m1_t *v5, vbool16_t mask, vuint16m1_t maskedoff0,
         vuint16m1_t maskedoff1, vuint16m1_t maskedoff2, vuint16m1_t
         maskedoff3, vuint16m1_t maskedoff4, vuint16m1_t maskedoff5,
         const uint16_t *base, size_t vl);
void vlseg7e16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
         vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
         vuint16m1_t *v5, vuint16m1_t *v6, vbool16_t mask,
         vuint16m1_t maskedoff0, vuint16m1_t maskedoff1, vuint16m1_t
         maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t maskedoff4,
         vuint16m1_t maskedoff5, vuint16m1_t maskedoff6, const
```

```
       uint16_t *base, size_t vl);
void vlseg8e16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vuint16m1_t *v7, vbool16_t
    mask, vuint16m1_t maskedoff0, vuint16m1_t maskedoff1,
    vuint16m1_t maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t
    maskedoff4, vuint16m1_t maskedoff5, vuint16m1_t maskedoff6,
    vuint16m1_t maskedoff7, const uint16_t *base, size_t vl);
void vlseg2e16_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vbool8_t mask, vuint16m2_t maskedoff0, vuint16m2_t
    maskedoff1, const uint16_t *base, size_t vl);
void vlseg3e16_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vbool8_t mask, vuint16m2_t maskedoff0,
    vuint16m2_t maskedoff1, vuint16m2_t maskedoff2, const
    uint16_t *base, size_t vl);
void vlseg4e16_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vuint16m2_t *v3, vbool8_t mask, vuint16m2_t
    maskedoff0, vuint16m2_t maskedoff1, vuint16m2_t maskedoff2,
    vuint16m2_t maskedoff3, const uint16_t *base, size_t vl);
void vlseg2e16_v_u16m4_m (vuint16m4_t *v0, vuint16m4_t *v1,
    vbool4_t mask, vuint16m4_t maskedoff0, vuint16m4_t
    maskedoff1, const uint16_t *base, size_t vl);
void vlseg2e32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vbool32_t mask, vuint32m1_t maskedoff0, vuint32m1_t
    maskedoff1, const uint32_t *base, size_t vl);
void vlseg3e32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vbool32_t mask, vuint32m1_t maskedoff0,
    vuint32m1_t maskedoff1, vuint32m1_t maskedoff2, const
    uint32_t *base, size_t vl);
void vlseg4e32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vbool32_t mask,
    vuint32m1_t maskedoff0, vuint32m1_t maskedoff1, vuint32m1_t
    maskedoff2, vuint32m1_t maskedoff3, const uint32_t *base,
    size_t vl);
void vlseg5e32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4, vbool32_t
    mask, vuint32m1_t maskedoff0, vuint32m1_t maskedoff1,
    vuint32m1_t maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t
    maskedoff4, const uint32_t *base, size_t vl);
void vlseg6e32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vbool32_t mask, vuint32m1_t maskedoff0,
    vuint32m1_t maskedoff1, vuint32m1_t maskedoff2, vuint32m1_t
    maskedoff3, vuint32m1_t maskedoff4, vuint32m1_t maskedoff5,
    const uint32_t *base, size_t vl);
```

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void vlseg7e32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, vbool32_t mask,
    vuint32m1_t maskedoff0, vuint32m1_t maskedoff1, vuint32m1_t
    maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t maskedoff4,
    vuint32m1_t maskedoff5, vuint32m1_t maskedoff6, const
    uint32_t *base, size_t vl);
void vlseg8e32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, vuint32m1_t *v7, vbool32_t
    mask, vuint32m1_t maskedoff0, vuint32m1_t maskedoff1,
    vuint32m1_t maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t
    maskedoff4, vuint32m1_t maskedoff5, vuint32m1_t maskedoff6,
    vuint32m1_t maskedoff7, const uint32_t *base, size_t vl);
void vlseg2e32_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
    vbool16_t mask, vuint32m2_t maskedoff0, vuint32m2_t
    maskedoff1, const uint32_t *base, size_t vl);
void vlseg3e32_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, vbool16_t mask, vuint32m2_t maskedoff0,
    vuint32m2_t maskedoff1, vuint32m2_t maskedoff2, const
    uint32_t *base, size_t vl);
void vlseg4e32_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, vuint32m2_t *v3, vbool16_t mask,
    vuint32m2_t maskedoff0, vuint32m2_t maskedoff1, vuint32m2_t
    maskedoff2, vuint32m2_t maskedoff3, const uint32_t *base,
    size_t vl);
void vlseg2e32_v_u32m4_m (vuint32m4_t *v0, vuint32m4_t *v1,
    vbool8_t mask, vuint32m4_t maskedoff0, vuint32m4_t
    maskedoff1, const uint32_t *base, size_t vl);
void vlseg2e64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vbool64_t mask, vuint64m1_t maskedoff0, vuint64m1_t
    maskedoff1, const uint64_t *base, size_t vl);
void vlseg3e64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vbool64_t mask, vuint64m1_t maskedoff0,
    vuint64m1_t maskedoff1, vuint64m1_t maskedoff2, const
    uint64_t *base, size_t vl);
void vlseg4e64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vbool64_t mask,
    vuint64m1_t maskedoff0, vuint64m1_t maskedoff1, vuint64m1_t
    maskedoff2, vuint64m1_t maskedoff3, const uint64_t *base,
    size_t vl);
void vlseg5e64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4, vbool64_t
    mask, vuint64m1_t maskedoff0, vuint64m1_t maskedoff1,
    vuint64m1_t maskedoff2, vuint64m1_t maskedoff3, vuint64m1_t
    maskedoff4, const uint64_t *base, size_t vl);
```

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void vlseg6e64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vbool64_t mask, vuint64m1_t maskedoff0,
    vuint64m1_t maskedoff1, vuint64m1_t maskedoff2, vuint64m1_t
    maskedoff3, vuint64m1_t maskedoff4, vuint64m1_t maskedoff5,
    const uint64_t *base, size_t vl);
void vlseg7e64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vuint64m1_t *v6, vbool64_t mask,
    vuint64m1_t maskedoff0, vuint64m1_t maskedoff1, vuint64m1_t
    maskedoff2, vuint64m1_t maskedoff3, vuint64m1_t maskedoff4,
    vuint64m1_t maskedoff5, vuint64m1_t maskedoff6, const
    uint64_t *base, size_t vl);
void vlseg8e64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vuint64m1_t *v6, vuint64m1_t *v7, vbool64_t
    mask, vuint64m1_t maskedoff0, vuint64m1_t maskedoff1,
    vuint64m1_t maskedoff2, vuint64m1_t maskedoff3, vuint64m1_t
    maskedoff4, vuint64m1_t maskedoff5, vuint64m1_t maskedoff6,
    vuint64m1_t maskedoff7, const uint64_t *base, size_t vl);
void vlseg2e64_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
    vbool32_t mask, vuint64m2_t maskedoff0, vuint64m2_t
    maskedoff1, const uint64_t *base, size_t vl);
void vlseg3e64_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, vbool32_t mask, vuint64m2_t maskedoff0,
    vuint64m2_t maskedoff1, vuint64m2_t maskedoff2, const
    uint64_t *base, size_t vl);
void vlseg4e64_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, vuint64m2_t *v3, vbool32_t mask,
    vuint64m2_t maskedoff0, vuint64m2_t maskedoff1, vuint64m2_t
    maskedoff2, vuint64m2_t maskedoff3, const uint64_t *base,
    size_t vl);
void vlseg2e64_v_u64m4_m (vuint64m4_t *v0, vuint64m4_t *v1,
    vbool16_t mask, vuint64m4_t maskedoff0, vuint64m4_t
    maskedoff1, const uint64_t *base, size_t vl);
void vlseg2e16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, const float16_t *base, size_t vl);
void vlseg3e16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vbool16_t mask, vfloat16m1_t maskedoff0,
    vfloat16m1_t maskedoff1, vfloat16m1_t maskedoff2, const
    float16_t *base, size_t vl);
void vlseg4e16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vbool16_t mask,
    vfloat16m1_t maskedoff0, vfloat16m1_t maskedoff1,
    vfloat16m1_t maskedoff2, vfloat16m1_t maskedoff3, const
```

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       float16_t *base, size_t vl);
void vlseg5e16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, vfloat16m1_t maskedoff2, vfloat16m1_t
    maskedoff3, vfloat16m1_t maskedoff4, const float16_t *base,
    size_t vl);
void vlseg6e16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vbool16_t mask, vfloat16m1_t maskedoff0,
    vfloat16m1_t maskedoff1, vfloat16m1_t maskedoff2,
    vfloat16m1_t maskedoff3, vfloat16m1_t maskedoff4,
    vfloat16m1_t maskedoff5, const float16_t *base, size_t vl);
void vlseg7e16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vbool16_t mask,
    vfloat16m1_t maskedoff0, vfloat16m1_t maskedoff1,
    vfloat16m1_t maskedoff2, vfloat16m1_t maskedoff3,
    vfloat16m1_t maskedoff4, vfloat16m1_t maskedoff5,
    vfloat16m1_t maskedoff6, const float16_t *base, size_t vl);
void vlseg8e16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vfloat16m1_t *v7,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, vfloat16m1_t maskedoff2, vfloat16m1_t
    maskedoff3, vfloat16m1_t maskedoff4, vfloat16m1_t
    maskedoff5, vfloat16m1_t maskedoff6, vfloat16m1_t
    maskedoff7, const float16_t *base, size_t vl);
void vlseg2e16_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vbool8_t mask, vfloat16m2_t maskedoff0, vfloat16m2_t
    maskedoff1, const float16_t *base, size_t vl);
void vlseg3e16_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vbool8_t mask, vfloat16m2_t maskedoff0,
    vfloat16m2_t maskedoff1, vfloat16m2_t maskedoff2, const
    float16_t *base, size_t vl);
void vlseg4e16_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, vbool8_t mask,
    vfloat16m2_t maskedoff0, vfloat16m2_t maskedoff1,
    vfloat16m2_t maskedoff2, vfloat16m2_t maskedoff3, const
    float16_t *base, size_t vl);
void vlseg2e16_v_f16m4_m (vfloat16m4_t *v0, vfloat16m4_t *v1,
    vbool4_t mask, vfloat16m4_t maskedoff0, vfloat16m4_t
    maskedoff1, const float16_t *base, size_t vl);
void vlseg2e32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
    maskedoff1, const float32_t *base, size_t vl);
```

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void vlseg3e32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vbool32_t mask, vfloat32m1_t maskedoff0,
    vfloat32m1_t maskedoff1, vfloat32m1_t maskedoff2, const
    float32_t *base, size_t vl);
void vlseg4e32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vbool32_t mask,
    vfloat32m1_t maskedoff0, vfloat32m1_t maskedoff1,
    vfloat32m1_t maskedoff2, vfloat32m1_t maskedoff3, const
    float32_t *base, size_t vl);
void vlseg5e32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
    maskedoff1, vfloat32m1_t maskedoff2, vfloat32m1_t
    maskedoff3, vfloat32m1_t maskedoff4, const float32_t *base,
    size_t vl);
void vlseg6e32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vbool32_t mask, vfloat32m1_t maskedoff0,
    vfloat32m1_t maskedoff1, vfloat32m1_t maskedoff2,
    vfloat32m1_t maskedoff3, vfloat32m1_t maskedoff4,
    vfloat32m1_t maskedoff5, const float32_t *base, size_t vl);
void vlseg7e32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, vbool32_t mask,
    vfloat32m1_t maskedoff0, vfloat32m1_t maskedoff1,
    vfloat32m1_t maskedoff2, vfloat32m1_t maskedoff3,
    vfloat32m1_t maskedoff4, vfloat32m1_t maskedoff5,
    vfloat32m1_t maskedoff6, const float32_t *base, size_t vl);
void vlseg8e32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, vfloat32m1_t *v7,
    vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
    maskedoff1, vfloat32m1_t maskedoff2, vfloat32m1_t
    maskedoff3, vfloat32m1_t maskedoff4, vfloat32m1_t
    maskedoff5, vfloat32m1_t maskedoff6, vfloat32m1_t
    maskedoff7, const float32_t *base, size_t vl);
void vlseg2e32_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vbool16_t mask, vfloat32m2_t maskedoff0, vfloat32m2_t
    maskedoff1, const float32_t *base, size_t vl);
void vlseg3e32_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vbool16_t mask, vfloat32m2_t maskedoff0,
    vfloat32m2_t maskedoff1, vfloat32m2_t maskedoff2, const
    float32_t *base, size_t vl);
void vlseg4e32_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vfloat32m2_t *v3, vbool16_t mask,
    vfloat32m2_t maskedoff0, vfloat32m2_t maskedoff1,
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        vfloat32m2_t maskedoff2, vfloat32m2_t maskedoff3, const
        float32_t *base, size_t vl);
void vlseg2e32_v_f32m4_m (vfloat32m4_t *v0, vfloat32m4_t *v1,
        vbool8_t mask, vfloat32m4_t maskedoff0, vfloat32m4_t
        maskedoff1, const float32_t *base, size_t vl);
void vlseg2e64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
        vbool64_t mask, vfloat64m1_t maskedoff0, vfloat64m1_t
        maskedoff1, const float64_t *base, size_t vl);
void vlseg3e64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
        vfloat64m1_t *v2, vbool64_t mask, vfloat64m1_t maskedoff0,
        vfloat64m1_t maskedoff1, vfloat64m1_t maskedoff2, const
        float64_t *base, size_t vl);
void vlseg4e64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
        vfloat64m1_t *v2, vfloat64m1_t *v3, vbool64_t mask,
        vfloat64m1_t maskedoff0, vfloat64m1_t maskedoff1,
        vfloat64m1_t maskedoff2, vfloat64m1_t maskedoff3, const
        float64_t *base, size_t vl);
void vlseg5e64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
        vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
        vbool64_t mask, vfloat64m1_t maskedoff0, vfloat64m1_t
        maskedoff1, vfloat64m1_t maskedoff2, vfloat64m1_t
        maskedoff3, vfloat64m1_t maskedoff4, const float64_t *base,
        size_t vl);
void vlseg6e64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
        vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
        vfloat64m1_t *v5, vbool64_t mask, vfloat64m1_t maskedoff0,
        vfloat64m1_t maskedoff1, vfloat64m1_t maskedoff2,
        vfloat64m1_t maskedoff3, vfloat64m1_t maskedoff4,
        vfloat64m1_t maskedoff5, const float64_t *base, size_t vl);
void vlseg7e64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
        vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
        vfloat64m1_t *v5, vfloat64m1_t *v6, vbool64_t mask,
        vfloat64m1_t maskedoff0, vfloat64m1_t maskedoff1,
        vfloat64m1_t maskedoff2, vfloat64m1_t maskedoff3,
        vfloat64m1_t maskedoff4, vfloat64m1_t maskedoff5,
        vfloat64m1_t maskedoff6, const float64_t *base, size_t vl);
void vlseg8e64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
        vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
        vfloat64m1_t *v5, vfloat64m1_t *v6, vfloat64m1_t *v7,
        vbool64_t mask, vfloat64m1_t maskedoff0, vfloat64m1_t
        maskedoff1, vfloat64m1_t maskedoff2, vfloat64m1_t
        maskedoff3, vfloat64m1_t maskedoff4, vfloat64m1_t
        maskedoff5, vfloat64m1_t maskedoff6, vfloat64m1_t
        maskedoff7, const float64_t *base, size_t vl);
void vlseg2e64_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
        vbool32_t mask, vfloat64m2_t maskedoff0, vfloat64m2_t
```

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    maskedoff1, const float64_t *base, size_t vl);
void vlseg3e64_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vbool32_t mask, vfloat64m2_t maskedoff0,
    vfloat64m2_t maskedoff1, vfloat64m2_t maskedoff2, const
    float64_t *base, size_t vl);
void vlseg4e64_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vfloat64m2_t *v3, vbool32_t mask,
    vfloat64m2_t maskedoff0, vfloat64m2_t maskedoff1,
    vfloat64m2_t maskedoff2, vfloat64m2_t maskedoff3, const
    float64_t *base, size_t vl);
void vlseg2e64_v_f64m4_m (vfloat64m4_t *v0, vfloat64m4_t *v1,
    vbool16_t mask, vfloat64m4_t maskedoff0, vfloat64m4_t
    maskedoff1, const float64_t *base, size_t vl);
void vlseg2e8ff_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1, vbool8_t
    mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1, const
    int8_t *base, size_t *new_vl, size_t vl);
void vlseg3e8ff_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, const int8_t
    *base, size_t *new_vl, size_t vl);
void vlseg4e8ff_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vbool8_t mask, vint8m1_t
    maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
    vint8m1_t maskedoff3, const int8_t *base, size_t *new_vl,
    size_t vl);
void vlseg5e8ff_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vbool8_t mask,
    vint8m1_t maskedoff0, vint8m1_t maskedoff1, vint8m1_t
    maskedoff2, vint8m1_t maskedoff3, vint8m1_t maskedoff4,
    const int8_t *base, size_t *new_vl, size_t vl);
void vlseg6e8ff_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1,
    vint8m1_t maskedoff2, vint8m1_t maskedoff3, vint8m1_t
    maskedoff4, vint8m1_t maskedoff5, const int8_t *base, size_t
    *new_vl, size_t vl);
void vlseg7e8ff_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, vint8m1_t
    maskedoff3, vint8m1_t maskedoff4, vint8m1_t maskedoff5,
    vint8m1_t maskedoff6, const int8_t *base, size_t *new_vl,
    size_t vl);
void vlseg8e8ff_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vint8m1_t *v7, vbool8_t mask, vint8m1_t
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        maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
        vint8m1_t maskedoff3, vint8m1_t maskedoff4, vint8m1_t
        maskedoff5, vint8m1_t maskedoff6, vint8m1_t maskedoff7,
        const int8_t *base, size_t *new_vl, size_t vl);
void vlseg2e8ff_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1, vbool4_t
        mask, vint8m2_t maskedoff0, vint8m2_t maskedoff1, const
        int8_t *base, size_t *new_vl, size_t vl);
void vlseg3e8ff_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
        vint8m2_t *v2, vbool4_t mask, vint8m2_t maskedoff0,
        vint8m2_t maskedoff1, vint8m2_t maskedoff2, const int8_t
        *base, size_t *new_vl, size_t vl);
void vlseg4e8ff_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
        vint8m2_t *v2, vint8m2_t *v3, vbool4_t mask, vint8m2_t
        maskedoff0, vint8m2_t maskedoff1, vint8m2_t maskedoff2,
        vint8m2_t maskedoff3, const int8_t *base, size_t *new_vl,
        size_t vl);
void vlseg2e8ff_v_i8m4_m (vint8m4_t *v0, vint8m4_t *v1, vbool2_t
        mask, vint8m4_t maskedoff0, vint8m4_t maskedoff1, const
        int8_t *base, size_t *new_vl, size_t vl);
void vlseg2e16ff_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
        vbool16_t mask, vint16m1_t maskedoff0, vint16m1_t
        maskedoff1, const int16_t *base, size_t *new_vl, size_t vl);
void vlseg3e16ff_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
        vint16m1_t *v2, vbool16_t mask, vint16m1_t maskedoff0,
        vint16m1_t maskedoff1, vint16m1_t maskedoff2, const int16_t
        *base, size_t *new_vl, size_t vl);
void vlseg4e16ff_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
        vint16m1_t *v2, vint16m1_t *v3, vbool16_t mask, vint16m1_t
        maskedoff0, vint16m1_t maskedoff1, vint16m1_t maskedoff2,
        vint16m1_t maskedoff3, const int16_t *base, size_t *new_vl,
        size_t vl);
void vlseg5e16ff_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
        vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vbool16_t
        mask, vint16m1_t maskedoff0, vint16m1_t maskedoff1,
        vint16m1_t maskedoff2, vint16m1_t maskedoff3, vint16m1_t
        maskedoff4, const int16_t *base, size_t *new_vl, size_t vl);
void vlseg6e16ff_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
        vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
        *v5, vbool16_t mask, vint16m1_t maskedoff0, vint16m1_t
        maskedoff1, vint16m1_t maskedoff2, vint16m1_t maskedoff3,
        vint16m1_t maskedoff4, vint16m1_t maskedoff5, const int16_t
        *base, size_t *new_vl, size_t vl);
void vlseg7e16ff_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
        vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
        *v5, vint16m1_t *v6, vbool16_t mask, vint16m1_t maskedoff0,
        vint16m1_t maskedoff1, vint16m1_t maskedoff2, vint16m1_t
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      maskedoff3, vint16m1_t maskedoff4, vint16m1_t maskedoff5,
      vint16m1_t maskedoff6, const int16_t *base, size_t *new_vl,
      size_t vl);
void vlseg8e16ff_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
      vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
      *v5, vint16m1_t *v6, vint16m1_t *v7, vbool16_t mask,
      vint16m1_t maskedoff0, vint16m1_t maskedoff1, vint16m1_t
      maskedoff2, vint16m1_t maskedoff3, vint16m1_t maskedoff4,
      vint16m1_t maskedoff5, vint16m1_t maskedoff6, vint16m1_t
      maskedoff7, const int16_t *base, size_t *new_vl, size_t vl);
void vlseg2e16ff_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
      vbool8_t mask, vint16m2_t maskedoff0, vint16m2_t maskedoff1,
      const int16_t *base, size_t *new_vl, size_t vl);
void vlseg3e16ff_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
      vint16m2_t *v2, vbool8_t mask, vint16m2_t maskedoff0,
      vint16m2_t maskedoff1, vint16m2_t maskedoff2, const int16_t
      *base, size_t *new_vl, size_t vl);
void vlseg4e16ff_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
      vint16m2_t *v2, vint16m2_t *v3, vbool8_t mask, vint16m2_t
      maskedoff0, vint16m2_t maskedoff1, vint16m2_t maskedoff2,
      vint16m2_t maskedoff3, const int16_t *base, size_t *new_vl,
      size_t vl);
void vlseg2e16ff_v_i16m4_m (vint16m4_t *v0, vint16m4_t *v1,
      vbool4_t mask, vint16m4_t maskedoff0, vint16m4_t maskedoff1,
      const int16_t *base, size_t *new_vl, size_t vl);
void vlseg2e32ff_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
      vbool32_t mask, vint32m1_t maskedoff0, vint32m1_t
      maskedoff1, const int32_t *base, size_t *new_vl, size_t vl);
void vlseg3e32ff_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
      vint32m1_t *v2, vbool32_t mask, vint32m1_t maskedoff0,
      vint32m1_t maskedoff1, vint32m1_t maskedoff2, const int32_t
      *base, size_t *new_vl, size_t vl);
void vlseg4e32ff_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
      vint32m1_t *v2, vint32m1_t *v3, vbool32_t mask, vint32m1_t
      maskedoff0, vint32m1_t maskedoff1, vint32m1_t maskedoff2,
      vint32m1_t maskedoff3, const int32_t *base, size_t *new_vl,
      size_t vl);
void vlseg5e32ff_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
      vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vbool32_t
      mask, vint32m1_t maskedoff0, vint32m1_t maskedoff1,
      vint32m1_t maskedoff2, vint32m1_t maskedoff3, vint32m1_t
      maskedoff4, const int32_t *base, size_t *new_vl, size_t vl);
void vlseg6e32ff_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
      vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
      *v5, vbool32_t mask, vint32m1_t maskedoff0, vint32m1_t
      maskedoff1, vint32m1_t maskedoff2, vint32m1_t maskedoff3,
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      vint32m1_t maskedoff4, vint32m1_t maskedoff5, const int32_t
      *base, size_t *new_vl, size_t vl);
void vlseg7e32ff_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
      vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
      *v5, vint32m1_t *v6, vbool32_t mask, vint32m1_t maskedoff0,
      vint32m1_t maskedoff1, vint32m1_t maskedoff2, vint32m1_t
      maskedoff3, vint32m1_t maskedoff4, vint32m1_t maskedoff5,
      vint32m1_t maskedoff6, const int32_t *base, size_t *new_vl,
      size_t vl);
void vlseg8e32ff_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
      vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
      *v5, vint32m1_t *v6, vint32m1_t *v7, vbool32_t mask,
      vint32m1_t maskedoff0, vint32m1_t maskedoff1, vint32m1_t
      maskedoff2, vint32m1_t maskedoff3, vint32m1_t maskedoff4,
      vint32m1_t maskedoff5, vint32m1_t maskedoff6, vint32m1_t
      maskedoff7, const int32_t *base, size_t *new_vl, size_t vl);
void vlseg2e32ff_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
      vbool16_t mask, vint32m2_t maskedoff0, vint32m2_t
      maskedoff1, const int32_t *base, size_t *new_vl, size_t vl);
void vlseg3e32ff_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
      vint32m2_t *v2, vbool16_t mask, vint32m2_t maskedoff0,
      vint32m2_t maskedoff1, vint32m2_t maskedoff2, const int32_t
      *base, size_t *new_vl, size_t vl);
void vlseg4e32ff_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
      vint32m2_t *v2, vint32m2_t *v3, vbool16_t mask, vint32m2_t
      maskedoff0, vint32m2_t maskedoff1, vint32m2_t maskedoff2,
      vint32m2_t maskedoff3, const int32_t *base, size_t *new_vl,
      size_t vl);
void vlseg2e32ff_v_i32m4_m (vint32m4_t *v0, vint32m4_t *v1,
      vbool8_t mask, vint32m4_t maskedoff0, vint32m4_t maskedoff1,
      const int32_t *base, size_t *new_vl, size_t vl);
void vlseg2e64ff_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
      vbool64_t mask, vint64m1_t maskedoff0, vint64m1_t
      maskedoff1, const int64_t *base, size_t *new_vl, size_t vl);
void vlseg3e64ff_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
      vint64m1_t *v2, vbool64_t mask, vint64m1_t maskedoff0,
      vint64m1_t maskedoff1, vint64m1_t maskedoff2, const int64_t
      *base, size_t *new_vl, size_t vl);
void vlseg4e64ff_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
      vint64m1_t *v2, vint64m1_t *v3, vbool64_t mask, vint64m1_t
      maskedoff0, vint64m1_t maskedoff1, vint64m1_t maskedoff2,
      vint64m1_t maskedoff3, const int64_t *base, size_t *new_vl,
      size_t vl);
void vlseg5e64ff_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
      vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vbool64_t
      mask, vint64m1_t maskedoff0, vint64m1_t maskedoff1,
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                vint64m1_t maskedoff2, vint64m1_t maskedoff3, vint64m1_t
                maskedoff4, const int64_t *base, size_t *new_vl, size_t vl);
void vlseg6e64ff_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
                vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
                *v5, vbool64_t mask, vint64m1_t maskedoff0, vint64m1_t
                maskedoff1, vint64m1_t maskedoff2, vint64m1_t maskedoff3,
                vint64m1_t maskedoff4, vint64m1_t maskedoff5, const int64_t
                *base, size_t *new_vl, size_t vl);
void vlseg7e64ff_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
                vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
                *v5, vint64m1_t *v6, vbool64_t mask, vint64m1_t maskedoff0,
                vint64m1_t maskedoff1, vint64m1_t maskedoff2, vint64m1_t
                maskedoff3, vint64m1_t maskedoff4, vint64m1_t maskedoff5,
                vint64m1_t maskedoff6, const int64_t *base, size_t *new_vl,
                size_t vl);
void vlseg8e64ff_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
                vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
                *v5, vint64m1_t *v6, vint64m1_t *v7, vbool64_t mask,
                vint64m1_t maskedoff0, vint64m1_t maskedoff1, vint64m1_t
                maskedoff2, vint64m1_t maskedoff3, vint64m1_t maskedoff4,
                vint64m1_t maskedoff5, vint64m1_t maskedoff6, vint64m1_t
                maskedoff7, const int64_t *base, size_t *new_vl, size_t vl);
void vlseg2e64ff_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
                vbool32_t mask, vint64m2_t maskedoff0, vint64m2_t
                maskedoff1, const int64_t *base, size_t *new_vl, size_t vl);
void vlseg3e64ff_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
                vint64m2_t *v2, vbool32_t mask, vint64m2_t maskedoff0,
                vint64m2_t maskedoff1, vint64m2_t maskedoff2, const int64_t
                *base, size_t *new_vl, size_t vl);
void vlseg4e64ff_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
                vint64m2_t *v2, vint64m2_t *v3, vbool32_t mask, vint64m2_t
                maskedoff0, vint64m2_t maskedoff1, vint64m2_t maskedoff2,
                vint64m2_t maskedoff3, const int64_t *base, size_t *new_vl,
                size_t vl);
void vlseg2e64ff_v_i64m4_m (vint64m4_t *v0, vint64m4_t *v1,
                vbool16_t mask, vint64m4_t maskedoff0, vint64m4_t
                maskedoff1, const int64_t *base, size_t *new_vl, size_t vl);
void vlseg2e8ff_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
                vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
                const uint8_t *base, size_t *new_vl, size_t vl);
void vlseg3e8ff_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
                vuint8m1_t *v2, vbool8_t mask, vuint8m1_t maskedoff0,
                vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, const uint8_t
                *base, size_t *new_vl, size_t vl);
void vlseg4e8ff_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
                vuint8m1_t *v2, vuint8m1_t *v3, vbool8_t mask, vuint8m1_t
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              maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t maskedoff2,
              vuint8m1_t maskedoff3, const uint8_t *base, size_t *new_vl,
              size_t vl);
void vlseg5e8ff_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
              vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vbool8_t
              mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
              vuint8m1_t maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t
              maskedoff4, const uint8_t *base, size_t *new_vl, size_t vl);
void vlseg6e8ff_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
              vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
              *v5, vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t
              maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t maskedoff3,
              vuint8m1_t maskedoff4, vuint8m1_t maskedoff5, const uint8_t
              *base, size_t *new_vl, size_t vl);
void vlseg7e8ff_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
              vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
              *v5, vuint8m1_t *v6, vbool8_t mask, vuint8m1_t maskedoff0,
              vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t
              maskedoff3, vuint8m1_t maskedoff4, vuint8m1_t maskedoff5,
              vuint8m1_t maskedoff6, const uint8_t *base, size_t *new_vl,
              size_t vl);
void vlseg8e8ff_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
              vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
              *v5, vuint8m1_t *v6, vuint8m1_t *v7, vbool8_t mask,
              vuint8m1_t maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t
              maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t maskedoff4,
              vuint8m1_t maskedoff5, vuint8m1_t maskedoff6, vuint8m1_t
              maskedoff7, const uint8_t *base, size_t *new_vl, size_t vl);
void vlseg2e8ff_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
              vbool4_t mask, vuint8m2_t maskedoff0, vuint8m2_t maskedoff1,
              const uint8_t *base, size_t *new_vl, size_t vl);
void vlseg3e8ff_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
              vuint8m2_t *v2, vbool4_t mask, vuint8m2_t maskedoff0,
              vuint8m2_t maskedoff1, vuint8m2_t maskedoff2, const uint8_t
              *base, size_t *new_vl, size_t vl);
void vlseg4e8ff_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
              vuint8m2_t *v2, vuint8m2_t *v3, vbool4_t mask, vuint8m2_t
              maskedoff0, vuint8m2_t maskedoff1, vuint8m2_t maskedoff2,
              vuint8m2_t maskedoff3, const uint8_t *base, size_t *new_vl,
              size_t vl);
void vlseg2e8ff_v_u8m4_m (vuint8m4_t *v0, vuint8m4_t *v1,
              vbool2_t mask, vuint8m4_t maskedoff0, vuint8m4_t maskedoff1,
              const uint8_t *base, size_t *new_vl, size_t vl);
void vlseg2e16ff_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
              vbool16_t mask, vuint16m1_t maskedoff0, vuint16m1_t
              maskedoff1, const uint16_t *base, size_t *new_vl, size_t vl);
```

```
void vlseg3e16ff_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vbool16_t mask, vuint16m1_t maskedoff0,
    vuint16m1_t maskedoff1, vuint16m1_t maskedoff2, const
    uint16_t *base, size_t *new_vl, size_t vl);
void vlseg4e16ff_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vbool16_t mask,
    vuint16m1_t maskedoff0, vuint16m1_t maskedoff1, vuint16m1_t
    maskedoff2, vuint16m1_t maskedoff3, const uint16_t *base,
    size_t *new_vl, size_t vl);
void vlseg5e16ff_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4, vbool16_t
    mask, vuint16m1_t maskedoff0, vuint16m1_t maskedoff1,
    vuint16m1_t maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t
    maskedoff4, const uint16_t *base, size_t *new_vl, size_t vl);
void vlseg6e16ff_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vbool16_t mask, vuint16m1_t maskedoff0,
    vuint16m1_t maskedoff1, vuint16m1_t maskedoff2, vuint16m1_t
    maskedoff3, vuint16m1_t maskedoff4, vuint16m1_t maskedoff5,
    const uint16_t *base, size_t *new_vl, size_t vl);
void vlseg7e16ff_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vbool16_t mask,
    vuint16m1_t maskedoff0, vuint16m1_t maskedoff1, vuint16m1_t
    maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t maskedoff4,
    vuint16m1_t maskedoff5, vuint16m1_t maskedoff6, const
    uint16_t *base, size_t *new_vl, size_t vl);
void vlseg8e16ff_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vuint16m1_t *v7, vbool16_t
    mask, vuint16m1_t maskedoff0, vuint16m1_t maskedoff1,
    vuint16m1_t maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t
    maskedoff4, vuint16m1_t maskedoff5, vuint16m1_t maskedoff6,
    vuint16m1_t maskedoff7, const uint16_t *base, size_t
    *new_vl, size_t vl);
void vlseg2e16ff_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vbool8_t mask, vuint16m2_t maskedoff0, vuint16m2_t
    maskedoff1, const uint16_t *base, size_t *new_vl, size_t vl);
void vlseg3e16ff_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vbool8_t mask, vuint16m2_t maskedoff0,
    vuint16m2_t maskedoff1, vuint16m2_t maskedoff2, const
    uint16_t *base, size_t *new_vl, size_t vl);
void vlseg4e16ff_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vuint16m2_t *v3, vbool8_t mask, vuint16m2_t
    maskedoff0, vuint16m2_t maskedoff1, vuint16m2_t maskedoff2,
    vuint16m2_t maskedoff3, const uint16_t *base, size_t
```

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    *new_vl, size_t vl);
void vlseg2e16ff_v_u16m4_m (vuint16m4_t *v0, vuint16m4_t *v1,
    vbool4_t mask, vuint16m4_t maskedoff0, vuint16m4_t
    maskedoff1, const uint16_t *base, size_t *new_vl, size_t vl);
void vlseg2e32ff_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vbool32_t mask, vuint32m1_t maskedoff0, vuint32m1_t
    maskedoff1, const uint32_t *base, size_t *new_vl, size_t vl);
void vlseg3e32ff_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vbool32_t mask, vuint32m1_t maskedoff0,
    vuint32m1_t maskedoff1, vuint32m1_t maskedoff2, const
    uint32_t *base, size_t *new_vl, size_t vl);
void vlseg4e32ff_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vbool32_t mask,
    vuint32m1_t maskedoff0, vuint32m1_t maskedoff1, vuint32m1_t
    maskedoff2, vuint32m1_t maskedoff3, const uint32_t *base,
    size_t *new_vl, size_t vl);
void vlseg5e32ff_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4, vbool32_t
    mask, vuint32m1_t maskedoff0, vuint32m1_t maskedoff1,
    vuint32m1_t maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t
    maskedoff4, const uint32_t *base, size_t *new_vl, size_t vl);
void vlseg6e32ff_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vbool32_t mask, vuint32m1_t maskedoff0,
    vuint32m1_t maskedoff1, vuint32m1_t maskedoff2, vuint32m1_t
    maskedoff3, vuint32m1_t maskedoff4, vuint32m1_t maskedoff5,
    const uint32_t *base, size_t *new_vl, size_t vl);
void vlseg7e32ff_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, vbool32_t mask,
    vuint32m1_t maskedoff0, vuint32m1_t maskedoff1, vuint32m1_t
    maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t maskedoff4,
    vuint32m1_t maskedoff5, vuint32m1_t maskedoff6, const
    uint32_t *base, size_t *new_vl, size_t vl);
void vlseg8e32ff_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, vuint32m1_t *v7, vbool32_t
    mask, vuint32m1_t maskedoff0, vuint32m1_t maskedoff1,
    vuint32m1_t maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t
    maskedoff4, vuint32m1_t maskedoff5, vuint32m1_t maskedoff6,
    vuint32m1_t maskedoff7, const uint32_t *base, size_t
    *new_vl, size_t vl);
void vlseg2e32ff_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
    vbool16_t mask, vuint32m2_t maskedoff0, vuint32m2_t
    maskedoff1, const uint32_t *base, size_t *new_vl, size_t vl);
```

```
void vlseg3e32ff_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, vbool16_t mask, vuint32m2_t maskedoff0,
    vuint32m2_t maskedoff1, vuint32m2_t maskedoff2, const
    uint32_t *base, size_t *new_vl, size_t vl);
void vlseg4e32ff_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, vuint32m2_t *v3, vbool16_t mask,
    vuint32m2_t maskedoff0, vuint32m2_t maskedoff1, vuint32m2_t
    maskedoff2, vuint32m2_t maskedoff3, const uint32_t *base,
    size_t *new_vl, size_t vl);
void vlseg2e32ff_v_u32m4_m (vuint32m4_t *v0, vuint32m4_t *v1,
    vbool8_t mask, vuint32m4_t maskedoff0, vuint32m4_t
    maskedoff1, const uint32_t *base, size_t *new_vl, size_t vl);
void vlseg2e64ff_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vbool64_t mask, vuint64m1_t maskedoff0, vuint64m1_t
    maskedoff1, const uint64_t *base, size_t *new_vl, size_t vl);
void vlseg3e64ff_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vbool64_t mask, vuint64m1_t maskedoff0,
    vuint64m1_t maskedoff1, vuint64m1_t maskedoff2, const
    uint64_t *base, size_t *new_vl, size_t vl);
void vlseg4e64ff_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vbool64_t mask,
    vuint64m1_t maskedoff0, vuint64m1_t maskedoff1, vuint64m1_t
    maskedoff2, vuint64m1_t maskedoff3, const uint64_t *base,
    size_t *new_vl, size_t vl);
void vlseg5e64ff_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4, vbool64_t
    mask, vuint64m1_t maskedoff0, vuint64m1_t maskedoff1,
    vuint64m1_t maskedoff2, vuint64m1_t maskedoff3, vuint64m1_t
    maskedoff4, const uint64_t *base, size_t *new_vl, size_t vl);
void vlseg6e64ff_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vbool64_t mask, vuint64m1_t maskedoff0,
    vuint64m1_t maskedoff1, vuint64m1_t maskedoff2, vuint64m1_t
    maskedoff3, vuint64m1_t maskedoff4, vuint64m1_t maskedoff5,
    const uint64_t *base, size_t *new_vl, size_t vl);
void vlseg7e64ff_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vuint64m1_t *v6, vbool64_t mask,
    vuint64m1_t maskedoff0, vuint64m1_t maskedoff1, vuint64m1_t
    maskedoff2, vuint64m1_t maskedoff3, vuint64m1_t maskedoff4,
    vuint64m1_t maskedoff5, vuint64m1_t maskedoff6, const
    uint64_t *base, size_t *new_vl, size_t vl);
void vlseg8e64ff_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vuint64m1_t *v6, vuint64m1_t *v7, vbool64_t
    mask, vuint64m1_t maskedoff0, vuint64m1_t maskedoff1,
```

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     vuint64m1_t maskedoff2, vuint64m1_t maskedoff3, vuint64m1_t
     maskedoff4, vuint64m1_t maskedoff5, vuint64m1_t maskedoff6,
     vuint64m1_t maskedoff7, const uint64_t *base, size_t
     *new_vl, size_t vl);
void vlseg2e64ff_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
     vbool32_t mask, vuint64m2_t maskedoff0, vuint64m2_t
     maskedoff1, const uint64_t *base, size_t *new_vl, size_t vl);
void vlseg3e64ff_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
     vuint64m2_t *v2, vbool32_t mask, vuint64m2_t maskedoff0,
     vuint64m2_t maskedoff1, vuint64m2_t maskedoff2, const
     uint64_t *base, size_t *new_vl, size_t vl);
void vlseg4e64ff_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
     vuint64m2_t *v2, vuint64m2_t *v3, vbool32_t mask,
     vuint64m2_t maskedoff0, vuint64m2_t maskedoff1, vuint64m2_t
     maskedoff2, vuint64m2_t maskedoff3, const uint64_t *base,
     size_t *new_vl, size_t vl);
void vlseg2e64ff_v_u64m4_m (vuint64m4_t *v0, vuint64m4_t *v1,
     vbool16_t mask, vuint64m4_t maskedoff0, vuint64m4_t
     maskedoff1, const uint64_t *base, size_t *new_vl, size_t vl);
void vlseg2e16ff_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
     vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
     maskedoff1, const float16_t *base, size_t *new_vl, size_t
     vl);
void vlseg3e16ff_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
     vfloat16m1_t *v2, vbool16_t mask, vfloat16m1_t maskedoff0,
     vfloat16m1_t maskedoff1, vfloat16m1_t maskedoff2, const
     float16_t *base, size_t *new_vl, size_t vl);
void vlseg4e16ff_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
     vfloat16m1_t *v2, vfloat16m1_t *v3, vbool16_t mask,
     vfloat16m1_t maskedoff0, vfloat16m1_t maskedoff1,
     vfloat16m1_t maskedoff2, vfloat16m1_t maskedoff3, const
     float16_t *base, size_t *new_vl, size_t vl);
void vlseg5e16ff_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
     vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
     vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
     maskedoff1, vfloat16m1_t maskedoff2, vfloat16m1_t
     maskedoff3, vfloat16m1_t maskedoff4, const float16_t *base,
     size_t *new_vl, size_t vl);
void vlseg6e16ff_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
     vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
     vfloat16m1_t *v5, vbool16_t mask, vfloat16m1_t maskedoff0,
     vfloat16m1_t maskedoff1, vfloat16m1_t maskedoff2,
     vfloat16m1_t maskedoff3, vfloat16m1_t maskedoff4,
     vfloat16m1_t maskedoff5, const float16_t *base, size_t
     *new_vl, size_t vl);
```

```
void vlseg7e16ff_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vbool16_t mask,
    vfloat16m1_t maskedoff0, vfloat16m1_t maskedoff1,
    vfloat16m1_t maskedoff2, vfloat16m1_t maskedoff3,
    vfloat16m1_t maskedoff4, vfloat16m1_t maskedoff5,
    vfloat16m1_t maskedoff6, const float16_t *base, size_t
    *new_vl, size_t vl);
void vlseg8e16ff_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vfloat16m1_t *v7,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, vfloat16m1_t maskedoff2, vfloat16m1_t
    maskedoff3, vfloat16m1_t maskedoff4, vfloat16m1_t
    maskedoff5, vfloat16m1_t maskedoff6, vfloat16m1_t
    maskedoff7, const float16_t *base, size_t *new_vl, size_t
    vl);
void vlseg2e16ff_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vbool8_t mask, vfloat16m2_t maskedoff0, vfloat16m2_t
    maskedoff1, const float16_t *base, size_t *new_vl, size_t
    vl);
void vlseg3e16ff_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vbool8_t mask, vfloat16m2_t maskedoff0,
    vfloat16m2_t maskedoff1, vfloat16m2_t maskedoff2, const
    float16_t *base, size_t *new_vl, size_t vl);
void vlseg4e16ff_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, vbool8_t mask,
    vfloat16m2_t maskedoff0, vfloat16m2_t maskedoff1,
    vfloat16m2_t maskedoff2, vfloat16m2_t maskedoff3, const
    float16_t *base, size_t *new_vl, size_t vl);
void vlseg2e16ff_v_f16m4_m (vfloat16m4_t *v0, vfloat16m4_t *v1,
    vbool4_t mask, vfloat16m4_t maskedoff0, vfloat16m4_t
    maskedoff1, const float16_t *base, size_t *new_vl, size_t
    vl);
void vlseg2e32ff_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
    maskedoff1, const float32_t *base, size_t *new_vl, size_t
    vl);
void vlseg3e32ff_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vbool32_t mask, vfloat32m1_t maskedoff0,
    vfloat32m1_t maskedoff1, vfloat32m1_t maskedoff2, const
    float32_t *base, size_t *new_vl, size_t vl);
void vlseg4e32ff_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vbool32_t mask,
    vfloat32m1_t maskedoff0, vfloat32m1_t maskedoff1,
    vfloat32m1_t maskedoff2, vfloat32m1_t maskedoff3, const
```

```
     float32_t *base, size_t *new_vl, size_t vl);
void vlseg5e32ff_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
     vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
     vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
     maskedoff1, vfloat32m1_t maskedoff2, vfloat32m1_t
     maskedoff3, vfloat32m1_t maskedoff4, const float32_t *base,
     size_t *new_vl, size_t vl);
void vlseg6e32ff_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
     vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
     vfloat32m1_t *v5, vbool32_t mask, vfloat32m1_t maskedoff0,
     vfloat32m1_t maskedoff1, vfloat32m1_t maskedoff2,
     vfloat32m1_t maskedoff3, vfloat32m1_t maskedoff4,
     vfloat32m1_t maskedoff5, const float32_t *base, size_t
     *new_vl, size_t vl);
void vlseg7e32ff_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
     vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
     vfloat32m1_t *v5, vfloat32m1_t *v6, vbool32_t mask,
     vfloat32m1_t maskedoff0, vfloat32m1_t maskedoff1,
     vfloat32m1_t maskedoff2, vfloat32m1_t maskedoff3,
     vfloat32m1_t maskedoff4, vfloat32m1_t maskedoff5,
     vfloat32m1_t maskedoff6, const float32_t *base, size_t
     *new_vl, size_t vl);
void vlseg8e32ff_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
     vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
     vfloat32m1_t *v5, vfloat32m1_t *v6, vfloat32m1_t *v7,
     vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
     maskedoff1, vfloat32m1_t maskedoff2, vfloat32m1_t
     maskedoff3, vfloat32m1_t maskedoff4, vfloat32m1_t
     maskedoff5, vfloat32m1_t maskedoff6, vfloat32m1_t
     maskedoff7, const float32_t *base, size_t *new_vl, size_t
     vl);
void vlseg2e32ff_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
     vbool16_t mask, vfloat32m2_t maskedoff0, vfloat32m2_t
     maskedoff1, const float32_t *base, size_t *new_vl, size_t
     vl);
void vlseg3e32ff_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
     vfloat32m2_t *v2, vbool16_t mask, vfloat32m2_t maskedoff0,
     vfloat32m2_t maskedoff1, vfloat32m2_t maskedoff2, const
     float32_t *base, size_t *new_vl, size_t vl);
void vlseg4e32ff_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
     vfloat32m2_t *v2, vfloat32m2_t *v3, vbool16_t mask,
     vfloat32m2_t maskedoff0, vfloat32m2_t maskedoff1,
     vfloat32m2_t maskedoff2, vfloat32m2_t maskedoff3, const
     float32_t *base, size_t *new_vl, size_t vl);
void vlseg2e32ff_v_f32m4_m (vfloat32m4_t *v0, vfloat32m4_t *v1,
     vbool8_t mask, vfloat32m4_t maskedoff0, vfloat32m4_t
```

```
              maskedoff1, const float32_t *base, size_t *new_vl, size_t
              vl);
void vlseg2e64ff_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
              vbool64_t mask, vfloat64m1_t maskedoff0, vfloat64m1_t
              maskedoff1, const float64_t *base, size_t *new_vl, size_t
              vl);
void vlseg3e64ff_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
              vfloat64m1_t *v2, vbool64_t mask, vfloat64m1_t maskedoff0,
              vfloat64m1_t maskedoff1, vfloat64m1_t maskedoff2, const
              float64_t *base, size_t *new_vl, size_t vl);
void vlseg4e64ff_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
              vfloat64m1_t *v2, vfloat64m1_t *v3, vbool64_t mask,
              vfloat64m1_t maskedoff0, vfloat64m1_t maskedoff1,
              vfloat64m1_t maskedoff2, vfloat64m1_t maskedoff3, const
              float64_t *base, size_t *new_vl, size_t vl);
void vlseg5e64ff_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
              vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
              vbool64_t mask, vfloat64m1_t maskedoff0, vfloat64m1_t
              maskedoff1, vfloat64m1_t maskedoff2, vfloat64m1_t
              maskedoff3, vfloat64m1_t maskedoff4, const float64_t *base,
              size_t *new_vl, size_t vl);
void vlseg6e64ff_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
              vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
              vfloat64m1_t *v5, vbool64_t mask, vfloat64m1_t maskedoff0,
              vfloat64m1_t maskedoff1, vfloat64m1_t maskedoff2,
              vfloat64m1_t maskedoff3, vfloat64m1_t maskedoff4,
              vfloat64m1_t maskedoff5, const float64_t *base, size_t
              *new_vl, size_t vl);
void vlseg7e64ff_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
              vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
              vfloat64m1_t *v5, vfloat64m1_t *v6, vbool64_t mask,
              vfloat64m1_t maskedoff0, vfloat64m1_t maskedoff1,
              vfloat64m1_t maskedoff2, vfloat64m1_t maskedoff3,
              vfloat64m1_t maskedoff4, vfloat64m1_t maskedoff5,
              vfloat64m1_t maskedoff6, const float64_t *base, size_t
              *new_vl, size_t vl);
void vlseg8e64ff_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
              vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
              vfloat64m1_t *v5, vfloat64m1_t *v6, vfloat64m1_t *v7,
              vbool64_t mask, vfloat64m1_t maskedoff0, vfloat64m1_t
              maskedoff1, vfloat64m1_t maskedoff2, vfloat64m1_t
              maskedoff3, vfloat64m1_t maskedoff4, vfloat64m1_t
              maskedoff5, vfloat64m1_t maskedoff6, vfloat64m1_t
              maskedoff7, const float64_t *base, size_t *new_vl, size_t
              vl);
```

```
void vlseg2e64ff_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vbool32_t mask, vfloat64m2_t maskedoff0, vfloat64m2_t
    maskedoff1, const float64_t *base, size_t *new_vl, size_t
    vl);
void vlseg3e64ff_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vbool32_t mask, vfloat64m2_t maskedoff0,
    vfloat64m2_t maskedoff1, vfloat64m2_t maskedoff2, const
    float64_t *base, size_t *new_vl, size_t vl);
void vlseg4e64ff_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vfloat64m2_t *v3, vbool32_t mask,
    vfloat64m2_t maskedoff0, vfloat64m2_t maskedoff1,
    vfloat64m2_t maskedoff2, vfloat64m2_t maskedoff3, const
    float64_t *base, size_t *new_vl, size_t vl);
void vlseg2e64ff_v_f64m4_m (vfloat64m4_t *v0, vfloat64m4_t *v1,
    vbool16_t mask, vfloat64m4_t maskedoff0, vfloat64m4_t
    maskedoff1, const float64_t *base, size_t *new_vl, size_t
    vl);
```

Vector Unit-Stride Segment Store Functions:

Prototypes:

```
void vsseg2e8_v_i8m1 (int8_t *base, vint8m1_t v0, vint8m1_t v1,
    size_t vl);
void vsseg3e8_v_i8m1 (int8_t *base, vint8m1_t v0, vint8m1_t v1,
    vint8m1_t v2, size_t vl);
void vsseg4e8_v_i8m1 (int8_t *base, vint8m1_t v0, vint8m1_t v1,
    vint8m1_t v2, vint8m1_t v3, size_t vl);
void vsseg5e8_v_i8m1 (int8_t *base, vint8m1_t v0, vint8m1_t v1,
    vint8m1_t v2, vint8m1_t v3, vint8m1_t v4, size_t vl);
void vsseg6e8_v_i8m1 (int8_t *base, vint8m1_t v0, vint8m1_t v1,
    vint8m1_t v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5,
    size_t vl);
void vsseg7e8_v_i8m1 (int8_t *base, vint8m1_t v0, vint8m1_t v1,
    vint8m1_t v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5,
    vint8m1_t v6, size_t vl);
void vsseg8e8_v_i8m1 (int8_t *base, vint8m1_t v0, vint8m1_t v1,
    vint8m1_t v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5,
    vint8m1_t v6, vint8m1_t v7, size_t vl);
void vsseg2e8_v_i8m2 (int8_t *base, vint8m2_t v0, vint8m2_t v1,
    size_t vl);
void vsseg3e8_v_i8m2 (int8_t *base, vint8m2_t v0, vint8m2_t v1,
    vint8m2_t v2, size_t vl);
void vsseg4e8_v_i8m2 (int8_t *base, vint8m2_t v0, vint8m2_t v1,
    vint8m2_t v2, vint8m2_t v3, size_t vl);
```

```
void vsseg2e8_v_i8m4 (int8_t *base, vint8m4_t v0, vint8m4_t v1,
    size_t vl);
void vsseg2e16_v_i16m1 (int16_t *base, vint16m1_t v0, vint16m1_t
    v1, size_t vl);
void vsseg3e16_v_i16m1 (int16_t *base, vint16m1_t v0, vint16m1_t
    v1, vint16m1_t v2, size_t vl);
void vsseg4e16_v_i16m1 (int16_t *base, vint16m1_t v0, vint16m1_t
    v1, vint16m1_t v2, vint16m1_t v3, size_t vl);
void vsseg5e16_v_i16m1 (int16_t *base, vint16m1_t v0, vint16m1_t
    v1, vint16m1_t v2, vint16m1_t v3, vint16m1_t v4, size_t vl);
void vsseg6e16_v_i16m1 (int16_t *base, vint16m1_t v0, vint16m1_t
    v1, vint16m1_t v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t
    v5, size_t vl);
void vsseg7e16_v_i16m1 (int16_t *base, vint16m1_t v0, vint16m1_t
    v1, vint16m1_t v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t
    v5, vint16m1_t v6, size_t vl);
void vsseg8e16_v_i16m1 (int16_t *base, vint16m1_t v0, vint16m1_t
    v1, vint16m1_t v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t
    v5, vint16m1_t v6, vint16m1_t v7, size_t vl);
void vsseg2e16_v_i16m2 (int16_t *base, vint16m2_t v0, vint16m2_t
    v1, size_t vl);
void vsseg3e16_v_i16m2 (int16_t *base, vint16m2_t v0, vint16m2_t
    v1, vint16m2_t v2, size_t vl);
void vsseg4e16_v_i16m2 (int16_t *base, vint16m2_t v0, vint16m2_t
    v1, vint16m2_t v2, vint16m2_t v3, size_t vl);
void vsseg2e16_v_i16m4 (int16_t *base, vint16m4_t v0, vint16m4_t
    v1, size_t vl);
void vsseg2e32_v_i32m1 (int32_t *base, vint32m1_t v0, vint32m1_t
    v1, size_t vl);
void vsseg3e32_v_i32m1 (int32_t *base, vint32m1_t v0, vint32m1_t
    v1, vint32m1_t v2, size_t vl);
void vsseg4e32_v_i32m1 (int32_t *base, vint32m1_t v0, vint32m1_t
    v1, vint32m1_t v2, vint32m1_t v3, size_t vl);
void vsseg5e32_v_i32m1 (int32_t *base, vint32m1_t v0, vint32m1_t
    v1, vint32m1_t v2, vint32m1_t v3, vint32m1_t v4, size_t vl);
void vsseg6e32_v_i32m1 (int32_t *base, vint32m1_t v0, vint32m1_t
    v1, vint32m1_t v2, vint32m1_t v3, vint32m1_t v4, vint32m1_t
    v5, size_t vl);
void vsseg7e32_v_i32m1 (int32_t *base, vint32m1_t v0, vint32m1_t
    v1, vint32m1_t v2, vint32m1_t v3, vint32m1_t v4, vint32m1_t
    v5, vint32m1_t v6, size_t vl);
void vsseg8e32_v_i32m1 (int32_t *base, vint32m1_t v0, vint32m1_t
    v1, vint32m1_t v2, vint32m1_t v3, vint32m1_t v4, vint32m1_t
    v5, vint32m1_t v6, vint32m1_t v7, size_t vl);
void vsseg2e32_v_i32m2 (int32_t *base, vint32m2_t v0, vint32m2_t
    v1, size_t vl);
```

```
void vsseg3e32_v_i32m2 (int32_t *base, vint32m2_t v0, vint32m2_t
    v1, vint32m2_t v2, size_t vl);
void vsseg4e32_v_i32m2 (int32_t *base, vint32m2_t v0, vint32m2_t
    v1, vint32m2_t v2, vint32m2_t v3, size_t vl);
void vsseg2e32_v_i32m4 (int32_t *base, vint32m4_t v0, vint32m4_t
    v1, size_t vl);
void vsseg2e64_v_i64m1 (int64_t *base, vint64m1_t v0, vint64m1_t
    v1, size_t vl);
void vsseg3e64_v_i64m1 (int64_t *base, vint64m1_t v0, vint64m1_t
    v1, vint64m1_t v2, size_t vl);
void vsseg4e64_v_i64m1 (int64_t *base, vint64m1_t v0, vint64m1_t
    v1, vint64m1_t v2, vint64m1_t v3, size_t vl);
void vsseg5e64_v_i64m1 (int64_t *base, vint64m1_t v0, vint64m1_t
    v1, vint64m1_t v2, vint64m1_t v3, vint64m1_t v4, size_t vl);
void vsseg6e64_v_i64m1 (int64_t *base, vint64m1_t v0, vint64m1_t
    v1, vint64m1_t v2, vint64m1_t v3, vint64m1_t v4, vint64m1_t
    v5, size_t vl);
void vsseg7e64_v_i64m1 (int64_t *base, vint64m1_t v0, vint64m1_t
    v1, vint64m1_t v2, vint64m1_t v3, vint64m1_t v4, vint64m1_t
    v5, vint64m1_t v6, size_t vl);
void vsseg8e64_v_i64m1 (int64_t *base, vint64m1_t v0, vint64m1_t
    v1, vint64m1_t v2, vint64m1_t v3, vint64m1_t v4, vint64m1_t
    v5, vint64m1_t v6, vint64m1_t v7, size_t vl);
void vsseg2e64_v_i64m2 (int64_t *base, vint64m2_t v0, vint64m2_t
    v1, size_t vl);
void vsseg3e64_v_i64m2 (int64_t *base, vint64m2_t v0, vint64m2_t
    v1, vint64m2_t v2, size_t vl);
void vsseg4e64_v_i64m2 (int64_t *base, vint64m2_t v0, vint64m2_t
    v1, vint64m2_t v2, vint64m2_t v3, size_t vl);
void vsseg2e64_v_i64m4 (int64_t *base, vint64m4_t v0, vint64m4_t
    v1, size_t vl);
void vsseg2e8_v_u8m1 (uint8_t *base, vuint8m1_t v0, vuint8m1_t
    v1, size_t vl);
void vsseg3e8_v_u8m1 (uint8_t *base, vuint8m1_t v0, vuint8m1_t
    v1, vuint8m1_t v2, size_t vl);
void vsseg4e8_v_u8m1 (uint8_t *base, vuint8m1_t v0, vuint8m1_t
    v1, vuint8m1_t v2, vuint8m1_t v3, size_t vl);
void vsseg5e8_v_u8m1 (uint8_t *base, vuint8m1_t v0, vuint8m1_t
    v1, vuint8m1_t v2, vuint8m1_t v3, vuint8m1_t v4, size_t vl);
void vsseg6e8_v_u8m1 (uint8_t *base, vuint8m1_t v0, vuint8m1_t
    v1, vuint8m1_t v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t
    v5, size_t vl);
void vsseg7e8_v_u8m1 (uint8_t *base, vuint8m1_t v0, vuint8m1_t
    v1, vuint8m1_t v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t
    v5, vuint8m1_t v6, size_t vl);
```

```
void vsseg8e8_v_u8m1 (uint8_t *base, vuint8m1_t v0, vuint8m1_t
    v1, vuint8m1_t v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t
    v5, vuint8m1_t v6, vuint8m1_t v7, size_t vl);
void vsseg2e8_v_u8m2 (uint8_t *base, vuint8m2_t v0, vuint8m2_t
    v1, size_t vl);
void vsseg3e8_v_u8m2 (uint8_t *base, vuint8m2_t v0, vuint8m2_t
    v1, vuint8m2_t v2, size_t vl);
void vsseg4e8_v_u8m2 (uint8_t *base, vuint8m2_t v0, vuint8m2_t
    v1, vuint8m2_t v2, vuint8m2_t v3, size_t vl);
void vsseg2e8_v_u8m4 (uint8_t *base, vuint8m4_t v0, vuint8m4_t
    v1, size_t vl);
void vsseg2e16_v_u16m1 (uint16_t *base, vuint16m1_t v0,
    vuint16m1_t v1, size_t vl);
void vsseg3e16_v_u16m1 (uint16_t *base, vuint16m1_t v0,
    vuint16m1_t v1, vuint16m1_t v2, size_t vl);
void vsseg4e16_v_u16m1 (uint16_t *base, vuint16m1_t v0,
    vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t v3, size_t vl);
void vsseg5e16_v_u16m1 (uint16_t *base, vuint16m1_t v0,
    vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t
    v4, size_t vl);
void vsseg6e16_v_u16m1 (uint16_t *base, vuint16m1_t v0,
    vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t
    v4, vuint16m1_t v5, size_t vl);
void vsseg7e16_v_u16m1 (uint16_t *base, vuint16m1_t v0,
    vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t
    v4, vuint16m1_t v5, vuint16m1_t v6, size_t vl);
void vsseg8e16_v_u16m1 (uint16_t *base, vuint16m1_t v0,
    vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t
    v4, vuint16m1_t v5, vuint16m1_t v6, vuint16m1_t v7, size_t
    vl);
void vsseg2e16_v_u16m2 (uint16_t *base, vuint16m2_t v0,
    vuint16m2_t v1, size_t vl);
void vsseg3e16_v_u16m2 (uint16_t *base, vuint16m2_t v0,
    vuint16m2_t v1, vuint16m2_t v2, size_t vl);
void vsseg4e16_v_u16m2 (uint16_t *base, vuint16m2_t v0,
    vuint16m2_t v1, vuint16m2_t v2, vuint16m2_t v3, size_t vl);
void vsseg2e16_v_u16m4 (uint16_t *base, vuint16m4_t v0,
    vuint16m4_t v1, size_t vl);
void vsseg2e32_v_u32m1 (uint32_t *base, vuint32m1_t v0,
    vuint32m1_t v1, size_t vl);
void vsseg3e32_v_u32m1 (uint32_t *base, vuint32m1_t v0,
    vuint32m1_t v1, vuint32m1_t v2, size_t vl);
void vsseg4e32_v_u32m1 (uint32_t *base, vuint32m1_t v0,
    vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t v3, size_t vl);
void vsseg5e32_v_u32m1 (uint32_t *base, vuint32m1_t v0,
    vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t
```

```
    v4, size_t vl);
void vsseg6e32_v_u32m1 (uint32_t *base, vuint32m1_t v0,
    vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t
    v4, vuint32m1_t v5, size_t vl);
void vsseg7e32_v_u32m1 (uint32_t *base, vuint32m1_t v0,
    vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t
    v4, vuint32m1_t v5, vuint32m1_t v6, size_t vl);
void vsseg8e32_v_u32m1 (uint32_t *base, vuint32m1_t v0,
    vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t
    v4, vuint32m1_t v5, vuint32m1_t v6, vuint32m1_t v7, size_t
    vl);
void vsseg2e32_v_u32m2 (uint32_t *base, vuint32m2_t v0,
    vuint32m2_t v1, size_t vl);
void vsseg3e32_v_u32m2 (uint32_t *base, vuint32m2_t v0,
    vuint32m2_t v1, vuint32m2_t v2, size_t vl);
void vsseg4e32_v_u32m2 (uint32_t *base, vuint32m2_t v0,
    vuint32m2_t v1, vuint32m2_t v2, vuint32m2_t v3, size_t vl);
void vsseg2e32_v_u32m4 (uint32_t *base, vuint32m4_t v0,
    vuint32m4_t v1, size_t vl);
void vsseg2e64_v_u64m1 (uint64_t *base, vuint64m1_t v0,
    vuint64m1_t v1, size_t vl);
void vsseg3e64_v_u64m1 (uint64_t *base, vuint64m1_t v0,
    vuint64m1_t v1, vuint64m1_t v2, size_t vl);
void vsseg4e64_v_u64m1 (uint64_t *base, vuint64m1_t v0,
    vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t v3, size_t vl);
void vsseg5e64_v_u64m1 (uint64_t *base, vuint64m1_t v0,
    vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t v3, vuint64m1_t
    v4, size_t vl);
void vsseg6e64_v_u64m1 (uint64_t *base, vuint64m1_t v0,
    vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t v3, vuint64m1_t
    v4, vuint64m1_t v5, size_t vl);
void vsseg7e64_v_u64m1 (uint64_t *base, vuint64m1_t v0,
    vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t v3, vuint64m1_t
    v4, vuint64m1_t v5, vuint64m1_t v6, size_t vl);
void vsseg8e64_v_u64m1 (uint64_t *base, vuint64m1_t v0,
    vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t v3, vuint64m1_t
    v4, vuint64m1_t v5, vuint64m1_t v6, vuint64m1_t v7, size_t
    vl);
void vsseg2e64_v_u64m2 (uint64_t *base, vuint64m2_t v0,
    vuint64m2_t v1, size_t vl);
void vsseg3e64_v_u64m2 (uint64_t *base, vuint64m2_t v0,
    vuint64m2_t v1, vuint64m2_t v2, size_t vl);
void vsseg4e64_v_u64m2 (uint64_t *base, vuint64m2_t v0,
    vuint64m2_t v1, vuint64m2_t v2, vuint64m2_t v3, size_t vl);
void vsseg2e64_v_u64m4 (uint64_t *base, vuint64m4_t v0,
    vuint64m4_t v1, size_t vl);
```

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void vsseg2e16_v_f16m1 (float16_t *base, vfloat16m1_t v0,
    vfloat16m1_t v1, size_t vl);
void vsseg3e16_v_f16m1 (float16_t *base, vfloat16m1_t v0,
    vfloat16m1_t v1, vfloat16m1_t v2, size_t vl);
void vsseg4e16_v_f16m1 (float16_t *base, vfloat16m1_t v0,
    vfloat16m1_t v1, vfloat16m1_t v2, vfloat16m1_t v3, size_t
    vl);
void vsseg5e16_v_f16m1 (float16_t *base, vfloat16m1_t v0,
    vfloat16m1_t v1, vfloat16m1_t v2, vfloat16m1_t v3,
    vfloat16m1_t v4, size_t vl);
void vsseg6e16_v_f16m1 (float16_t *base, vfloat16m1_t v0,
    vfloat16m1_t v1, vfloat16m1_t v2, vfloat16m1_t v3,
    vfloat16m1_t v4, vfloat16m1_t v5, size_t vl);
void vsseg7e16_v_f16m1 (float16_t *base, vfloat16m1_t v0,
    vfloat16m1_t v1, vfloat16m1_t v2, vfloat16m1_t v3,
    vfloat16m1_t v4, vfloat16m1_t v5, vfloat16m1_t v6, size_t
    vl);
void vsseg8e16_v_f16m1 (float16_t *base, vfloat16m1_t v0,
    vfloat16m1_t v1, vfloat16m1_t v2, vfloat16m1_t v3,
    vfloat16m1_t v4, vfloat16m1_t v5, vfloat16m1_t v6,
    vfloat16m1_t v7, size_t vl);
void vsseg2e16_v_f16m2 (float16_t *base, vfloat16m2_t v0,
    vfloat16m2_t v1, size_t vl);
void vsseg3e16_v_f16m2 (float16_t *base, vfloat16m2_t v0,
    vfloat16m2_t v1, vfloat16m2_t v2, size_t vl);
void vsseg4e16_v_f16m2 (float16_t *base, vfloat16m2_t v0,
    vfloat16m2_t v1, vfloat16m2_t v2, vfloat16m2_t v3, size_t
    vl);
void vsseg2e16_v_f16m4 (float16_t *base, vfloat16m4_t v0,
    vfloat16m4_t v1, size_t vl);
void vsseg2e32_v_f32m1 (float32_t *base, vfloat32m1_t v0,
    vfloat32m1_t v1, size_t vl);
void vsseg3e32_v_f32m1 (float32_t *base, vfloat32m1_t v0,
    vfloat32m1_t v1, vfloat32m1_t v2, size_t vl);
void vsseg4e32_v_f32m1 (float32_t *base, vfloat32m1_t v0,
    vfloat32m1_t v1, vfloat32m1_t v2, vfloat32m1_t v3, size_t
    vl);
void vsseg5e32_v_f32m1 (float32_t *base, vfloat32m1_t v0,
    vfloat32m1_t v1, vfloat32m1_t v2, vfloat32m1_t v3,
    vfloat32m1_t v4, size_t vl);
void vsseg6e32_v_f32m1 (float32_t *base, vfloat32m1_t v0,
    vfloat32m1_t v1, vfloat32m1_t v2, vfloat32m1_t v3,
    vfloat32m1_t v4, vfloat32m1_t v5, size_t vl);
void vsseg7e32_v_f32m1 (float32_t *base, vfloat32m1_t v0,
    vfloat32m1_t v1, vfloat32m1_t v2, vfloat32m1_t v3,
    vfloat32m1_t v4, vfloat32m1_t v5, vfloat32m1_t v6, size_t
```

```
    vl);
void vsseg8e32_v_f32m1 (float32_t *base, vfloat32m1_t v0,
    vfloat32m1_t v1, vfloat32m1_t v2, vfloat32m1_t v3,
    vfloat32m1_t v4, vfloat32m1_t v5, vfloat32m1_t v6,
    vfloat32m1_t v7, size_t vl);
void vsseg2e32_v_f32m2 (float32_t *base, vfloat32m2_t v0,
    vfloat32m2_t v1, size_t vl);
void vsseg3e32_v_f32m2 (float32_t *base, vfloat32m2_t v0,
    vfloat32m2_t v1, vfloat32m2_t v2, size_t vl);
void vsseg4e32_v_f32m2 (float32_t *base, vfloat32m2_t v0,
    vfloat32m2_t v1, vfloat32m2_t v2, vfloat32m2_t v3, size_t
    vl);
void vsseg2e32_v_f32m4 (float32_t *base, vfloat32m4_t v0,
    vfloat32m4_t v1, size_t vl);
void vsseg2e64_v_f64m1 (float64_t *base, vfloat64m1_t v0,
    vfloat64m1_t v1, size_t vl);
void vsseg3e64_v_f64m1 (float64_t *base, vfloat64m1_t v0,
    vfloat64m1_t v1, vfloat64m1_t v2, size_t vl);
void vsseg4e64_v_f64m1 (float64_t *base, vfloat64m1_t v0,
    vfloat64m1_t v1, vfloat64m1_t v2, vfloat64m1_t v3, size_t
    vl);
void vsseg5e64_v_f64m1 (float64_t *base, vfloat64m1_t v0,
    vfloat64m1_t v1, vfloat64m1_t v2, vfloat64m1_t v3,
    vfloat64m1_t v4, size_t vl);
void vsseg6e64_v_f64m1 (float64_t *base, vfloat64m1_t v0,
    vfloat64m1_t v1, vfloat64m1_t v2, vfloat64m1_t v3,
    vfloat64m1_t v4, vfloat64m1_t v5, size_t vl);
void vsseg7e64_v_f64m1 (float64_t *base, vfloat64m1_t v0,
    vfloat64m1_t v1, vfloat64m1_t v2, vfloat64m1_t v3,
    vfloat64m1_t v4, vfloat64m1_t v5, vfloat64m1_t v6, size_t
    vl);
void vsseg8e64_v_f64m1 (float64_t *base, vfloat64m1_t v0,
    vfloat64m1_t v1, vfloat64m1_t v2, vfloat64m1_t v3,
    vfloat64m1_t v4, vfloat64m1_t v5, vfloat64m1_t v6,
    vfloat64m1_t v7, size_t vl);
void vsseg2e64_v_f64m2 (float64_t *base, vfloat64m2_t v0,
    vfloat64m2_t v1, size_t vl);
void vsseg3e64_v_f64m2 (float64_t *base, vfloat64m2_t v0,
    vfloat64m2_t v1, vfloat64m2_t v2, size_t vl);
void vsseg4e64_v_f64m2 (float64_t *base, vfloat64m2_t v0,
    vfloat64m2_t v1, vfloat64m2_t v2, vfloat64m2_t v3, size_t
    vl);
void vsseg2e64_v_f64m4 (float64_t *base, vfloat64m4_t v0,
    vfloat64m4_t v1, size_t vl);
// masked functions
```

```
void vsseg2e8_v_i8m1_m (vbool8_t mask, int8_t *base, vint8m1_t
    v0, vint8m1_t v1, size_t vl);
void vsseg3e8_v_i8m1_m (vbool8_t mask, int8_t *base, vint8m1_t
    v0, vint8m1_t v1, vint8m1_t v2, size_t vl);
void vsseg4e8_v_i8m1_m (vbool8_t mask, int8_t *base, vint8m1_t
    v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3, size_t vl);
void vsseg5e8_v_i8m1_m (vbool8_t mask, int8_t *base, vint8m1_t
    v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3, vint8m1_t v4,
    size_t vl);
void vsseg6e8_v_i8m1_m (vbool8_t mask, int8_t *base, vint8m1_t
    v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3, vint8m1_t v4,
    vint8m1_t v5, size_t vl);
void vsseg7e8_v_i8m1_m (vbool8_t mask, int8_t *base, vint8m1_t
    v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3, vint8m1_t v4,
    vint8m1_t v5, vint8m1_t v6, size_t vl);
void vsseg8e8_v_i8m1_m (vbool8_t mask, int8_t *base, vint8m1_t
    v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3, vint8m1_t v4,
    vint8m1_t v5, vint8m1_t v6, vint8m1_t v7, size_t vl);
void vsseg2e8_v_i8m2_m (vbool4_t mask, int8_t *base, vint8m2_t
    v0, vint8m2_t v1, size_t vl);
void vsseg3e8_v_i8m2_m (vbool4_t mask, int8_t *base, vint8m2_t
    v0, vint8m2_t v1, vint8m2_t v2, size_t vl);
void vsseg4e8_v_i8m2_m (vbool4_t mask, int8_t *base, vint8m2_t
    v0, vint8m2_t v1, vint8m2_t v2, vint8m2_t v3, size_t vl);
void vsseg2e8_v_i8m4_m (vbool2_t mask, int8_t *base, vint8m4_t
    v0, vint8m4_t v1, size_t vl);
void vsseg2e16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vint16m1_t v0, vint16m1_t v1, size_t vl);
void vsseg3e16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, size_t vl);
void vsseg4e16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    size_t vl);
void vsseg5e16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, size_t vl);
void vsseg6e16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, size_t vl);
void vsseg7e16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, vint16m1_t v6, size_t vl);
void vsseg8e16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, vint16m1_t v6, vint16m1_t v7,
    size_t vl);
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void vsseg2e16_v_i16m2_m (vbool8_t mask, int16_t *base,
    vint16m2_t v0, vint16m2_t v1, size_t vl);
void vsseg3e16_v_i16m2_m (vbool8_t mask, int16_t *base,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, size_t vl);
void vsseg4e16_v_i16m2_m (vbool8_t mask, int16_t *base,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, vint16m2_t v3,
    size_t vl);
void vsseg2e16_v_i16m4_m (vbool4_t mask, int16_t *base,
    vint16m4_t v0, vint16m4_t v1, size_t vl);
void vsseg2e32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vint32m1_t v0, vint32m1_t v1, size_t vl);
void vsseg3e32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, size_t vl);
void vsseg4e32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    size_t vl);
void vsseg5e32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, size_t vl);
void vsseg6e32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, vint32m1_t v5, size_t vl);
void vsseg7e32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, vint32m1_t v5, vint32m1_t v6, size_t vl);
void vsseg8e32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, vint32m1_t v5, vint32m1_t v6, vint32m1_t v7,
    size_t vl);
void vsseg2e32_v_i32m2_m (vbool16_t mask, int32_t *base,
    vint32m2_t v0, vint32m2_t v1, size_t vl);
void vsseg3e32_v_i32m2_m (vbool16_t mask, int32_t *base,
    vint32m2_t v0, vint32m2_t v1, vint32m2_t v2, size_t vl);
void vsseg4e32_v_i32m2_m (vbool16_t mask, int32_t *base,
    vint32m2_t v0, vint32m2_t v1, vint32m2_t v2, vint32m2_t v3,
    size_t vl);
void vsseg2e32_v_i32m4_m (vbool8_t mask, int32_t *base,
    vint32m4_t v0, vint32m4_t v1, size_t vl);
void vsseg2e64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vint64m1_t v0, vint64m1_t v1, size_t vl);
void vsseg3e64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, size_t vl);
void vsseg4e64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    size_t vl);
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197

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void vsseg5e64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    vint64m1_t v4, size_t vl);
void vsseg6e64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    vint64m1_t v4, vint64m1_t v5, size_t vl);
void vsseg7e64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    vint64m1_t v4, vint64m1_t v5, vint64m1_t v6, size_t vl);
void vsseg8e64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    vint64m1_t v4, vint64m1_t v5, vint64m1_t v6, vint64m1_t v7,
    size_t vl);
void vsseg2e64_v_i64m2_m (vbool32_t mask, int64_t *base,
    vint64m2_t v0, vint64m2_t v1, size_t vl);
void vsseg3e64_v_i64m2_m (vbool32_t mask, int64_t *base,
    vint64m2_t v0, vint64m2_t v1, vint64m2_t v2, size_t vl);
void vsseg4e64_v_i64m2_m (vbool32_t mask, int64_t *base,
    vint64m2_t v0, vint64m2_t v1, vint64m2_t v2, vint64m2_t v3,
    size_t vl);
void vsseg2e64_v_i64m4_m (vbool16_t mask, int64_t *base,
    vint64m4_t v0, vint64m4_t v1, size_t vl);
void vsseg2e8_v_u8m1_m (vbool8_t mask, uint8_t *base, vuint8m1_t
    v0, vuint8m1_t v1, size_t vl);
void vsseg3e8_v_u8m1_m (vbool8_t mask, uint8_t *base, vuint8m1_t
    v0, vuint8m1_t v1, vuint8m1_t v2, size_t vl);
void vsseg4e8_v_u8m1_m (vbool8_t mask, uint8_t *base, vuint8m1_t
    v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3, size_t vl);
void vsseg5e8_v_u8m1_m (vbool8_t mask, uint8_t *base, vuint8m1_t
    v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3, vuint8m1_t
    v4, size_t vl);
void vsseg6e8_v_u8m1_m (vbool8_t mask, uint8_t *base, vuint8m1_t
    v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3, vuint8m1_t
    v4, vuint8m1_t v5, size_t vl);
void vsseg7e8_v_u8m1_m (vbool8_t mask, uint8_t *base, vuint8m1_t
    v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3, vuint8m1_t
    v4, vuint8m1_t v5, vuint8m1_t v6, size_t vl);
void vsseg8e8_v_u8m1_m (vbool8_t mask, uint8_t *base, vuint8m1_t
    v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3, vuint8m1_t
    v4, vuint8m1_t v5, vuint8m1_t v6, vuint8m1_t v7, size_t vl);
void vsseg2e8_v_u8m2_m (vbool4_t mask, uint8_t *base, vuint8m2_t
    v0, vuint8m2_t v1, size_t vl);
void vsseg3e8_v_u8m2_m (vbool4_t mask, uint8_t *base, vuint8m2_t
    v0, vuint8m2_t v1, vuint8m2_t v2, size_t vl);
void vsseg4e8_v_u8m2_m (vbool4_t mask, uint8_t *base, vuint8m2_t
    v0, vuint8m2_t v1, vuint8m2_t v2, vuint8m2_t v3, size_t vl);
```

```
void vsseg2e8_v_u8m4_m (vbool2_t mask, uint8_t *base, vuint8m4_t
    v0, vuint8m4_t v1, size_t vl);
void vsseg2e16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t v0, vuint16m1_t v1, size_t vl);
void vsseg3e16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, size_t vl);
void vsseg4e16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, size_t vl);
void vsseg5e16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, size_t vl);
void vsseg6e16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, size_t vl);
void vsseg7e16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, vuint16m1_t v6, size_t
    vl);
void vsseg8e16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, vuint16m1_t v6,
    vuint16m1_t v7, size_t vl);
void vsseg2e16_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint16m2_t v0, vuint16m2_t v1, size_t vl);
void vsseg3e16_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, size_t vl);
void vsseg4e16_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, vuint16m2_t
    v3, size_t vl);
void vsseg2e16_v_u16m4_m (vbool4_t mask, uint16_t *base,
    vuint16m4_t v0, vuint16m4_t v1, size_t vl);
void vsseg2e32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t v0, vuint32m1_t v1, size_t vl);
void vsseg3e32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, size_t vl);
void vsseg4e32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, size_t vl);
void vsseg5e32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, size_t vl);
void vsseg6e32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, vuint32m1_t v5, size_t vl);
```

```
void vsseg7e32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, vuint32m1_t v5, vuint32m1_t v6, size_t
    vl);
void vsseg8e32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, vuint32m1_t v5, vuint32m1_t v6,
    vuint32m1_t v7, size_t vl);
void vsseg2e32_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint32m2_t v0, vuint32m2_t v1, size_t vl);
void vsseg3e32_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint32m2_t v0, vuint32m2_t v1, vuint32m2_t v2, size_t vl);
void vsseg4e32_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint32m2_t v0, vuint32m2_t v1, vuint32m2_t v2, vuint32m2_t
    v3, size_t vl);
void vsseg2e32_v_u32m4_m (vbool8_t mask, uint32_t *base,
    vuint32m4_t v0, vuint32m4_t v1, size_t vl);
void vsseg2e64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t v0, vuint64m1_t v1, size_t vl);
void vsseg3e64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, size_t vl);
void vsseg4e64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, size_t vl);
void vsseg5e64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, vuint64m1_t v4, size_t vl);
void vsseg6e64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, vuint64m1_t v4, vuint64m1_t v5, size_t vl);
void vsseg7e64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, vuint64m1_t v4, vuint64m1_t v5, vuint64m1_t v6, size_t
    vl);
void vsseg8e64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, vuint64m1_t v4, vuint64m1_t v5, vuint64m1_t v6,
    vuint64m1_t v7, size_t vl);
void vsseg2e64_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint64m2_t v0, vuint64m2_t v1, size_t vl);
void vsseg3e64_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint64m2_t v0, vuint64m2_t v1, vuint64m2_t v2, size_t vl);
void vsseg4e64_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint64m2_t v0, vuint64m2_t v1, vuint64m2_t v2, vuint64m2_t
    v3, size_t vl);
```

```
void vsseg2e64_v_u64m4_m (vbool16_t mask, uint64_t *base,
    vuint64m4_t v0, vuint64m4_t v1, size_t vl);
void vsseg2e16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vfloat16m1_t v0, vfloat16m1_t v1, size_t vl);
void vsseg3e16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2, size_t
    vl);
void vsseg4e16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, size_t vl);
void vsseg5e16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, size_t vl);
void vsseg6e16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5, size_t
    vl);
void vsseg7e16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5,
    vfloat16m1_t v6, size_t vl);
void vsseg8e16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5,
    vfloat16m1_t v6, vfloat16m1_t v7, size_t vl);
void vsseg2e16_v_f16m2_m (vbool8_t mask, float16_t *base,
    vfloat16m2_t v0, vfloat16m2_t v1, size_t vl);
void vsseg3e16_v_f16m2_m (vbool8_t mask, float16_t *base,
    vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2, size_t
    vl);
void vsseg4e16_v_f16m2_m (vbool8_t mask, float16_t *base,
    vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2,
    vfloat16m2_t v3, size_t vl);
void vsseg2e16_v_f16m4_m (vbool4_t mask, float16_t *base,
    vfloat16m4_t v0, vfloat16m4_t v1, size_t vl);
void vsseg2e32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vfloat32m1_t v0, vfloat32m1_t v1, size_t vl);
void vsseg3e32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2, size_t
    vl);
void vsseg4e32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, size_t vl);
void vsseg5e32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, size_t vl);
```

```c
void vsseg6e32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, vfloat32m1_t v5, size_t
    vl);
void vsseg7e32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, vfloat32m1_t v5,
    vfloat32m1_t v6, size_t vl);
void vsseg8e32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, vfloat32m1_t v5,
    vfloat32m1_t v6, vfloat32m1_t v7, size_t vl);
void vsseg2e32_v_f32m2_m (vbool16_t mask, float32_t *base,
    vfloat32m2_t v0, vfloat32m2_t v1, size_t vl);
void vsseg3e32_v_f32m2_m (vbool16_t mask, float32_t *base,
    vfloat32m2_t v0, vfloat32m2_t v1, vfloat32m2_t v2, size_t
    vl);
void vsseg4e32_v_f32m2_m (vbool16_t mask, float32_t *base,
    vfloat32m2_t v0, vfloat32m2_t v1, vfloat32m2_t v2,
    vfloat32m2_t v3, size_t vl);
void vsseg2e32_v_f32m4_m (vbool8_t mask, float32_t *base,
    vfloat32m4_t v0, vfloat32m4_t v1, size_t vl);
void vsseg2e64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vfloat64m1_t v0, vfloat64m1_t v1, size_t vl);
void vsseg3e64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2, size_t
    vl);
void vsseg4e64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
    vfloat64m1_t v3, size_t vl);
void vsseg5e64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
    vfloat64m1_t v3, vfloat64m1_t v4, size_t vl);
void vsseg6e64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
    vfloat64m1_t v3, vfloat64m1_t v4, vfloat64m1_t v5, size_t
    vl);
void vsseg7e64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
    vfloat64m1_t v3, vfloat64m1_t v4, vfloat64m1_t v5,
    vfloat64m1_t v6, size_t vl);
void vsseg8e64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
    vfloat64m1_t v3, vfloat64m1_t v4, vfloat64m1_t v5,
    vfloat64m1_t v6, vfloat64m1_t v7, size_t vl);
```

```
void vsseg2e64_v_f64m2_m (vbool32_t mask, float64_t *base,
    vfloat64m2_t v0, vfloat64m2_t v1, size_t vl);
void vsseg3e64_v_f64m2_m (vbool32_t mask, float64_t *base,
    vfloat64m2_t v0, vfloat64m2_t v1, vfloat64m2_t v2, size_t
    vl);
void vsseg4e64_v_f64m2_m (vbool32_t mask, float64_t *base,
    vfloat64m2_t v0, vfloat64m2_t v1, vfloat64m2_t v2,
    vfloat64m2_t v3, size_t vl);
void vsseg2e64_v_f64m4_m (vbool16_t mask, float64_t *base,
    vfloat64m4_t v0, vfloat64m4_t v1, size_t vl);
```

Vector Strided Segment Load Functions:

Prototypes:

```
void vlsseg2e8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, const
    int8_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, const int8_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, const int8_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg5e8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, const int8_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg6e8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, const
    int8_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg7e8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, vint8m1_t
    *v6, const int8_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg8e8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, vint8m1_t
    *v6, vint8m1_t *v7, const int8_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg2e8_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1, const
    int8_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e8_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1, vint8m2_t
    *v2, const int8_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e8_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1, vint8m2_t
    *v2, vint8m2_t *v3, const int8_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg2e8_v_i8m4 (vint8m4_t *v0, vint8m4_t *v1, const
    int8_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1, const
    int16_t *base, ptrdiff_t bstride, size_t vl);
```

```
void vlsseg3e16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, const int16_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg4e16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, const int16_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg5e16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, const
    int16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg6e16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, const int16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg7e16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, const int16_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg8e16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, vint16m1_t *v7, const int16_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg2e16_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1, const
    int16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e16_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, const int16_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg4e16_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vint16m2_t *v3, const int16_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg2e16_v_i16m4 (vint16m4_t *v0, vint16m4_t *v1, const
    int16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1, const
    int32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, const int32_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg4e32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, const int32_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg5e32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, const
    int32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg6e32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, const int32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg7e32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
```

```
    *v5, vint32m1_t *v6, const int32_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg8e32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, vint32m1_t *v7, const int32_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg2e32_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1, const
    int32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e32_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, const int32_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg4e32_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vint32m2_t *v3, const int32_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg2e32_v_i32m4 (vint32m4_t *v0, vint32m4_t *v1, const
    int32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1, const
    int64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, const int64_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg4e64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, const int64_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg5e64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, const
    int64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg6e64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, const int64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg7e64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, vint64m1_t *v6, const int64_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg8e64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, vint64m1_t *v6, vint64m1_t *v7, const int64_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg2e64_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1, const
    int64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e64_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1,
    vint64m2_t *v2, const int64_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg4e64_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1,
    vint64m2_t *v2, vint64m2_t *v3, const int64_t *base,
    ptrdiff_t bstride, size_t vl);
```

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void vlsseg2e64_v_i64m4 (vint64m4_t *v0, vint64m4_t *v1, const
    int64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1, const
    uint8_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, const uint8_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg4e8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, const uint8_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg5e8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, const
    uint8_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg6e8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, const uint8_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg7e8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, const uint8_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg8e8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vuint8m1_t *v7, const uint8_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg2e8_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1, const
    uint8_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e8_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, const uint8_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg4e8_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, vuint8m2_t *v3, const uint8_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg2e8_v_u8m4 (vuint8m4_t *v0, vuint8m4_t *v1, const
    uint8_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1, const
    uint16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, const uint16_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg4e16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, const uint16_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg5e16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4, const
    uint16_t *base, ptrdiff_t bstride, size_t vl);
```

```
void vlsseg6e16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, const uint16_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg7e16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, const uint16_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg8e16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vuint16m1_t *v7, const
    uint16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e16_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1, const
    uint16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e16_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, const uint16_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg4e16_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vuint16m2_t *v3, const uint16_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg2e16_v_u16m4 (vuint16m4_t *v0, vuint16m4_t *v1, const
    uint16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1, const
    uint32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, const uint32_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg4e32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, const uint32_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg5e32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4, const
    uint32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg6e32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, const uint32_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg7e32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, const uint32_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg8e32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, vuint32m1_t *v7, const
    uint32_t *base, ptrdiff_t bstride, size_t vl);
```

```
void vlsseg2e32_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1, const
    uint32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e32_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, const uint32_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg4e32_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, vuint32m2_t *v3, const uint32_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg2e32_v_u32m4 (vuint32m4_t *v0, vuint32m4_t *v1, const
    uint32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1, const
    uint64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, const uint64_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg4e64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, const uint64_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg5e64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4, const
    uint64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg6e64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, const uint64_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg7e64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vuint64m1_t *v6, const uint64_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg8e64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vuint64m1_t *v6, vuint64m1_t *v7, const
    uint64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e64_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1, const
    uint64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e64_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, const uint64_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg4e64_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, vuint64m2_t *v3, const uint64_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg2e64_v_u64m4 (vuint64m4_t *v0, vuint64m4_t *v1, const
    uint64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    const float16_t *base, ptrdiff_t bstride, size_t vl);
```

```
void vlsseg3e16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, const float16_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg4e16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, const float16_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg5e16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4, const
    float16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg6e16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, const float16_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg7e16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, const float16_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg8e16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vfloat16m1_t *v7, const
    float16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e16_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    const float16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e16_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, const float16_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg4e16_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, const float16_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg2e16_v_f16m4 (vfloat16m4_t *v0, vfloat16m4_t *v1,
    const float16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    const float32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, const float32_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg4e32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, const float32_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg5e32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4, const
    float32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg6e32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, const float32_t *base, ptrdiff_t bstride,
    size_t vl);
```

```
void vlsseg7e32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, const float32_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg8e32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, vfloat32m1_t *v7, const
    float32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e32_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    const float32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e32_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, const float32_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg4e32_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vfloat32m2_t *v3, const float32_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg2e32_v_f32m4 (vfloat32m4_t *v0, vfloat32m4_t *v1,
    const float32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    const float64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, const float64_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg4e64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, const float64_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg5e64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4, const
    float64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg6e64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, const float64_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg7e64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, vfloat64m1_t *v6, const float64_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg8e64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, vfloat64m1_t *v6, vfloat64m1_t *v7, const
    float64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e64_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    const float64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e64_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, const float64_t *base, ptrdiff_t bstride,
    size_t vl);
```

```
void vlsseg4e64_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vfloat64m2_t *v3, const float64_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg2e64_v_f64m4 (vfloat64m4_t *v0, vfloat64m4_t *v1,
    const float64_t *base, ptrdiff_t bstride, size_t vl);
// masked functions
void vlsseg2e8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1, vbool8_t
    mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1, const
    int8_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t
    maskedoff1, vint8m1_t maskedoff2, const int8_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg4e8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, vint8m1_t
    maskedoff3, const int8_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg5e8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vbool8_t mask, vint8m1_t
    maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
    vint8m1_t maskedoff3, vint8m1_t maskedoff4, const int8_t
    *base, ptrdiff_t bstride, size_t vl);
void vlsseg6e8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, vbool8_t
    mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1, vint8m1_t
    maskedoff2, vint8m1_t maskedoff3, vint8m1_t maskedoff4,
    vint8m1_t maskedoff5, const int8_t *base, ptrdiff_t bstride,
    size_t vl);
void vlsseg7e8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, vint8m1_t
    *v6, vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t
    maskedoff1, vint8m1_t maskedoff2, vint8m1_t maskedoff3,
    vint8m1_t maskedoff4, vint8m1_t maskedoff5, vint8m1_t
    maskedoff6, const int8_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg8e8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, vint8m1_t
    *v6, vint8m1_t *v7, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, vint8m1_t
    maskedoff3, vint8m1_t maskedoff4, vint8m1_t maskedoff5,
    vint8m1_t maskedoff6, vint8m1_t maskedoff7, const int8_t
    *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e8_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1, vbool4_t
    mask, vint8m2_t maskedoff0, vint8m2_t maskedoff1, const
    int8_t *base, ptrdiff_t bstride, size_t vl);
```

```c
void vlsseg3e8_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1, vint8m2_t
    *v2, vbool4_t mask, vint8m2_t maskedoff0, vint8m2_t
    maskedoff1, vint8m2_t maskedoff2, const int8_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg4e8_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1, vint8m2_t
    *v2, vint8m2_t *v3, vbool4_t mask, vint8m2_t maskedoff0,
    vint8m2_t maskedoff1, vint8m2_t maskedoff2, vint8m2_t
    maskedoff3, const int8_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg2e8_v_i8m4_m (vint8m4_t *v0, vint8m4_t *v1, vbool2_t
    mask, vint8m4_t maskedoff0, vint8m4_t maskedoff1, const
    int8_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vbool16_t mask, vint16m1_t maskedoff0, vint16m1_t
    maskedoff1, const int16_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg3e16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vbool16_t mask, vint16m1_t maskedoff0,
    vint16m1_t maskedoff1, vint16m1_t maskedoff2, const int16_t
    *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vbool16_t mask, vint16m1_t
    maskedoff0, vint16m1_t maskedoff1, vint16m1_t maskedoff2,
    vint16m1_t maskedoff3, const int16_t *base, ptrdiff_t
    bstride, size_t vl);
void vlsseg5e16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vbool16_t
    mask, vint16m1_t maskedoff0, vint16m1_t maskedoff1,
    vint16m1_t maskedoff2, vint16m1_t maskedoff3, vint16m1_t
    maskedoff4, const int16_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg6e16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vbool16_t mask, vint16m1_t maskedoff0, vint16m1_t
    maskedoff1, vint16m1_t maskedoff2, vint16m1_t maskedoff3,
    vint16m1_t maskedoff4, vint16m1_t maskedoff5, const int16_t
    *base, ptrdiff_t bstride, size_t vl);
void vlsseg7e16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, vbool16_t mask, vint16m1_t maskedoff0,
    vint16m1_t maskedoff1, vint16m1_t maskedoff2, vint16m1_t
    maskedoff3, vint16m1_t maskedoff4, vint16m1_t maskedoff5,
    vint16m1_t maskedoff6, const int16_t *base, ptrdiff_t
    bstride, size_t vl);
void vlsseg8e16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
```

```
                 *v5, vint16m1_t *v6, vint16m1_t *v7, vbool16_t mask,
                 vint16m1_t maskedoff0, vint16m1_t maskedoff1, vint16m1_t
                 maskedoff2, vint16m1_t maskedoff3, vint16m1_t maskedoff4,
                 vint16m1_t maskedoff5, vint16m1_t maskedoff6, vint16m1_t
                 maskedoff7, const int16_t *base, ptrdiff_t bstride, size_t
                 vl);
void vlsseg2e16_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
                 vbool8_t mask, vint16m2_t maskedoff0, vint16m2_t maskedoff1,
                 const int16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e16_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
                 vint16m2_t *v2, vbool8_t mask, vint16m2_t maskedoff0,
                 vint16m2_t maskedoff1, vint16m2_t maskedoff2, const int16_t
                 *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e16_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
                 vint16m2_t *v2, vint16m2_t *v3, vbool8_t mask, vint16m2_t
                 maskedoff0, vint16m2_t maskedoff1, vint16m2_t maskedoff2,
                 vint16m2_t maskedoff3, const int16_t *base, ptrdiff_t
                 bstride, size_t vl);
void vlsseg2e16_v_i16m4_m (vint16m4_t *v0, vint16m4_t *v1,
                 vbool4_t mask, vint16m4_t maskedoff0, vint16m4_t maskedoff1,
                 const int16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
                 vbool32_t mask, vint32m1_t maskedoff0, vint32m1_t
                 maskedoff1, const int32_t *base, ptrdiff_t bstride, size_t
                 vl);
void vlsseg3e32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
                 vint32m1_t *v2, vbool32_t mask, vint32m1_t maskedoff0,
                 vint32m1_t maskedoff1, vint32m1_t maskedoff2, const int32_t
                 *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
                 vint32m1_t *v2, vint32m1_t *v3, vbool32_t mask, vint32m1_t
                 maskedoff0, vint32m1_t maskedoff1, vint32m1_t maskedoff2,
                 vint32m1_t maskedoff3, const int32_t *base, ptrdiff_t
                 bstride, size_t vl);
void vlsseg5e32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
                 vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vbool32_t
                 mask, vint32m1_t maskedoff0, vint32m1_t maskedoff1,
                 vint32m1_t maskedoff2, vint32m1_t maskedoff3, vint32m1_t
                 maskedoff4, const int32_t *base, ptrdiff_t bstride, size_t
                 vl);
void vlsseg6e32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
                 vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
                 *v5, vbool32_t mask, vint32m1_t maskedoff0, vint32m1_t
                 maskedoff1, vint32m1_t maskedoff2, vint32m1_t maskedoff3,
                 vint32m1_t maskedoff4, vint32m1_t maskedoff5, const int32_t
                 *base, ptrdiff_t bstride, size_t vl);
```

```
void vlsseg7e32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, vbool32_t mask, vint32m1_t maskedoff0,
    vint32m1_t maskedoff1, vint32m1_t maskedoff2, vint32m1_t
    maskedoff3, vint32m1_t maskedoff4, vint32m1_t maskedoff5,
    vint32m1_t maskedoff6, const int32_t *base, ptrdiff_t
    bstride, size_t vl);
void vlsseg8e32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, vint32m1_t *v7, vbool32_t mask,
    vint32m1_t maskedoff0, vint32m1_t maskedoff1, vint32m1_t
    maskedoff2, vint32m1_t maskedoff3, vint32m1_t maskedoff4,
    vint32m1_t maskedoff5, vint32m1_t maskedoff6, vint32m1_t
    maskedoff7, const int32_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg2e32_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
    vbool16_t mask, vint32m2_t maskedoff0, vint32m2_t
    maskedoff1, const int32_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg3e32_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vbool16_t mask, vint32m2_t maskedoff0,
    vint32m2_t maskedoff1, vint32m2_t maskedoff2, const int32_t
    *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e32_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vint32m2_t *v3, vbool16_t mask, vint32m2_t
    maskedoff0, vint32m2_t maskedoff1, vint32m2_t maskedoff2,
    vint32m2_t maskedoff3, const int32_t *base, ptrdiff_t
    bstride, size_t vl);
void vlsseg2e32_v_i32m4_m (vint32m4_t *v0, vint32m4_t *v1,
    vbool8_t mask, vint32m4_t maskedoff0, vint32m4_t maskedoff1,
    const int32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
    vbool64_t mask, vint64m1_t maskedoff0, vint64m1_t
    maskedoff1, const int64_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg3e64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vbool64_t mask, vint64m1_t maskedoff0,
    vint64m1_t maskedoff1, vint64m1_t maskedoff2, const int64_t
    *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vbool64_t mask, vint64m1_t
    maskedoff0, vint64m1_t maskedoff1, vint64m1_t maskedoff2,
    vint64m1_t maskedoff3, const int64_t *base, ptrdiff_t
    bstride, size_t vl);
void vlsseg5e64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vbool64_t
```

```
              mask, vint64m1_t maskedoff0, vint64m1_t maskedoff1,
              vint64m1_t maskedoff2, vint64m1_t maskedoff3, vint64m1_t
              maskedoff4, const int64_t *base, ptrdiff_t bstride, size_t
              vl);
void vlsseg6e64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
              vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
              *v5, vbool64_t mask, vint64m1_t maskedoff0, vint64m1_t
              maskedoff1, vint64m1_t maskedoff2, vint64m1_t maskedoff3,
              vint64m1_t maskedoff4, vint64m1_t maskedoff5, const int64_t
              *base, ptrdiff_t bstride, size_t vl);
void vlsseg7e64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
              vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
              *v5, vint64m1_t *v6, vbool64_t mask, vint64m1_t maskedoff0,
              vint64m1_t maskedoff1, vint64m1_t maskedoff2, vint64m1_t
              maskedoff3, vint64m1_t maskedoff4, vint64m1_t maskedoff5,
              vint64m1_t maskedoff6, const int64_t *base, ptrdiff_t
              bstride, size_t vl);
void vlsseg8e64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
              vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
              *v5, vint64m1_t *v6, vint64m1_t *v7, vbool64_t mask,
              vint64m1_t maskedoff0, vint64m1_t maskedoff1, vint64m1_t
              maskedoff2, vint64m1_t maskedoff3, vint64m1_t maskedoff4,
              vint64m1_t maskedoff5, vint64m1_t maskedoff6, vint64m1_t
              maskedoff7, const int64_t *base, ptrdiff_t bstride, size_t
              vl);
void vlsseg2e64_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
              vbool32_t mask, vint64m2_t maskedoff0, vint64m2_t
              maskedoff1, const int64_t *base, ptrdiff_t bstride, size_t
              vl);
void vlsseg3e64_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
              vint64m2_t *v2, vbool32_t mask, vint64m2_t maskedoff0,
              vint64m2_t maskedoff1, vint64m2_t maskedoff2, const int64_t
              *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e64_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
              vint64m2_t *v2, vint64m2_t *v3, vbool32_t mask, vint64m2_t
              maskedoff0, vint64m2_t maskedoff1, vint64m2_t maskedoff2,
              vint64m2_t maskedoff3, const int64_t *base, ptrdiff_t
              bstride, size_t vl);
void vlsseg2e64_v_i64m4_m (vint64m4_t *v0, vint64m4_t *v1,
              vbool16_t mask, vint64m4_t maskedoff0, vint64m4_t
              maskedoff1, const int64_t *base, ptrdiff_t bstride, size_t
              vl);
void vlsseg2e8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
              vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
              const uint8_t *base, ptrdiff_t bstride, size_t vl);
```

```c
void vlsseg3e8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vbool8_t mask, vuint8m1_t maskedoff0,
    vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, const uint8_t
    *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vbool8_t mask, vuint8m1_t
    maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t maskedoff2,
    vuint8m1_t maskedoff3, const uint8_t *base, ptrdiff_t
    bstride, size_t vl);
void vlsseg5e8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vbool8_t
    mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
    vuint8m1_t maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t
    maskedoff4, const uint8_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg6e8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t
    maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t maskedoff3,
    vuint8m1_t maskedoff4, vuint8m1_t maskedoff5, const uint8_t
    *base, ptrdiff_t bstride, size_t vl);
void vlsseg7e8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vbool8_t mask, vuint8m1_t maskedoff0,
    vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t
    maskedoff3, vuint8m1_t maskedoff4, vuint8m1_t maskedoff5,
    vuint8m1_t maskedoff6, const uint8_t *base, ptrdiff_t
    bstride, size_t vl);
void vlsseg8e8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vuint8m1_t *v7, vbool8_t mask,
    vuint8m1_t maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t
    maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t maskedoff4,
    vuint8m1_t maskedoff5, vuint8m1_t maskedoff6, vuint8m1_t
    maskedoff7, const uint8_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg2e8_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
    vbool4_t mask, vuint8m2_t maskedoff0, vuint8m2_t maskedoff1,
    const uint8_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg3e8_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, vbool4_t mask, vuint8m2_t maskedoff0,
    vuint8m2_t maskedoff1, vuint8m2_t maskedoff2, const uint8_t
    *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e8_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, vuint8m2_t *v3, vbool4_t mask, vuint8m2_t
    maskedoff0, vuint8m2_t maskedoff1, vuint8m2_t maskedoff2,
```

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    vuint8m2_t maskedoff3, const uint8_t *base, ptrdiff_t
    bstride, size_t vl);
void vlsseg2e8_v_u8m4_m (vuint8m4_t *v0, vuint8m4_t *v1,
    vbool2_t mask, vuint8m4_t maskedoff0, vuint8m4_t maskedoff1,
    const uint8_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vbool16_t mask, vuint16m1_t maskedoff0, vuint16m1_t
    maskedoff1, const uint16_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg3e16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vbool16_t mask, vuint16m1_t maskedoff0,
    vuint16m1_t maskedoff1, vuint16m1_t maskedoff2, const
    uint16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vbool16_t mask,
    vuint16m1_t maskedoff0, vuint16m1_t maskedoff1, vuint16m1_t
    maskedoff2, vuint16m1_t maskedoff3, const uint16_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg5e16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4, vbool16_t
    mask, vuint16m1_t maskedoff0, vuint16m1_t maskedoff1,
    vuint16m1_t maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t
    maskedoff4, const uint16_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg6e16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vbool16_t mask, vuint16m1_t maskedoff0,
    vuint16m1_t maskedoff1, vuint16m1_t maskedoff2, vuint16m1_t
    maskedoff3, vuint16m1_t maskedoff4, vuint16m1_t maskedoff5,
    const uint16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg7e16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vbool16_t mask,
    vuint16m1_t maskedoff0, vuint16m1_t maskedoff1, vuint16m1_t
    maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t maskedoff4,
    vuint16m1_t maskedoff5, vuint16m1_t maskedoff6, const
    uint16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg8e16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vuint16m1_t *v7, vbool16_t
    mask, vuint16m1_t maskedoff0, vuint16m1_t maskedoff1,
    vuint16m1_t maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t
    maskedoff4, vuint16m1_t maskedoff5, vuint16m1_t maskedoff6,
    vuint16m1_t maskedoff7, const uint16_t *base, ptrdiff_t
    bstride, size_t vl);
```

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void vlsseg2e16_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vbool8_t mask, vuint16m2_t maskedoff0, vuint16m2_t
    maskedoff1, const uint16_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg3e16_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vbool8_t mask, vuint16m2_t maskedoff0,
    vuint16m2_t maskedoff1, vuint16m2_t maskedoff2, const
    uint16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e16_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vuint16m2_t *v3, vbool8_t mask, vuint16m2_t
    maskedoff0, vuint16m2_t maskedoff1, vuint16m2_t maskedoff2,
    vuint16m2_t maskedoff3, const uint16_t *base, ptrdiff_t
    bstride, size_t vl);
void vlsseg2e16_v_u16m4_m (vuint16m4_t *v0, vuint16m4_t *v1,
    vbool4_t mask, vuint16m4_t maskedoff0, vuint16m4_t
    maskedoff1, const uint16_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg2e32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vbool32_t mask, vuint32m1_t maskedoff0, vuint32m1_t
    maskedoff1, const uint32_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg3e32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vbool32_t mask, vuint32m1_t maskedoff0,
    vuint32m1_t maskedoff1, vuint32m1_t maskedoff2, const
    uint32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vbool32_t mask,
    vuint32m1_t maskedoff0, vuint32m1_t maskedoff1, vuint32m1_t
    maskedoff2, vuint32m1_t maskedoff3, const uint32_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg5e32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4, vbool32_t
    mask, vuint32m1_t maskedoff0, vuint32m1_t maskedoff1,
    vuint32m1_t maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t
    maskedoff4, const uint32_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg6e32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vbool32_t mask, vuint32m1_t maskedoff0,
    vuint32m1_t maskedoff1, vuint32m1_t maskedoff2, vuint32m1_t
    maskedoff3, vuint32m1_t maskedoff4, vuint32m1_t maskedoff5,
    const uint32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg7e32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, vbool32_t mask,
    vuint32m1_t maskedoff0, vuint32m1_t maskedoff1, vuint32m1_t
```

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        maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t maskedoff4,
        vuint32m1_t maskedoff5, vuint32m1_t maskedoff6, const
        uint32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg8e32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
        vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
        vuint32m1_t *v5, vuint32m1_t *v6, vuint32m1_t *v7, vbool32_t
        mask, vuint32m1_t maskedoff0, vuint32m1_t maskedoff1,
        vuint32m1_t maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t
        maskedoff4, vuint32m1_t maskedoff5, vuint32m1_t maskedoff6,
        vuint32m1_t maskedoff7, const uint32_t *base, ptrdiff_t
        bstride, size_t vl);
void vlsseg2e32_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
        vbool16_t mask, vuint32m2_t maskedoff0, vuint32m2_t
        maskedoff1, const uint32_t *base, ptrdiff_t bstride, size_t
        vl);
void vlsseg3e32_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
        vuint32m2_t *v2, vbool16_t mask, vuint32m2_t maskedoff0,
        vuint32m2_t maskedoff1, vuint32m2_t maskedoff2, const
        uint32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e32_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
        vuint32m2_t *v2, vuint32m2_t *v3, vbool16_t mask,
        vuint32m2_t maskedoff0, vuint32m2_t maskedoff1, vuint32m2_t
        maskedoff2, vuint32m2_t maskedoff3, const uint32_t *base,
        ptrdiff_t bstride, size_t vl);
void vlsseg2e32_v_u32m4_m (vuint32m4_t *v0, vuint32m4_t *v1,
        vbool8_t mask, vuint32m4_t maskedoff0, vuint32m4_t
        maskedoff1, const uint32_t *base, ptrdiff_t bstride, size_t
        vl);
void vlsseg2e64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
        vbool64_t mask, vuint64m1_t maskedoff0, vuint64m1_t
        maskedoff1, const uint64_t *base, ptrdiff_t bstride, size_t
        vl);
void vlsseg3e64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
        vuint64m1_t *v2, vbool64_t mask, vuint64m1_t maskedoff0,
        vuint64m1_t maskedoff1, vuint64m1_t maskedoff2, const
        uint64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
        vuint64m1_t *v2, vuint64m1_t *v3, vbool64_t mask,
        vuint64m1_t maskedoff0, vuint64m1_t maskedoff1, vuint64m1_t
        maskedoff2, vuint64m1_t maskedoff3, const uint64_t *base,
        ptrdiff_t bstride, size_t vl);
void vlsseg5e64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
        vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4, vbool64_t
        mask, vuint64m1_t maskedoff0, vuint64m1_t maskedoff1,
        vuint64m1_t maskedoff2, vuint64m1_t maskedoff3, vuint64m1_t
        maskedoff4, const uint64_t *base, ptrdiff_t bstride, size_t
```

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    vl);
void vlsseg6e64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vbool64_t mask, vuint64m1_t maskedoff0,
    vuint64m1_t maskedoff1, vuint64m1_t maskedoff2, vuint64m1_t
    maskedoff3, vuint64m1_t maskedoff4, vuint64m1_t maskedoff5,
    const uint64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg7e64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vuint64m1_t *v6, vbool64_t mask,
    vuint64m1_t maskedoff0, vuint64m1_t maskedoff1, vuint64m1_t
    maskedoff2, vuint64m1_t maskedoff3, vuint64m1_t maskedoff4,
    vuint64m1_t maskedoff5, vuint64m1_t maskedoff6, const
    uint64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg8e64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vuint64m1_t *v6, vuint64m1_t *v7, vbool64_t
    mask, vuint64m1_t maskedoff0, vuint64m1_t maskedoff1,
    vuint64m1_t maskedoff2, vuint64m1_t maskedoff3, vuint64m1_t
    maskedoff4, vuint64m1_t maskedoff5, vuint64m1_t maskedoff6,
    vuint64m1_t maskedoff7, const uint64_t *base, ptrdiff_t
    bstride, size_t vl);
void vlsseg2e64_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
    vbool32_t mask, vuint64m2_t maskedoff0, vuint64m2_t
    maskedoff1, const uint64_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg3e64_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, vbool32_t mask, vuint64m2_t maskedoff0,
    vuint64m2_t maskedoff1, vuint64m2_t maskedoff2, const
    uint64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e64_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, vuint64m2_t *v3, vbool32_t mask,
    vuint64m2_t maskedoff0, vuint64m2_t maskedoff1, vuint64m2_t
    maskedoff2, vuint64m2_t maskedoff3, const uint64_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg2e64_v_u64m4_m (vuint64m4_t *v0, vuint64m4_t *v1,
    vbool16_t mask, vuint64m4_t maskedoff0, vuint64m4_t
    maskedoff1, const uint64_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg2e16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, const float16_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg3e16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vbool16_t mask, vfloat16m1_t maskedoff0,
    vfloat16m1_t maskedoff1, vfloat16m1_t maskedoff2, const
```

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                  float16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vbool16_t mask,
    vfloat16m1_t maskedoff0, vfloat16m1_t maskedoff1,
    vfloat16m1_t maskedoff2, vfloat16m1_t maskedoff3, const
    float16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg5e16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, vfloat16m1_t maskedoff2, vfloat16m1_t
    maskedoff3, vfloat16m1_t maskedoff4, const float16_t *base,
    ptrdiff_t bstride, size_t vl);
void vlsseg6e16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vbool16_t mask, vfloat16m1_t maskedoff0,
    vfloat16m1_t maskedoff1, vfloat16m1_t maskedoff2,
    vfloat16m1_t maskedoff3, vfloat16m1_t maskedoff4,
    vfloat16m1_t maskedoff5, const float16_t *base, ptrdiff_t
    bstride, size_t vl);
void vlsseg7e16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vbool16_t mask,
    vfloat16m1_t maskedoff0, vfloat16m1_t maskedoff1,
    vfloat16m1_t maskedoff2, vfloat16m1_t maskedoff3,
    vfloat16m1_t maskedoff4, vfloat16m1_t maskedoff5,
    vfloat16m1_t maskedoff6, const float16_t *base, ptrdiff_t
    bstride, size_t vl);
void vlsseg8e16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vfloat16m1_t *v7,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, vfloat16m1_t maskedoff2, vfloat16m1_t
    maskedoff3, vfloat16m1_t maskedoff4, vfloat16m1_t
    maskedoff5, vfloat16m1_t maskedoff6, vfloat16m1_t
    maskedoff7, const float16_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg2e16_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vbool8_t mask, vfloat16m2_t maskedoff0, vfloat16m2_t
    maskedoff1, const float16_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg3e16_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vbool8_t mask, vfloat16m2_t maskedoff0,
    vfloat16m2_t maskedoff1, vfloat16m2_t maskedoff2, const
    float16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e16_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, vbool8_t mask,
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      vfloat16m2_t maskedoff0, vfloat16m2_t maskedoff1,
      vfloat16m2_t maskedoff2, vfloat16m2_t maskedoff3, const
      float16_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e16_v_f16m4_m (vfloat16m4_t *v0, vfloat16m4_t *v1,
      vbool4_t mask, vfloat16m4_t maskedoff0, vfloat16m4_t
      maskedoff1, const float16_t *base, ptrdiff_t bstride, size_t
      vl);
void vlsseg2e32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
      vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
      maskedoff1, const float32_t *base, ptrdiff_t bstride, size_t
      vl);
void vlsseg3e32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
      vfloat32m1_t *v2, vbool32_t mask, vfloat32m1_t maskedoff0,
      vfloat32m1_t maskedoff1, vfloat32m1_t maskedoff2, const
      float32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
      vfloat32m1_t *v2, vfloat32m1_t *v3, vbool32_t mask,
      vfloat32m1_t maskedoff0, vfloat32m1_t maskedoff1,
      vfloat32m1_t maskedoff2, vfloat32m1_t maskedoff3, const
      float32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg5e32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
      vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
      vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
      maskedoff1, vfloat32m1_t maskedoff2, vfloat32m1_t
      maskedoff3, vfloat32m1_t maskedoff4, const float32_t *base,
      ptrdiff_t bstride, size_t vl);
void vlsseg6e32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
      vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
      vfloat32m1_t *v5, vbool32_t mask, vfloat32m1_t maskedoff0,
      vfloat32m1_t maskedoff1, vfloat32m1_t maskedoff2,
      vfloat32m1_t maskedoff3, vfloat32m1_t maskedoff4,
      vfloat32m1_t maskedoff5, const float32_t *base, ptrdiff_t
      bstride, size_t vl);
void vlsseg7e32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
      vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
      vfloat32m1_t *v5, vfloat32m1_t *v6, vbool32_t mask,
      vfloat32m1_t maskedoff0, vfloat32m1_t maskedoff1,
      vfloat32m1_t maskedoff2, vfloat32m1_t maskedoff3,
      vfloat32m1_t maskedoff4, vfloat32m1_t maskedoff5,
      vfloat32m1_t maskedoff6, const float32_t *base, ptrdiff_t
      bstride, size_t vl);
void vlsseg8e32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
      vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
      vfloat32m1_t *v5, vfloat32m1_t *v6, vfloat32m1_t *v7,
      vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
      maskedoff1, vfloat32m1_t maskedoff2, vfloat32m1_t
```

```
        maskedoff3, vfloat32m1_t maskedoff4, vfloat32m1_t
        maskedoff5, vfloat32m1_t maskedoff6, vfloat32m1_t
        maskedoff7, const float32_t *base, ptrdiff_t bstride, size_t
        vl);
void vlsseg2e32_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
        vbool16_t mask, vfloat32m2_t maskedoff0, vfloat32m2_t
        maskedoff1, const float32_t *base, ptrdiff_t bstride, size_t
        vl);
void vlsseg3e32_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
        vfloat32m2_t *v2, vbool16_t mask, vfloat32m2_t maskedoff0,
        vfloat32m2_t maskedoff1, vfloat32m2_t maskedoff2, const
        float32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e32_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
        vfloat32m2_t *v2, vfloat32m2_t *v3, vbool16_t mask,
        vfloat32m2_t maskedoff0, vfloat32m2_t maskedoff1,
        vfloat32m2_t maskedoff2, vfloat32m2_t maskedoff3, const
        float32_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e32_v_f32m4_m (vfloat32m4_t *v0, vfloat32m4_t *v1,
        vbool8_t mask, vfloat32m4_t maskedoff0, vfloat32m4_t
        maskedoff1, const float32_t *base, ptrdiff_t bstride, size_t
        vl);
void vlsseg2e64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
        vbool64_t mask, vfloat64m1_t maskedoff0, vfloat64m1_t
        maskedoff1, const float64_t *base, ptrdiff_t bstride, size_t
        vl);
void vlsseg3e64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
        vfloat64m1_t *v2, vbool64_t mask, vfloat64m1_t maskedoff0,
        vfloat64m1_t maskedoff1, vfloat64m1_t maskedoff2, const
        float64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
        vfloat64m1_t *v2, vfloat64m1_t *v3, vbool64_t mask,
        vfloat64m1_t maskedoff0, vfloat64m1_t maskedoff1,
        vfloat64m1_t maskedoff2, vfloat64m1_t maskedoff3, const
        float64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg5e64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
        vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
        vbool64_t mask, vfloat64m1_t maskedoff0, vfloat64m1_t
        maskedoff1, vfloat64m1_t maskedoff2, vfloat64m1_t
        maskedoff3, vfloat64m1_t maskedoff4, const float64_t *base,
        ptrdiff_t bstride, size_t vl);
void vlsseg6e64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
        vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
        vfloat64m1_t *v5, vbool64_t mask, vfloat64m1_t maskedoff0,
        vfloat64m1_t maskedoff1, vfloat64m1_t maskedoff2,
        vfloat64m1_t maskedoff3, vfloat64m1_t maskedoff4,
        vfloat64m1_t maskedoff5, const float64_t *base, ptrdiff_t
```

```
    bstride, size_t vl);
void vlsseg7e64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, vfloat64m1_t *v6, vbool64_t mask,
    vfloat64m1_t maskedoff0, vfloat64m1_t maskedoff1,
    vfloat64m1_t maskedoff2, vfloat64m1_t maskedoff3,
    vfloat64m1_t maskedoff4, vfloat64m1_t maskedoff5,
    vfloat64m1_t maskedoff6, const float64_t *base, ptrdiff_t
    bstride, size_t vl);
void vlsseg8e64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, vfloat64m1_t *v6, vfloat64m1_t *v7,
    vbool64_t mask, vfloat64m1_t maskedoff0, vfloat64m1_t
    maskedoff1, vfloat64m1_t maskedoff2, vfloat64m1_t
    maskedoff3, vfloat64m1_t maskedoff4, vfloat64m1_t
    maskedoff5, vfloat64m1_t maskedoff6, vfloat64m1_t
    maskedoff7, const float64_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg2e64_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vbool32_t mask, vfloat64m2_t maskedoff0, vfloat64m2_t
    maskedoff1, const float64_t *base, ptrdiff_t bstride, size_t
    vl);
void vlsseg3e64_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vbool32_t mask, vfloat64m2_t maskedoff0,
    vfloat64m2_t maskedoff1, vfloat64m2_t maskedoff2, const
    float64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg4e64_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vfloat64m2_t *v3, vbool32_t mask,
    vfloat64m2_t maskedoff0, vfloat64m2_t maskedoff1,
    vfloat64m2_t maskedoff2, vfloat64m2_t maskedoff3, const
    float64_t *base, ptrdiff_t bstride, size_t vl);
void vlsseg2e64_v_f64m4_m (vfloat64m4_t *v0, vfloat64m4_t *v1,
    vbool16_t mask, vfloat64m4_t maskedoff0, vfloat64m4_t
    maskedoff1, const float64_t *base, ptrdiff_t bstride, size_t
    vl);
```

Vector Strided Segment Store Functions:

Prototypes:

```
void vssseg2e8_v_i8m1 (int8_t *base, ptrdiff_t bstride,
    vint8m1_t v0, vint8m1_t v1, size_t vl);
void vssseg3e8_v_i8m1 (int8_t *base, ptrdiff_t bstride,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, size_t vl);
void vssseg4e8_v_i8m1 (int8_t *base, ptrdiff_t bstride,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
```

```
        size_t vl);
void vssseg5e8_v_i8m1 (int8_t *base, ptrdiff_t bstride,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, size_t vl);
void vssseg6e8_v_i8m1 (int8_t *base, ptrdiff_t bstride,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, size_t vl);
void vssseg7e8_v_i8m1 (int8_t *base, ptrdiff_t bstride,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, size_t vl);
void vssseg8e8_v_i8m1 (int8_t *base, ptrdiff_t bstride,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, vint8m1_t v7,
    size_t vl);
void vssseg2e8_v_i8m2 (int8_t *base, ptrdiff_t bstride,
    vint8m2_t v0, vint8m2_t v1, size_t vl);
void vssseg3e8_v_i8m2 (int8_t *base, ptrdiff_t bstride,
    vint8m2_t v0, vint8m2_t v1, vint8m2_t v2, size_t vl);
void vssseg4e8_v_i8m2 (int8_t *base, ptrdiff_t bstride,
    vint8m2_t v0, vint8m2_t v1, vint8m2_t v2, vint8m2_t v3,
    size_t vl);
void vssseg2e8_v_i8m4 (int8_t *base, ptrdiff_t bstride,
    vint8m4_t v0, vint8m4_t v1, size_t vl);
void vssseg2e16_v_i16m1 (int16_t *base, ptrdiff_t bstride,
    vint16m1_t v0, vint16m1_t v1, size_t vl);
void vssseg3e16_v_i16m1 (int16_t *base, ptrdiff_t bstride,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, size_t vl);
void vssseg4e16_v_i16m1 (int16_t *base, ptrdiff_t bstride,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    size_t vl);
void vssseg5e16_v_i16m1 (int16_t *base, ptrdiff_t bstride,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, size_t vl);
void vssseg6e16_v_i16m1 (int16_t *base, ptrdiff_t bstride,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, size_t vl);
void vssseg7e16_v_i16m1 (int16_t *base, ptrdiff_t bstride,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, vint16m1_t v6, size_t vl);
void vssseg8e16_v_i16m1 (int16_t *base, ptrdiff_t bstride,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, vint16m1_t v6, vint16m1_t v7,
    size_t vl);
void vssseg2e16_v_i16m2 (int16_t *base, ptrdiff_t bstride,
    vint16m2_t v0, vint16m2_t v1, size_t vl);
```

```
void vssseg3e16_v_i16m2 (int16_t *base, ptrdiff_t bstride,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, size_t vl);
void vssseg4e16_v_i16m2 (int16_t *base, ptrdiff_t bstride,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, vint16m2_t v3,
    size_t vl);
void vssseg2e16_v_i16m4 (int16_t *base, ptrdiff_t bstride,
    vint16m4_t v0, vint16m4_t v1, size_t vl);
void vssseg2e32_v_i32m1 (int32_t *base, ptrdiff_t bstride,
    vint32m1_t v0, vint32m1_t v1, size_t vl);
void vssseg3e32_v_i32m1 (int32_t *base, ptrdiff_t bstride,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, size_t vl);
void vssseg4e32_v_i32m1 (int32_t *base, ptrdiff_t bstride,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    size_t vl);
void vssseg5e32_v_i32m1 (int32_t *base, ptrdiff_t bstride,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, size_t vl);
void vssseg6e32_v_i32m1 (int32_t *base, ptrdiff_t bstride,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, vint32m1_t v5, size_t vl);
void vssseg7e32_v_i32m1 (int32_t *base, ptrdiff_t bstride,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, vint32m1_t v5, vint32m1_t v6, size_t vl);
void vssseg8e32_v_i32m1 (int32_t *base, ptrdiff_t bstride,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, vint32m1_t v5, vint32m1_t v6, vint32m1_t v7,
    size_t vl);
void vssseg2e32_v_i32m2 (int32_t *base, ptrdiff_t bstride,
    vint32m2_t v0, vint32m2_t v1, size_t vl);
void vssseg3e32_v_i32m2 (int32_t *base, ptrdiff_t bstride,
    vint32m2_t v0, vint32m2_t v1, vint32m2_t v2, size_t vl);
void vssseg4e32_v_i32m2 (int32_t *base, ptrdiff_t bstride,
    vint32m2_t v0, vint32m2_t v1, vint32m2_t v2, vint32m2_t v3,
    size_t vl);
void vssseg2e32_v_i32m4 (int32_t *base, ptrdiff_t bstride,
    vint32m4_t v0, vint32m4_t v1, size_t vl);
void vssseg2e64_v_i64m1 (int64_t *base, ptrdiff_t bstride,
    vint64m1_t v0, vint64m1_t v1, size_t vl);
void vssseg3e64_v_i64m1 (int64_t *base, ptrdiff_t bstride,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, size_t vl);
void vssseg4e64_v_i64m1 (int64_t *base, ptrdiff_t bstride,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    size_t vl);
void vssseg5e64_v_i64m1 (int64_t *base, ptrdiff_t bstride,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    vint64m1_t v4, size_t vl);
```

```
void vssseg6e64_v_i64m1 (int64_t *base, ptrdiff_t bstride,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    vint64m1_t v4, vint64m1_t v5, size_t vl);
void vssseg7e64_v_i64m1 (int64_t *base, ptrdiff_t bstride,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    vint64m1_t v4, vint64m1_t v5, vint64m1_t v6, size_t vl);
void vssseg8e64_v_i64m1 (int64_t *base, ptrdiff_t bstride,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    vint64m1_t v4, vint64m1_t v5, vint64m1_t v6, vint64m1_t v7,
    size_t vl);
void vssseg2e64_v_i64m2 (int64_t *base, ptrdiff_t bstride,
    vint64m2_t v0, vint64m2_t v1, size_t vl);
void vssseg3e64_v_i64m2 (int64_t *base, ptrdiff_t bstride,
    vint64m2_t v0, vint64m2_t v1, vint64m2_t v2, size_t vl);
void vssseg4e64_v_i64m2 (int64_t *base, ptrdiff_t bstride,
    vint64m2_t v0, vint64m2_t v1, vint64m2_t v2, vint64m2_t v3,
    size_t vl);
void vssseg2e64_v_i64m4 (int64_t *base, ptrdiff_t bstride,
    vint64m4_t v0, vint64m4_t v1, size_t vl);
void vssseg2e8_v_u8m1 (uint8_t *base, ptrdiff_t bstride,
    vuint8m1_t v0, vuint8m1_t v1, size_t vl);
void vssseg3e8_v_u8m1 (uint8_t *base, ptrdiff_t bstride,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, size_t vl);
void vssseg4e8_v_u8m1 (uint8_t *base, ptrdiff_t bstride,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    size_t vl);
void vssseg5e8_v_u8m1 (uint8_t *base, ptrdiff_t bstride,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, size_t vl);
void vssseg6e8_v_u8m1 (uint8_t *base, ptrdiff_t bstride,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, size_t vl);
void vssseg7e8_v_u8m1 (uint8_t *base, ptrdiff_t bstride,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6, size_t vl);
void vssseg8e8_v_u8m1 (uint8_t *base, ptrdiff_t bstride,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6, vuint8m1_t v7,
    size_t vl);
void vssseg2e8_v_u8m2 (uint8_t *base, ptrdiff_t bstride,
    vuint8m2_t v0, vuint8m2_t v1, size_t vl);
void vssseg3e8_v_u8m2 (uint8_t *base, ptrdiff_t bstride,
    vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t v2, size_t vl);
void vssseg4e8_v_u8m2 (uint8_t *base, ptrdiff_t bstride,
    vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t v2, vuint8m2_t v3,
    size_t vl);
```

```
void vssseg2e8_v_u8m4 (uint8_t *base, ptrdiff_t bstride,
    vuint8m4_t v0, vuint8m4_t v1, size_t vl);
void vssseg2e16_v_u16m1 (uint16_t *base, ptrdiff_t bstride,
    vuint16m1_t v0, vuint16m1_t v1, size_t vl);
void vssseg3e16_v_u16m1 (uint16_t *base, ptrdiff_t bstride,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, size_t vl);
void vssseg4e16_v_u16m1 (uint16_t *base, ptrdiff_t bstride,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, size_t vl);
void vssseg5e16_v_u16m1 (uint16_t *base, ptrdiff_t bstride,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, size_t vl);
void vssseg6e16_v_u16m1 (uint16_t *base, ptrdiff_t bstride,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, size_t vl);
void vssseg7e16_v_u16m1 (uint16_t *base, ptrdiff_t bstride,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, vuint16m1_t v6, size_t
    vl);
void vssseg8e16_v_u16m1 (uint16_t *base, ptrdiff_t bstride,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, vuint16m1_t v6,
    vuint16m1_t v7, size_t vl);
void vssseg2e16_v_u16m2 (uint16_t *base, ptrdiff_t bstride,
    vuint16m2_t v0, vuint16m2_t v1, size_t vl);
void vssseg3e16_v_u16m2 (uint16_t *base, ptrdiff_t bstride,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, size_t vl);
void vssseg4e16_v_u16m2 (uint16_t *base, ptrdiff_t bstride,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, vuint16m2_t
    v3, size_t vl);
void vssseg2e16_v_u16m4 (uint16_t *base, ptrdiff_t bstride,
    vuint16m4_t v0, vuint16m4_t v1, size_t vl);
void vssseg2e32_v_u32m1 (uint32_t *base, ptrdiff_t bstride,
    vuint32m1_t v0, vuint32m1_t v1, size_t vl);
void vssseg3e32_v_u32m1 (uint32_t *base, ptrdiff_t bstride,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, size_t vl);
void vssseg4e32_v_u32m1 (uint32_t *base, ptrdiff_t bstride,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, size_t vl);
void vssseg5e32_v_u32m1 (uint32_t *base, ptrdiff_t bstride,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, size_t vl);
void vssseg6e32_v_u32m1 (uint32_t *base, ptrdiff_t bstride,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, vuint32m1_t v5, size_t vl);
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void vssseg7e32_v_u32m1 (uint32_t *base, ptrdiff_t bstride,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, vuint32m1_t v5, vuint32m1_t v6, size_t
    vl);
void vssseg8e32_v_u32m1 (uint32_t *base, ptrdiff_t bstride,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, vuint32m1_t v5, vuint32m1_t v6,
    vuint32m1_t v7, size_t vl);
void vssseg2e32_v_u32m2 (uint32_t *base, ptrdiff_t bstride,
    vuint32m2_t v0, vuint32m2_t v1, size_t vl);
void vssseg3e32_v_u32m2 (uint32_t *base, ptrdiff_t bstride,
    vuint32m2_t v0, vuint32m2_t v1, vuint32m2_t v2, size_t vl);
void vssseg4e32_v_u32m2 (uint32_t *base, ptrdiff_t bstride,
    vuint32m2_t v0, vuint32m2_t v1, vuint32m2_t v2, vuint32m2_t
    v3, size_t vl);
void vssseg2e32_v_u32m4 (uint32_t *base, ptrdiff_t bstride,
    vuint32m4_t v0, vuint32m4_t v1, size_t vl);
void vssseg2e64_v_u64m1 (uint64_t *base, ptrdiff_t bstride,
    vuint64m1_t v0, vuint64m1_t v1, size_t vl);
void vssseg3e64_v_u64m1 (uint64_t *base, ptrdiff_t bstride,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, size_t vl);
void vssseg4e64_v_u64m1 (uint64_t *base, ptrdiff_t bstride,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, size_t vl);
void vssseg5e64_v_u64m1 (uint64_t *base, ptrdiff_t bstride,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, vuint64m1_t v4, size_t vl);
void vssseg6e64_v_u64m1 (uint64_t *base, ptrdiff_t bstride,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, vuint64m1_t v4, vuint64m1_t v5, size_t vl);
void vssseg7e64_v_u64m1 (uint64_t *base, ptrdiff_t bstride,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, vuint64m1_t v4, vuint64m1_t v5, vuint64m1_t v6, size_t
    vl);
void vssseg8e64_v_u64m1 (uint64_t *base, ptrdiff_t bstride,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, vuint64m1_t v4, vuint64m1_t v5, vuint64m1_t v6,
    vuint64m1_t v7, size_t vl);
void vssseg2e64_v_u64m2 (uint64_t *base, ptrdiff_t bstride,
    vuint64m2_t v0, vuint64m2_t v1, size_t vl);
void vssseg3e64_v_u64m2 (uint64_t *base, ptrdiff_t bstride,
    vuint64m2_t v0, vuint64m2_t v1, vuint64m2_t v2, size_t vl);
void vssseg4e64_v_u64m2 (uint64_t *base, ptrdiff_t bstride,
    vuint64m2_t v0, vuint64m2_t v1, vuint64m2_t v2, vuint64m2_t
    v3, size_t vl);
```

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void vssseg2e64_v_u64m4 (uint64_t *base, ptrdiff_t bstride,
    vuint64m4_t v0, vuint64m4_t v1, size_t vl);
void vssseg2e16_v_f16m1 (float16_t *base, ptrdiff_t bstride,
    vfloat16m1_t v0, vfloat16m1_t v1, size_t vl);
void vssseg3e16_v_f16m1 (float16_t *base, ptrdiff_t bstride,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2, size_t
    vl);
void vssseg4e16_v_f16m1 (float16_t *base, ptrdiff_t bstride,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, size_t vl);
void vssseg5e16_v_f16m1 (float16_t *base, ptrdiff_t bstride,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, size_t vl);
void vssseg6e16_v_f16m1 (float16_t *base, ptrdiff_t bstride,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5, size_t
    vl);
void vssseg7e16_v_f16m1 (float16_t *base, ptrdiff_t bstride,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5,
    vfloat16m1_t v6, size_t vl);
void vssseg8e16_v_f16m1 (float16_t *base, ptrdiff_t bstride,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5,
    vfloat16m1_t v6, vfloat16m1_t v7, size_t vl);
void vssseg2e16_v_f16m2 (float16_t *base, ptrdiff_t bstride,
    vfloat16m2_t v0, vfloat16m2_t v1, size_t vl);
void vssseg3e16_v_f16m2 (float16_t *base, ptrdiff_t bstride,
    vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2, size_t
    vl);
void vssseg4e16_v_f16m2 (float16_t *base, ptrdiff_t bstride,
    vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2,
    vfloat16m2_t v3, size_t vl);
void vssseg2e16_v_f16m4 (float16_t *base, ptrdiff_t bstride,
    vfloat16m4_t v0, vfloat16m4_t v1, size_t vl);
void vssseg2e32_v_f32m1 (float32_t *base, ptrdiff_t bstride,
    vfloat32m1_t v0, vfloat32m1_t v1, size_t vl);
void vssseg3e32_v_f32m1 (float32_t *base, ptrdiff_t bstride,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2, size_t
    vl);
void vssseg4e32_v_f32m1 (float32_t *base, ptrdiff_t bstride,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, size_t vl);
void vssseg5e32_v_f32m1 (float32_t *base, ptrdiff_t bstride,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, size_t vl);
```

```
void vssseg6e32_v_f32m1 (float32_t *base, ptrdiff_t bstride,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, vfloat32m1_t v5, size_t
    vl);
void vssseg7e32_v_f32m1 (float32_t *base, ptrdiff_t bstride,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, vfloat32m1_t v5,
    vfloat32m1_t v6, size_t vl);
void vssseg8e32_v_f32m1 (float32_t *base, ptrdiff_t bstride,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, vfloat32m1_t v5,
    vfloat32m1_t v6, vfloat32m1_t v7, size_t vl);
void vssseg2e32_v_f32m2 (float32_t *base, ptrdiff_t bstride,
    vfloat32m2_t v0, vfloat32m2_t v1, size_t vl);
void vssseg3e32_v_f32m2 (float32_t *base, ptrdiff_t bstride,
    vfloat32m2_t v0, vfloat32m2_t v1, vfloat32m2_t v2, size_t
    vl);
void vssseg4e32_v_f32m2 (float32_t *base, ptrdiff_t bstride,
    vfloat32m2_t v0, vfloat32m2_t v1, vfloat32m2_t v2,
    vfloat32m2_t v3, size_t vl);
void vssseg2e32_v_f32m4 (float32_t *base, ptrdiff_t bstride,
    vfloat32m4_t v0, vfloat32m4_t v1, size_t vl);
void vssseg2e64_v_f64m1 (float64_t *base, ptrdiff_t bstride,
    vfloat64m1_t v0, vfloat64m1_t v1, size_t vl);
void vssseg3e64_v_f64m1 (float64_t *base, ptrdiff_t bstride,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2, size_t
    vl);
void vssseg4e64_v_f64m1 (float64_t *base, ptrdiff_t bstride,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
    vfloat64m1_t v3, size_t vl);
void vssseg5e64_v_f64m1 (float64_t *base, ptrdiff_t bstride,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
    vfloat64m1_t v3, vfloat64m1_t v4, size_t vl);
void vssseg6e64_v_f64m1 (float64_t *base, ptrdiff_t bstride,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
    vfloat64m1_t v3, vfloat64m1_t v4, vfloat64m1_t v5, size_t
    vl);
void vssseg7e64_v_f64m1 (float64_t *base, ptrdiff_t bstride,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
    vfloat64m1_t v3, vfloat64m1_t v4, vfloat64m1_t v5,
    vfloat64m1_t v6, size_t vl);
void vssseg8e64_v_f64m1 (float64_t *base, ptrdiff_t bstride,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
    vfloat64m1_t v3, vfloat64m1_t v4, vfloat64m1_t v5,
    vfloat64m1_t v6, vfloat64m1_t v7, size_t vl);
```

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void vssseg2e64_v_f64m2 (float64_t *base, ptrdiff_t bstride,
    vfloat64m2_t v0, vfloat64m2_t v1, size_t vl);
void vssseg3e64_v_f64m2 (float64_t *base, ptrdiff_t bstride,
    vfloat64m2_t v0, vfloat64m2_t v1, vfloat64m2_t v2, size_t
    vl);
void vssseg4e64_v_f64m2 (float64_t *base, ptrdiff_t bstride,
    vfloat64m2_t v0, vfloat64m2_t v1, vfloat64m2_t v2,
    vfloat64m2_t v3, size_t vl);
void vssseg2e64_v_f64m4 (float64_t *base, ptrdiff_t bstride,
    vfloat64m4_t v0, vfloat64m4_t v1, size_t vl);
// masked functions
void vssseg2e8_v_i8m1_m (vbool8_t mask, int8_t *base, ptrdiff_t
    bstride, vint8m1_t v0, vint8m1_t v1, size_t vl);
void vssseg3e8_v_i8m1_m (vbool8_t mask, int8_t *base, ptrdiff_t
    bstride, vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, size_t
    vl);
void vssseg4e8_v_i8m1_m (vbool8_t mask, int8_t *base, ptrdiff_t
    bstride, vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t
    v3, size_t vl);
void vssseg5e8_v_i8m1_m (vbool8_t mask, int8_t *base, ptrdiff_t
    bstride, vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t
    v3, vint8m1_t v4, size_t vl);
void vssseg6e8_v_i8m1_m (vbool8_t mask, int8_t *base, ptrdiff_t
    bstride, vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t
    v3, vint8m1_t v4, vint8m1_t v5, size_t vl);
void vssseg7e8_v_i8m1_m (vbool8_t mask, int8_t *base, ptrdiff_t
    bstride, vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t
    v3, vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, size_t vl);
void vssseg8e8_v_i8m1_m (vbool8_t mask, int8_t *base, ptrdiff_t
    bstride, vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t
    v3, vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, vint8m1_t v7,
    size_t vl);
void vssseg2e8_v_i8m2_m (vbool4_t mask, int8_t *base, ptrdiff_t
    bstride, vint8m2_t v0, vint8m2_t v1, size_t vl);
void vssseg3e8_v_i8m2_m (vbool4_t mask, int8_t *base, ptrdiff_t
    bstride, vint8m2_t v0, vint8m2_t v1, vint8m2_t v2, size_t
    vl);
void vssseg4e8_v_i8m2_m (vbool4_t mask, int8_t *base, ptrdiff_t
    bstride, vint8m2_t v0, vint8m2_t v1, vint8m2_t v2, vint8m2_t
    v3, size_t vl);
void vssseg2e8_v_i8m4_m (vbool2_t mask, int8_t *base, ptrdiff_t
    bstride, vint8m4_t v0, vint8m4_t v1, size_t vl);
void vssseg2e16_v_i16m1_m (vbool16_t mask, int16_t *base,
    ptrdiff_t bstride, vint16m1_t v0, vint16m1_t v1, size_t vl);
void vssseg3e16_v_i16m1_m (vbool16_t mask, int16_t *base,
    ptrdiff_t bstride, vint16m1_t v0, vint16m1_t v1, vint16m1_t
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    v2, size_t vl);
void vssseg4e16_v_i16m1_m (vbool16_t mask, int16_t *base,
    ptrdiff_t bstride, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, size_t vl);
void vssseg5e16_v_i16m1_m (vbool16_t mask, int16_t *base,
    ptrdiff_t bstride, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, size_t vl);
void vssseg6e16_v_i16m1_m (vbool16_t mask, int16_t *base,
    ptrdiff_t bstride, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, size_t vl);
void vssseg7e16_v_i16m1_m (vbool16_t mask, int16_t *base,
    ptrdiff_t bstride, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, vint16m1_t
    v6, size_t vl);
void vssseg8e16_v_i16m1_m (vbool16_t mask, int16_t *base,
    ptrdiff_t bstride, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, vint16m1_t
    v6, vint16m1_t v7, size_t vl);
void vssseg2e16_v_i16m2_m (vbool8_t mask, int16_t *base,
    ptrdiff_t bstride, vint16m2_t v0, vint16m2_t v1, size_t vl);
void vssseg3e16_v_i16m2_m (vbool8_t mask, int16_t *base,
    ptrdiff_t bstride, vint16m2_t v0, vint16m2_t v1, vint16m2_t
    v2, size_t vl);
void vssseg4e16_v_i16m2_m (vbool8_t mask, int16_t *base,
    ptrdiff_t bstride, vint16m2_t v0, vint16m2_t v1, vint16m2_t
    v2, vint16m2_t v3, size_t vl);
void vssseg2e16_v_i16m4_m (vbool4_t mask, int16_t *base,
    ptrdiff_t bstride, vint16m4_t v0, vint16m4_t v1, size_t vl);
void vssseg2e32_v_i32m1_m (vbool32_t mask, int32_t *base,
    ptrdiff_t bstride, vint32m1_t v0, vint32m1_t v1, size_t vl);
void vssseg3e32_v_i32m1_m (vbool32_t mask, int32_t *base,
    ptrdiff_t bstride, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, size_t vl);
void vssseg4e32_v_i32m1_m (vbool32_t mask, int32_t *base,
    ptrdiff_t bstride, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, size_t vl);
void vssseg5e32_v_i32m1_m (vbool32_t mask, int32_t *base,
    ptrdiff_t bstride, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, vint32m1_t v4, size_t vl);
void vssseg6e32_v_i32m1_m (vbool32_t mask, int32_t *base,
    ptrdiff_t bstride, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, vint32m1_t v4, vint32m1_t v5, size_t vl);
void vssseg7e32_v_i32m1_m (vbool32_t mask, int32_t *base,
    ptrdiff_t bstride, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, vint32m1_t v4, vint32m1_t v5, vint32m1_t
    v6, size_t vl);
```

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void vssseg8e32_v_i32m1_m (vbool32_t mask, int32_t *base,
    ptrdiff_t bstride, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, vint32m1_t v4, vint32m1_t v5, vint32m1_t
    v6, vint32m1_t v7, size_t vl);
void vssseg2e32_v_i32m2_m (vbool16_t mask, int32_t *base,
    ptrdiff_t bstride, vint32m2_t v0, vint32m2_t v1, size_t vl);
void vssseg3e32_v_i32m2_m (vbool16_t mask, int32_t *base,
    ptrdiff_t bstride, vint32m2_t v0, vint32m2_t v1, vint32m2_t
    v2, size_t vl);
void vssseg4e32_v_i32m2_m (vbool16_t mask, int32_t *base,
    ptrdiff_t bstride, vint32m2_t v0, vint32m2_t v1, vint32m2_t
    v2, vint32m2_t v3, size_t vl);
void vssseg2e32_v_i32m4_m (vbool8_t mask, int32_t *base,
    ptrdiff_t bstride, vint32m4_t v0, vint32m4_t v1, size_t vl);
void vssseg2e64_v_i64m1_m (vbool64_t mask, int64_t *base,
    ptrdiff_t bstride, vint64m1_t v0, vint64m1_t v1, size_t vl);
void vssseg3e64_v_i64m1_m (vbool64_t mask, int64_t *base,
    ptrdiff_t bstride, vint64m1_t v0, vint64m1_t v1, vint64m1_t
    v2, size_t vl);
void vssseg4e64_v_i64m1_m (vbool64_t mask, int64_t *base,
    ptrdiff_t bstride, vint64m1_t v0, vint64m1_t v1, vint64m1_t
    v2, vint64m1_t v3, size_t vl);
void vssseg5e64_v_i64m1_m (vbool64_t mask, int64_t *base,
    ptrdiff_t bstride, vint64m1_t v0, vint64m1_t v1, vint64m1_t
    v2, vint64m1_t v3, vint64m1_t v4, size_t vl);
void vssseg6e64_v_i64m1_m (vbool64_t mask, int64_t *base,
    ptrdiff_t bstride, vint64m1_t v0, vint64m1_t v1, vint64m1_t
    v2, vint64m1_t v3, vint64m1_t v4, vint64m1_t v5, size_t vl);
void vssseg7e64_v_i64m1_m (vbool64_t mask, int64_t *base,
    ptrdiff_t bstride, vint64m1_t v0, vint64m1_t v1, vint64m1_t
    v2, vint64m1_t v3, vint64m1_t v4, vint64m1_t v5, vint64m1_t
    v6, size_t vl);
void vssseg8e64_v_i64m1_m (vbool64_t mask, int64_t *base,
    ptrdiff_t bstride, vint64m1_t v0, vint64m1_t v1, vint64m1_t
    v2, vint64m1_t v3, vint64m1_t v4, vint64m1_t v5, vint64m1_t
    v6, vint64m1_t v7, size_t vl);
void vssseg2e64_v_i64m2_m (vbool32_t mask, int64_t *base,
    ptrdiff_t bstride, vint64m2_t v0, vint64m2_t v1, size_t vl);
void vssseg3e64_v_i64m2_m (vbool32_t mask, int64_t *base,
    ptrdiff_t bstride, vint64m2_t v0, vint64m2_t v1, vint64m2_t
    v2, size_t vl);
void vssseg4e64_v_i64m2_m (vbool32_t mask, int64_t *base,
    ptrdiff_t bstride, vint64m2_t v0, vint64m2_t v1, vint64m2_t
    v2, vint64m2_t v3, size_t vl);
void vssseg2e64_v_i64m4_m (vbool16_t mask, int64_t *base,
    ptrdiff_t bstride, vint64m4_t v0, vint64m4_t v1, size_t vl);
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void vssseg2e8_v_u8m1_m (vbool8_t mask, uint8_t *base, ptrdiff_t
    bstride, vuint8m1_t v0, vuint8m1_t v1, size_t vl);
void vssseg3e8_v_u8m1_m (vbool8_t mask, uint8_t *base, ptrdiff_t
    bstride, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, size_t
    vl);
void vssseg4e8_v_u8m1_m (vbool8_t mask, uint8_t *base, ptrdiff_t
    bstride, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2,
    vuint8m1_t v3, size_t vl);
void vssseg5e8_v_u8m1_m (vbool8_t mask, uint8_t *base, ptrdiff_t
    bstride, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2,
    vuint8m1_t v3, vuint8m1_t v4, size_t vl);
void vssseg6e8_v_u8m1_m (vbool8_t mask, uint8_t *base, ptrdiff_t
    bstride, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2,
    vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, size_t vl);
void vssseg7e8_v_u8m1_m (vbool8_t mask, uint8_t *base, ptrdiff_t
    bstride, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2,
    vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6,
    size_t vl);
void vssseg8e8_v_u8m1_m (vbool8_t mask, uint8_t *base, ptrdiff_t
    bstride, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2,
    vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6,
    vuint8m1_t v7, size_t vl);
void vssseg2e8_v_u8m2_m (vbool4_t mask, uint8_t *base, ptrdiff_t
    bstride, vuint8m2_t v0, vuint8m2_t v1, size_t vl);
void vssseg3e8_v_u8m2_m (vbool4_t mask, uint8_t *base, ptrdiff_t
    bstride, vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t v2, size_t
    vl);
void vssseg4e8_v_u8m2_m (vbool4_t mask, uint8_t *base, ptrdiff_t
    bstride, vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t v2,
    vuint8m2_t v3, size_t vl);
void vssseg2e8_v_u8m4_m (vbool2_t mask, uint8_t *base, ptrdiff_t
    bstride, vuint8m4_t v0, vuint8m4_t v1, size_t vl);
void vssseg2e16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    ptrdiff_t bstride, vuint16m1_t v0, vuint16m1_t v1, size_t
    vl);
void vssseg3e16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    ptrdiff_t bstride, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, size_t vl);
void vssseg4e16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    ptrdiff_t bstride, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, size_t vl);
void vssseg5e16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    ptrdiff_t bstride, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, size_t vl);
void vssseg6e16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    ptrdiff_t bstride, vuint16m1_t v0, vuint16m1_t v1,
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                    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
      v5, size_t vl);
void vssseg7e16_v_u16m1_m (vbool16_t mask, uint16_t *base,
      ptrdiff_t bstride, vuint16m1_t v0, vuint16m1_t v1,
      vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
      v5, vuint16m1_t v6, size_t vl);
void vssseg8e16_v_u16m1_m (vbool16_t mask, uint16_t *base,
      ptrdiff_t bstride, vuint16m1_t v0, vuint16m1_t v1,
      vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
      v5, vuint16m1_t v6, vuint16m1_t v7, size_t vl);
void vssseg2e16_v_u16m2_m (vbool8_t mask, uint16_t *base,
      ptrdiff_t bstride, vuint16m2_t v0, vuint16m2_t v1, size_t
      vl);
void vssseg3e16_v_u16m2_m (vbool8_t mask, uint16_t *base,
      ptrdiff_t bstride, vuint16m2_t v0, vuint16m2_t v1,
      vuint16m2_t v2, size_t vl);
void vssseg4e16_v_u16m2_m (vbool8_t mask, uint16_t *base,
      ptrdiff_t bstride, vuint16m2_t v0, vuint16m2_t v1,
      vuint16m2_t v2, vuint16m2_t v3, size_t vl);
void vssseg2e16_v_u16m4_m (vbool4_t mask, uint16_t *base,
      ptrdiff_t bstride, vuint16m4_t v0, vuint16m4_t v1, size_t
      vl);
void vssseg2e32_v_u32m1_m (vbool32_t mask, uint32_t *base,
      ptrdiff_t bstride, vuint32m1_t v0, vuint32m1_t v1, size_t
      vl);
void vssseg3e32_v_u32m1_m (vbool32_t mask, uint32_t *base,
      ptrdiff_t bstride, vuint32m1_t v0, vuint32m1_t v1,
      vuint32m1_t v2, size_t vl);
void vssseg4e32_v_u32m1_m (vbool32_t mask, uint32_t *base,
      ptrdiff_t bstride, vuint32m1_t v0, vuint32m1_t v1,
      vuint32m1_t v2, vuint32m1_t v3, size_t vl);
void vssseg5e32_v_u32m1_m (vbool32_t mask, uint32_t *base,
      ptrdiff_t bstride, vuint32m1_t v0, vuint32m1_t v1,
      vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, size_t vl);
void vssseg6e32_v_u32m1_m (vbool32_t mask, uint32_t *base,
      ptrdiff_t bstride, vuint32m1_t v0, vuint32m1_t v1,
      vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, vuint32m1_t
      v5, size_t vl);
void vssseg7e32_v_u32m1_m (vbool32_t mask, uint32_t *base,
      ptrdiff_t bstride, vuint32m1_t v0, vuint32m1_t v1,
      vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, vuint32m1_t
      v5, vuint32m1_t v6, size_t vl);
void vssseg8e32_v_u32m1_m (vbool32_t mask, uint32_t *base,
      ptrdiff_t bstride, vuint32m1_t v0, vuint32m1_t v1,
      vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, vuint32m1_t
      v5, vuint32m1_t v6, vuint32m1_t v7, size_t vl);
```

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void vssseg2e32_v_u32m2_m (vbool16_t mask, uint32_t *base,
    ptrdiff_t bstride, vuint32m2_t v0, vuint32m2_t v1, size_t
    vl);
void vssseg3e32_v_u32m2_m (vbool16_t mask, uint32_t *base,
    ptrdiff_t bstride, vuint32m2_t v0, vuint32m2_t v1,
    vuint32m2_t v2, size_t vl);
void vssseg4e32_v_u32m2_m (vbool16_t mask, uint32_t *base,
    ptrdiff_t bstride, vuint32m2_t v0, vuint32m2_t v1,
    vuint32m2_t v2, vuint32m2_t v3, size_t vl);
void vssseg2e32_v_u32m4_m (vbool8_t mask, uint32_t *base,
    ptrdiff_t bstride, vuint32m4_t v0, vuint32m4_t v1, size_t
    vl);
void vssseg2e64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    ptrdiff_t bstride, vuint64m1_t v0, vuint64m1_t v1, size_t
    vl);
void vssseg3e64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    ptrdiff_t bstride, vuint64m1_t v0, vuint64m1_t v1,
    vuint64m1_t v2, size_t vl);
void vssseg4e64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    ptrdiff_t bstride, vuint64m1_t v0, vuint64m1_t v1,
    vuint64m1_t v2, vuint64m1_t v3, size_t vl);
void vssseg5e64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    ptrdiff_t bstride, vuint64m1_t v0, vuint64m1_t v1,
    vuint64m1_t v2, vuint64m1_t v3, vuint64m1_t v4, size_t vl);
void vssseg6e64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    ptrdiff_t bstride, vuint64m1_t v0, vuint64m1_t v1,
    vuint64m1_t v2, vuint64m1_t v3, vuint64m1_t v4, vuint64m1_t
    v5, size_t vl);
void vssseg7e64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    ptrdiff_t bstride, vuint64m1_t v0, vuint64m1_t v1,
    vuint64m1_t v2, vuint64m1_t v3, vuint64m1_t v4, vuint64m1_t
    v5, vuint64m1_t v6, size_t vl);
void vssseg8e64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    ptrdiff_t bstride, vuint64m1_t v0, vuint64m1_t v1,
    vuint64m1_t v2, vuint64m1_t v3, vuint64m1_t v4, vuint64m1_t
    v5, vuint64m1_t v6, vuint64m1_t v7, size_t vl);
void vssseg2e64_v_u64m2_m (vbool32_t mask, uint64_t *base,
    ptrdiff_t bstride, vuint64m2_t v0, vuint64m2_t v1, size_t
    vl);
void vssseg3e64_v_u64m2_m (vbool32_t mask, uint64_t *base,
    ptrdiff_t bstride, vuint64m2_t v0, vuint64m2_t v1,
    vuint64m2_t v2, size_t vl);
void vssseg4e64_v_u64m2_m (vbool32_t mask, uint64_t *base,
    ptrdiff_t bstride, vuint64m2_t v0, vuint64m2_t v1,
    vuint64m2_t v2, vuint64m2_t v3, size_t vl);
```

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void vssseg2e64_v_u64m4_m (vbool16_t mask, uint64_t *base,
    ptrdiff_t bstride, vuint64m4_t v0, vuint64m4_t v1, size_t
    vl);
void vssseg2e16_v_f16m1_m (vbool16_t mask, float16_t *base,
    ptrdiff_t bstride, vfloat16m1_t v0, vfloat16m1_t v1, size_t
    vl);
void vssseg3e16_v_f16m1_m (vbool16_t mask, float16_t *base,
    ptrdiff_t bstride, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, size_t vl);
void vssseg4e16_v_f16m1_m (vbool16_t mask, float16_t *base,
    ptrdiff_t bstride, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, size_t vl);
void vssseg5e16_v_f16m1_m (vbool16_t mask, float16_t *base,
    ptrdiff_t bstride, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4, size_t
    vl);
void vssseg6e16_v_f16m1_m (vbool16_t mask, float16_t *base,
    ptrdiff_t bstride, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, size_t vl);
void vssseg7e16_v_f16m1_m (vbool16_t mask, float16_t *base,
    ptrdiff_t bstride, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, vfloat16m1_t v6, size_t vl);
void vssseg8e16_v_f16m1_m (vbool16_t mask, float16_t *base,
    ptrdiff_t bstride, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, vfloat16m1_t v6, vfloat16m1_t v7, size_t
    vl);
void vssseg2e16_v_f16m2_m (vbool8_t mask, float16_t *base,
    ptrdiff_t bstride, vfloat16m2_t v0, vfloat16m2_t v1, size_t
    vl);
void vssseg3e16_v_f16m2_m (vbool8_t mask, float16_t *base,
    ptrdiff_t bstride, vfloat16m2_t v0, vfloat16m2_t v1,
    vfloat16m2_t v2, size_t vl);
void vssseg4e16_v_f16m2_m (vbool8_t mask, float16_t *base,
    ptrdiff_t bstride, vfloat16m2_t v0, vfloat16m2_t v1,
    vfloat16m2_t v2, vfloat16m2_t v3, size_t vl);
void vssseg2e16_v_f16m4_m (vbool4_t mask, float16_t *base,
    ptrdiff_t bstride, vfloat16m4_t v0, vfloat16m4_t v1, size_t
    vl);
void vssseg2e32_v_f32m1_m (vbool32_t mask, float32_t *base,
    ptrdiff_t bstride, vfloat32m1_t v0, vfloat32m1_t v1, size_t
    vl);
void vssseg3e32_v_f32m1_m (vbool32_t mask, float32_t *base,
    ptrdiff_t bstride, vfloat32m1_t v0, vfloat32m1_t v1,
```

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       vfloat32m1_t v2, size_t vl);
void vssseg4e32_v_f32m1_m (vbool32_t mask, float32_t *base,
    ptrdiff_t bstride, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, size_t vl);
void vssseg5e32_v_f32m1_m (vbool32_t mask, float32_t *base,
    ptrdiff_t bstride, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4, size_t
    vl);
void vssseg6e32_v_f32m1_m (vbool32_t mask, float32_t *base,
    ptrdiff_t bstride, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4,
    vfloat32m1_t v5, size_t vl);
void vssseg7e32_v_f32m1_m (vbool32_t mask, float32_t *base,
    ptrdiff_t bstride, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4,
    vfloat32m1_t v5, vfloat32m1_t v6, size_t vl);
void vssseg8e32_v_f32m1_m (vbool32_t mask, float32_t *base,
    ptrdiff_t bstride, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4,
    vfloat32m1_t v5, vfloat32m1_t v6, vfloat32m1_t v7, size_t
    vl);
void vssseg2e32_v_f32m2_m (vbool16_t mask, float32_t *base,
    ptrdiff_t bstride, vfloat32m2_t v0, vfloat32m2_t v1, size_t
    vl);
void vssseg3e32_v_f32m2_m (vbool16_t mask, float32_t *base,
    ptrdiff_t bstride, vfloat32m2_t v0, vfloat32m2_t v1,
    vfloat32m2_t v2, size_t vl);
void vssseg4e32_v_f32m2_m (vbool16_t mask, float32_t *base,
    ptrdiff_t bstride, vfloat32m2_t v0, vfloat32m2_t v1,
    vfloat32m2_t v2, vfloat32m2_t v3, size_t vl);
void vssseg2e32_v_f32m4_m (vbool8_t mask, float32_t *base,
    ptrdiff_t bstride, vfloat32m4_t v0, vfloat32m4_t v1, size_t
    vl);
void vssseg2e64_v_f64m1_m (vbool64_t mask, float64_t *base,
    ptrdiff_t bstride, vfloat64m1_t v0, vfloat64m1_t v1, size_t
    vl);
void vssseg3e64_v_f64m1_m (vbool64_t mask, float64_t *base,
    ptrdiff_t bstride, vfloat64m1_t v0, vfloat64m1_t v1,
    vfloat64m1_t v2, size_t vl);
void vssseg4e64_v_f64m1_m (vbool64_t mask, float64_t *base,
    ptrdiff_t bstride, vfloat64m1_t v0, vfloat64m1_t v1,
    vfloat64m1_t v2, vfloat64m1_t v3, size_t vl);
void vssseg5e64_v_f64m1_m (vbool64_t mask, float64_t *base,
    ptrdiff_t bstride, vfloat64m1_t v0, vfloat64m1_t v1,
    vfloat64m1_t v2, vfloat64m1_t v3, vfloat64m1_t v4, size_t
    vl);
```

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void vssseg6e64_v_f64m1_m (vbool64_t mask, float64_t *base,
    ptrdiff_t bstride, vfloat64m1_t v0, vfloat64m1_t v1,
    vfloat64m1_t v2, vfloat64m1_t v3, vfloat64m1_t v4,
    vfloat64m1_t v5, size_t vl);
void vssseg7e64_v_f64m1_m (vbool64_t mask, float64_t *base,
    ptrdiff_t bstride, vfloat64m1_t v0, vfloat64m1_t v1,
    vfloat64m1_t v2, vfloat64m1_t v3, vfloat64m1_t v4,
    vfloat64m1_t v5, vfloat64m1_t v6, size_t vl);
void vssseg8e64_v_f64m1_m (vbool64_t mask, float64_t *base,
    ptrdiff_t bstride, vfloat64m1_t v0, vfloat64m1_t v1,
    vfloat64m1_t v2, vfloat64m1_t v3, vfloat64m1_t v4,
    vfloat64m1_t v5, vfloat64m1_t v6, vfloat64m1_t v7, size_t
    vl);
void vssseg2e64_v_f64m2_m (vbool32_t mask, float64_t *base,
    ptrdiff_t bstride, vfloat64m2_t v0, vfloat64m2_t v1, size_t
    vl);
void vssseg3e64_v_f64m2_m (vbool32_t mask, float64_t *base,
    ptrdiff_t bstride, vfloat64m2_t v0, vfloat64m2_t v1,
    vfloat64m2_t v2, size_t vl);
void vssseg4e64_v_f64m2_m (vbool32_t mask, float64_t *base,
    ptrdiff_t bstride, vfloat64m2_t v0, vfloat64m2_t v1,
    vfloat64m2_t v2, vfloat64m2_t v3, size_t vl);
void vssseg2e64_v_f64m4_m (vbool16_t mask, float64_t *base,
    ptrdiff_t bstride, vfloat64m4_t v0, vfloat64m4_t v1, size_t
    vl);
```

Vector Indexed Segment Load Functions:

Prototypes:

```
void vloxseg2ei8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, const
    int8_t *base, vuint8m1_t bindex, size_t vl);
void vloxseg3ei8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, const int8_t *base, vuint8m1_t bindex, size_t vl);
void vloxseg4ei8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, const int8_t *base, vuint8m1_t bindex,
    size_t vl);
void vloxseg5ei8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, const int8_t *base,
    vuint8m1_t bindex, size_t vl);
void vloxseg6ei8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, const
    int8_t *base, vuint8m1_t bindex, size_t vl);
void vloxseg7ei8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, vint8m1_t
    *v6, const int8_t *base, vuint8m1_t bindex, size_t vl);
```

```
void vloxseg8ei8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, vint8m1_t
    *v6, vint8m1_t *v7, const int8_t *base, vuint8m1_t bindex,
    size_t vl);
void vloxseg2ei8_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1, const
    int8_t *base, vuint8m2_t bindex, size_t vl);
void vloxseg3ei8_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1, vint8m2_t
    *v2, const int8_t *base, vuint8m2_t bindex, size_t vl);
void vloxseg4ei8_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1, vint8m2_t
    *v2, vint8m2_t *v3, const int8_t *base, vuint8m2_t bindex,
    size_t vl);
void vloxseg2ei8_v_i8m4 (vint8m4_t *v0, vint8m4_t *v1, const
    int8_t *base, vuint8m4_t bindex, size_t vl);
void vloxseg2ei16_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, const
    int8_t *base, vuint16m2_t bindex, size_t vl);
void vloxseg3ei16_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, const int8_t *base, vuint16m2_t bindex,
    size_t vl);
void vloxseg4ei16_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, const int8_t *base,
    vuint16m2_t bindex, size_t vl);
void vloxseg5ei16_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, const int8_t
    *base, vuint16m2_t bindex, size_t vl);
void vloxseg6ei16_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    const int8_t *base, vuint16m2_t bindex, size_t vl);
void vloxseg7ei16_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, const int8_t *base, vuint16m2_t bindex,
    size_t vl);
void vloxseg8ei16_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vint8m1_t *v7, const int8_t *base,
    vuint16m2_t bindex, size_t vl);
void vloxseg2ei16_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1, const
    int8_t *base, vuint16m4_t bindex, size_t vl);
void vloxseg3ei16_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1,
    vint8m2_t *v2, const int8_t *base, vuint16m4_t bindex,
    size_t vl);
void vloxseg4ei16_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1,
    vint8m2_t *v2, vint8m2_t *v3, const int8_t *base,
    vuint16m4_t bindex, size_t vl);
void vloxseg2ei16_v_i8m4 (vint8m4_t *v0, vint8m4_t *v1, const
    int8_t *base, vuint16m8_t bindex, size_t vl);
```

```
void vloxseg2ei32_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, const
    int8_t *base, vuint32m4_t bindex, size_t vl);
void vloxseg3ei32_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, const int8_t *base, vuint32m4_t bindex,
    size_t vl);
void vloxseg4ei32_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, const int8_t *base,
    vuint32m4_t bindex, size_t vl);
void vloxseg5ei32_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, const int8_t
    *base, vuint32m4_t bindex, size_t vl);
void vloxseg6ei32_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    const int8_t *base, vuint32m4_t bindex, size_t vl);
void vloxseg7ei32_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, const int8_t *base, vuint32m4_t bindex,
    size_t vl);
void vloxseg8ei32_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vint8m1_t *v7, const int8_t *base,
    vuint32m4_t bindex, size_t vl);
void vloxseg2ei32_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1, const
    int8_t *base, vuint32m8_t bindex, size_t vl);
void vloxseg3ei32_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1,
    vint8m2_t *v2, const int8_t *base, vuint32m8_t bindex,
    size_t vl);
void vloxseg4ei32_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1,
    vint8m2_t *v2, vint8m2_t *v3, const int8_t *base,
    vuint32m8_t bindex, size_t vl);
void vloxseg2ei64_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, const
    int8_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg3ei64_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, const int8_t *base, vuint64m8_t bindex,
    size_t vl);
void vloxseg4ei64_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, const int8_t *base,
    vuint64m8_t bindex, size_t vl);
void vloxseg5ei64_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, const int8_t
    *base, vuint64m8_t bindex, size_t vl);
void vloxseg6ei64_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    const int8_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg7ei64_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
```

```
    vint8m1_t *v6, const int8_t *base, vuint64m8_t bindex,
    size_t vl);
void vloxseg8ei64_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vint8m1_t *v7, const int8_t *base,
    vuint64m8_t bindex, size_t vl);
void vloxseg2ei8_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1, const
    int16_t *base, vuint8m1_t bindex, size_t vl);
void vloxseg3ei8_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, const int16_t *base, vuint8m1_t bindex,
    size_t vl);
void vloxseg4ei8_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vint16m2_t *v3, const int16_t *base,
    vuint8m1_t bindex, size_t vl);
void vloxseg2ei8_v_i16m4 (vint16m4_t *v0, vint16m4_t *v1, const
    int16_t *base, vuint8m2_t bindex, size_t vl);
void vloxseg2ei16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1, const
    int16_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg3ei16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, const int16_t *base, vuint16m1_t bindex,
    size_t vl);
void vloxseg4ei16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, const int16_t *base,
    vuint16m1_t bindex, size_t vl);
void vloxseg5ei16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, const
    int16_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg6ei16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, const int16_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg7ei16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, const int16_t *base, vuint16m1_t
    bindex, size_t vl);
void vloxseg8ei16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, vint16m1_t *v7, const int16_t *base,
    vuint16m1_t bindex, size_t vl);
void vloxseg2ei16_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1, const
    int16_t *base, vuint16m2_t bindex, size_t vl);
void vloxseg3ei16_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, const int16_t *base, vuint16m2_t bindex,
    size_t vl);
void vloxseg4ei16_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vint16m2_t *v3, const int16_t *base,
    vuint16m2_t bindex, size_t vl);
```

```c
void vloxseg2ei16_v_i16m4 (vint16m4_t *v0, vint16m4_t *v1, const
    int16_t *base, vuint16m4_t bindex, size_t vl);
void vloxseg2ei32_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1, const
    int16_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg3ei32_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, const int16_t *base, vuint32m2_t bindex,
    size_t vl);
void vloxseg4ei32_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, const int16_t *base,
    vuint32m2_t bindex, size_t vl);
void vloxseg5ei32_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, const
    int16_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg6ei32_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, const int16_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg7ei32_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, const int16_t *base, vuint32m2_t
    bindex, size_t vl);
void vloxseg8ei32_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, vint16m1_t *v7, const int16_t *base,
    vuint32m2_t bindex, size_t vl);
void vloxseg2ei32_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1, const
    int16_t *base, vuint32m4_t bindex, size_t vl);
void vloxseg3ei32_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, const int16_t *base, vuint32m4_t bindex,
    size_t vl);
void vloxseg4ei32_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vint16m2_t *v3, const int16_t *base,
    vuint32m4_t bindex, size_t vl);
void vloxseg2ei32_v_i16m4 (vint16m4_t *v0, vint16m4_t *v1, const
    int16_t *base, vuint32m8_t bindex, size_t vl);
void vloxseg2ei64_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1, const
    int16_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg3ei64_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, const int16_t *base, vuint64m4_t bindex,
    size_t vl);
void vloxseg4ei64_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, const int16_t *base,
    vuint64m4_t bindex, size_t vl);
void vloxseg5ei64_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, const
    int16_t *base, vuint64m4_t bindex, size_t vl);
```

```
void vloxseg6ei64_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, const int16_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg7ei64_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, const int16_t *base, vuint64m4_t
    bindex, size_t vl);
void vloxseg8ei64_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, vint16m1_t *v7, const int16_t *base,
    vuint64m4_t bindex, size_t vl);
void vloxseg2ei64_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1, const
    int16_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg3ei64_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, const int16_t *base, vuint64m8_t bindex,
    size_t vl);
void vloxseg4ei64_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vint16m2_t *v3, const int16_t *base,
    vuint64m8_t bindex, size_t vl);
void vloxseg2ei8_v_i32m4 (vint32m4_t *v0, vint32m4_t *v1, const
    int32_t *base, vuint8m1_t bindex, size_t vl);
void vloxseg2ei16_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1, const
    int32_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg3ei16_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, const int32_t *base, vuint16m1_t bindex,
    size_t vl);
void vloxseg4ei16_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vint32m2_t *v3, const int32_t *base,
    vuint16m1_t bindex, size_t vl);
void vloxseg2ei16_v_i32m4 (vint32m4_t *v0, vint32m4_t *v1, const
    int32_t *base, vuint16m2_t bindex, size_t vl);
void vloxseg2ei32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1, const
    int32_t *base, vuint32m1_t bindex, size_t vl);
void vloxseg3ei32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, const int32_t *base, vuint32m1_t bindex,
    size_t vl);
void vloxseg4ei32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, const int32_t *base,
    vuint32m1_t bindex, size_t vl);
void vloxseg5ei32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, const
    int32_t *base, vuint32m1_t bindex, size_t vl);
void vloxseg6ei32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, const int32_t *base, vuint32m1_t bindex, size_t vl);
```

```
void vloxseg7ei32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, const int32_t *base, vuint32m1_t
    bindex, size_t vl);
void vloxseg8ei32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, vint32m1_t *v7, const int32_t *base,
    vuint32m1_t bindex, size_t vl);
void vloxseg2ei32_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1, const
    int32_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg3ei32_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, const int32_t *base, vuint32m2_t bindex,
    size_t vl);
void vloxseg4ei32_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vint32m2_t *v3, const int32_t *base,
    vuint32m2_t bindex, size_t vl);
void vloxseg2ei32_v_i32m4 (vint32m4_t *v0, vint32m4_t *v1, const
    int32_t *base, vuint32m4_t bindex, size_t vl);
void vloxseg2ei64_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1, const
    int32_t *base, vuint64m2_t bindex, size_t vl);
void vloxseg3ei64_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, const int32_t *base, vuint64m2_t bindex,
    size_t vl);
void vloxseg4ei64_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, const int32_t *base,
    vuint64m2_t bindex, size_t vl);
void vloxseg5ei64_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, const
    int32_t *base, vuint64m2_t bindex, size_t vl);
void vloxseg6ei64_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, const int32_t *base, vuint64m2_t bindex, size_t vl);
void vloxseg7ei64_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, const int32_t *base, vuint64m2_t
    bindex, size_t vl);
void vloxseg8ei64_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, vint32m1_t *v7, const int32_t *base,
    vuint64m2_t bindex, size_t vl);
void vloxseg2ei64_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1, const
    int32_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg3ei64_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, const int32_t *base, vuint64m4_t bindex,
    size_t vl);
```

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void vloxseg4ei64_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vint32m2_t *v3, const int32_t *base,
    vuint64m4_t bindex, size_t vl);
void vloxseg2ei64_v_i32m4 (vint32m4_t *v0, vint32m4_t *v1, const
    int32_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg2ei16_v_i64m4 (vint64m4_t *v0, vint64m4_t *v1, const
    int64_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg2ei32_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1, const
    int64_t *base, vuint32m1_t bindex, size_t vl);
void vloxseg3ei32_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1,
    vint64m2_t *v2, const int64_t *base, vuint32m1_t bindex,
    size_t vl);
void vloxseg4ei32_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1,
    vint64m2_t *v2, vint64m2_t *v3, const int64_t *base,
    vuint32m1_t bindex, size_t vl);
void vloxseg2ei32_v_i64m4 (vint64m4_t *v0, vint64m4_t *v1, const
    int64_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg2ei64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1, const
    int64_t *base, vuint64m1_t bindex, size_t vl);
void vloxseg3ei64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, const int64_t *base, vuint64m1_t bindex,
    size_t vl);
void vloxseg4ei64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, const int64_t *base,
    vuint64m1_t bindex, size_t vl);
void vloxseg5ei64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, const
    int64_t *base, vuint64m1_t bindex, size_t vl);
void vloxseg6ei64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, const int64_t *base, vuint64m1_t bindex, size_t vl);
void vloxseg7ei64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, vint64m1_t *v6, const int64_t *base, vuint64m1_t
    bindex, size_t vl);
void vloxseg8ei64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, vint64m1_t *v6, vint64m1_t *v7, const int64_t *base,
    vuint64m1_t bindex, size_t vl);
void vloxseg2ei64_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1, const
    int64_t *base, vuint64m2_t bindex, size_t vl);
void vloxseg3ei64_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1,
    vint64m2_t *v2, const int64_t *base, vuint64m2_t bindex,
    size_t vl);
void vloxseg4ei64_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1,
    vint64m2_t *v2, vint64m2_t *v3, const int64_t *base,
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     vuint64m2_t bindex, size_t vl);
void vloxseg2ei64_v_i64m4 (vint64m4_t *v0, vint64m4_t *v1, const
     int64_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg2ei8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1, const
     uint8_t *base, vuint8m1_t bindex, size_t vl);
void vloxseg3ei8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
     vuint8m1_t *v2, const uint8_t *base, vuint8m1_t bindex,
     size_t vl);
void vloxseg4ei8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
     vuint8m1_t *v2, vuint8m1_t *v3, const uint8_t *base,
     vuint8m1_t bindex, size_t vl);
void vloxseg5ei8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
     vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, const
     uint8_t *base, vuint8m1_t bindex, size_t vl);
void vloxseg6ei8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
     vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
     *v5, const uint8_t *base, vuint8m1_t bindex, size_t vl);
void vloxseg7ei8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
     vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
     *v5, vuint8m1_t *v6, const uint8_t *base, vuint8m1_t bindex,
     size_t vl);
void vloxseg8ei8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
     vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
     *v5, vuint8m1_t *v6, vuint8m1_t *v7, const uint8_t *base,
     vuint8m1_t bindex, size_t vl);
void vloxseg2ei8_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1, const
     uint8_t *base, vuint8m2_t bindex, size_t vl);
void vloxseg3ei8_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1,
     vuint8m2_t *v2, const uint8_t *base, vuint8m2_t bindex,
     size_t vl);
void vloxseg4ei8_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1,
     vuint8m2_t *v2, vuint8m2_t *v3, const uint8_t *base,
     vuint8m2_t bindex, size_t vl);
void vloxseg2ei8_v_u8m4 (vuint8m4_t *v0, vuint8m4_t *v1, const
     uint8_t *base, vuint8m4_t bindex, size_t vl);
void vloxseg2ei16_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1, const
     uint8_t *base, vuint16m2_t bindex, size_t vl);
void vloxseg3ei16_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
     vuint8m1_t *v2, const uint8_t *base, vuint16m2_t bindex,
     size_t vl);
void vloxseg4ei16_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
     vuint8m1_t *v2, vuint8m1_t *v3, const uint8_t *base,
     vuint16m2_t bindex, size_t vl);
void vloxseg5ei16_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
     vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, const
     uint8_t *base, vuint16m2_t bindex, size_t vl);
```

```
void vloxseg6ei16_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, const uint8_t *base, vuint16m2_t bindex, size_t vl);
void vloxseg7ei16_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, const uint8_t *base, vuint16m2_t
    bindex, size_t vl);
void vloxseg8ei16_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vuint8m1_t *v7, const uint8_t *base,
    vuint16m2_t bindex, size_t vl);
void vloxseg2ei16_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1, const
    uint8_t *base, vuint16m4_t bindex, size_t vl);
void vloxseg3ei16_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, const uint8_t *base, vuint16m4_t bindex,
    size_t vl);
void vloxseg4ei16_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, vuint8m2_t *v3, const uint8_t *base,
    vuint16m4_t bindex, size_t vl);
void vloxseg2ei16_v_u8m4 (vuint8m4_t *v0, vuint8m4_t *v1, const
    uint8_t *base, vuint16m8_t bindex, size_t vl);
void vloxseg2ei32_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1, const
    uint8_t *base, vuint32m4_t bindex, size_t vl);
void vloxseg3ei32_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, const uint8_t *base, vuint32m4_t bindex,
    size_t vl);
void vloxseg4ei32_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, const uint8_t *base,
    vuint32m4_t bindex, size_t vl);
void vloxseg5ei32_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, const
    uint8_t *base, vuint32m4_t bindex, size_t vl);
void vloxseg6ei32_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, const uint8_t *base, vuint32m4_t bindex, size_t vl);
void vloxseg7ei32_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, const uint8_t *base, vuint32m4_t
    bindex, size_t vl);
void vloxseg8ei32_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vuint8m1_t *v7, const uint8_t *base,
    vuint32m4_t bindex, size_t vl);
void vloxseg2ei32_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1, const
    uint8_t *base, vuint32m8_t bindex, size_t vl);
```

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void vloxseg3ei32_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, const uint8_t *base, vuint32m8_t bindex,
    size_t vl);
void vloxseg4ei32_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, vuint8m2_t *v3, const uint8_t *base,
    vuint32m8_t bindex, size_t vl);
void vloxseg2ei64_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1, const
    uint8_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg3ei64_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, const uint8_t *base, vuint64m8_t bindex,
    size_t vl);
void vloxseg4ei64_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, const uint8_t *base,
    vuint64m8_t bindex, size_t vl);
void vloxseg5ei64_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, const
    uint8_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg6ei64_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, const uint8_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg7ei64_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, const uint8_t *base, vuint64m8_t
    bindex, size_t vl);
void vloxseg8ei64_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vuint8m1_t *v7, const uint8_t *base,
    vuint64m8_t bindex, size_t vl);
void vloxseg2ei8_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    const uint16_t *base, vuint8m1_t bindex, size_t vl);
void vloxseg3ei8_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, const uint16_t *base, vuint8m1_t bindex,
    size_t vl);
void vloxseg4ei8_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vuint16m2_t *v3, const uint16_t *base,
    vuint8m1_t bindex, size_t vl);
void vloxseg2ei8_v_u16m4 (vuint16m4_t *v0, vuint16m4_t *v1,
    const uint16_t *base, vuint8m2_t bindex, size_t vl);
void vloxseg2ei16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    const uint16_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg3ei16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, const uint16_t *base, vuint16m1_t bindex,
    size_t vl);
void vloxseg4ei16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, const uint16_t *base,
    vuint16m1_t bindex, size_t vl);
```

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void vloxseg5ei16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4, const
    uint16_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg6ei16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, const uint16_t *base, vuint16m1_t bindex,
    size_t vl);
void vloxseg7ei16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, const uint16_t *base,
    vuint16m1_t bindex, size_t vl);
void vloxseg8ei16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vuint16m1_t *v7, const
    uint16_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg2ei16_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    const uint16_t *base, vuint16m2_t bindex, size_t vl);
void vloxseg3ei16_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, const uint16_t *base, vuint16m2_t bindex,
    size_t vl);
void vloxseg4ei16_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vuint16m2_t *v3, const uint16_t *base,
    vuint16m2_t bindex, size_t vl);
void vloxseg2ei16_v_u16m4 (vuint16m4_t *v0, vuint16m4_t *v1,
    const uint16_t *base, vuint16m4_t bindex, size_t vl);
void vloxseg2ei32_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    const uint16_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg3ei32_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, const uint16_t *base, vuint32m2_t bindex,
    size_t vl);
void vloxseg4ei32_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, const uint16_t *base,
    vuint32m2_t bindex, size_t vl);
void vloxseg5ei32_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4, const
    uint16_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg6ei32_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, const uint16_t *base, vuint32m2_t bindex,
    size_t vl);
void vloxseg7ei32_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, const uint16_t *base,
    vuint32m2_t bindex, size_t vl);
void vloxseg8ei32_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
```

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    vuint16m1_t *v5, vuint16m1_t *v6, vuint16m1_t *v7, const
    uint16_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg2ei32_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    const uint16_t *base, vuint32m4_t bindex, size_t vl);
void vloxseg3ei32_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, const uint16_t *base, vuint32m4_t bindex,
    size_t vl);
void vloxseg4ei32_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vuint16m2_t *v3, const uint16_t *base,
    vuint32m4_t bindex, size_t vl);
void vloxseg2ei32_v_u16m4 (vuint16m4_t *v0, vuint16m4_t *v1,
    const uint16_t *base, vuint32m8_t bindex, size_t vl);
void vloxseg2ei64_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    const uint16_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg3ei64_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, const uint16_t *base, vuint64m4_t bindex,
    size_t vl);
void vloxseg4ei64_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, const uint16_t *base,
    vuint64m4_t bindex, size_t vl);
void vloxseg5ei64_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4, const
    uint16_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg6ei64_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, const uint16_t *base, vuint64m4_t bindex,
    size_t vl);
void vloxseg7ei64_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, const uint16_t *base,
    vuint64m4_t bindex, size_t vl);
void vloxseg8ei64_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vuint16m1_t *v7, const
    uint16_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg2ei64_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    const uint16_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg3ei64_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, const uint16_t *base, vuint64m8_t bindex,
    size_t vl);
void vloxseg4ei64_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vuint16m2_t *v3, const uint16_t *base,
    vuint64m8_t bindex, size_t vl);
void vloxseg2ei8_v_u32m4 (vuint32m4_t *v0, vuint32m4_t *v1,
    const uint32_t *base, vuint8m1_t bindex, size_t vl);
```

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void vloxseg2ei16_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    const uint32_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg3ei16_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, const uint32_t *base, vuint16m1_t bindex,
    size_t vl);
void vloxseg4ei16_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, vuint32m2_t *v3, const uint32_t *base,
    vuint16m1_t bindex, size_t vl);
void vloxseg2ei16_v_u32m4 (vuint32m4_t *v0, vuint32m4_t *v1,
    const uint32_t *base, vuint16m2_t bindex, size_t vl);
void vloxseg2ei32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    const uint32_t *base, vuint32m1_t bindex, size_t vl);
void vloxseg3ei32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, const uint32_t *base, vuint32m1_t bindex,
    size_t vl);
void vloxseg4ei32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, const uint32_t *base,
    vuint32m1_t bindex, size_t vl);
void vloxseg5ei32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4, const
    uint32_t *base, vuint32m1_t bindex, size_t vl);
void vloxseg6ei32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, const uint32_t *base, vuint32m1_t bindex,
    size_t vl);
void vloxseg7ei32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, const uint32_t *base,
    vuint32m1_t bindex, size_t vl);
void vloxseg8ei32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, vuint32m1_t *v7, const
    uint32_t *base, vuint32m1_t bindex, size_t vl);
void vloxseg2ei32_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    const uint32_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg3ei32_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, const uint32_t *base, vuint32m2_t bindex,
    size_t vl);
void vloxseg4ei32_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, vuint32m2_t *v3, const uint32_t *base,
    vuint32m2_t bindex, size_t vl);
void vloxseg2ei32_v_u32m4 (vuint32m4_t *v0, vuint32m4_t *v1,
    const uint32_t *base, vuint32m4_t bindex, size_t vl);
void vloxseg2ei64_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    const uint32_t *base, vuint64m2_t bindex, size_t vl);
```

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void vloxseg3ei64_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, const uint32_t *base, vuint64m2_t bindex,
    size_t vl);
void vloxseg4ei64_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, const uint32_t *base,
    vuint64m2_t bindex, size_t vl);
void vloxseg5ei64_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4, const
    uint32_t *base, vuint64m2_t bindex, size_t vl);
void vloxseg6ei64_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, const uint32_t *base, vuint64m2_t bindex,
    size_t vl);
void vloxseg7ei64_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, const uint32_t *base,
    vuint64m2_t bindex, size_t vl);
void vloxseg8ei64_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, vuint32m1_t *v7, const
    uint32_t *base, vuint64m2_t bindex, size_t vl);
void vloxseg2ei64_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    const uint32_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg3ei64_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, const uint32_t *base, vuint64m4_t bindex,
    size_t vl);
void vloxseg4ei64_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, vuint32m2_t *v3, const uint32_t *base,
    vuint64m4_t bindex, size_t vl);
void vloxseg2ei64_v_u32m4 (vuint32m4_t *v0, vuint32m4_t *v1,
    const uint32_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg2ei16_v_u64m4 (vuint64m4_t *v0, vuint64m4_t *v1,
    const uint64_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg2ei32_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1,
    const uint64_t *base, vuint32m1_t bindex, size_t vl);
void vloxseg3ei32_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, const uint64_t *base, vuint32m1_t bindex,
    size_t vl);
void vloxseg4ei32_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, vuint64m2_t *v3, const uint64_t *base,
    vuint32m1_t bindex, size_t vl);
void vloxseg2ei32_v_u64m4 (vuint64m4_t *v0, vuint64m4_t *v1,
    const uint64_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg2ei64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    const uint64_t *base, vuint64m1_t bindex, size_t vl);
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void vloxseg3ei64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, const uint64_t *base, vuint64m1_t bindex,
    size_t vl);
void vloxseg4ei64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, const uint64_t *base,
    vuint64m1_t bindex, size_t vl);
void vloxseg5ei64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4, const
    uint64_t *base, vuint64m1_t bindex, size_t vl);
void vloxseg6ei64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, const uint64_t *base, vuint64m1_t bindex,
    size_t vl);
void vloxseg7ei64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vuint64m1_t *v6, const uint64_t *base,
    vuint64m1_t bindex, size_t vl);
void vloxseg8ei64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vuint64m1_t *v6, vuint64m1_t *v7, const
    uint64_t *base, vuint64m1_t bindex, size_t vl);
void vloxseg2ei64_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1,
    const uint64_t *base, vuint64m2_t bindex, size_t vl);
void vloxseg3ei64_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, const uint64_t *base, vuint64m2_t bindex,
    size_t vl);
void vloxseg4ei64_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, vuint64m2_t *v3, const uint64_t *base,
    vuint64m2_t bindex, size_t vl);
void vloxseg2ei64_v_u64m4 (vuint64m4_t *v0, vuint64m4_t *v1,
    const uint64_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg2ei8_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    const float16_t *base, vuint8m1_t bindex, size_t vl);
void vloxseg3ei8_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, const float16_t *base, vuint8m1_t bindex,
    size_t vl);
void vloxseg4ei8_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, const float16_t *base,
    vuint8m1_t bindex, size_t vl);
void vloxseg2ei8_v_f16m4 (vfloat16m4_t *v0, vfloat16m4_t *v1,
    const float16_t *base, vuint8m2_t bindex, size_t vl);
void vloxseg2ei16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    const float16_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg3ei16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, const float16_t *base, vuint16m1_t bindex,
    size_t vl);
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void vloxseg4ei16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, const float16_t *base,
    vuint16m1_t bindex, size_t vl);
void vloxseg5ei16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4, const
    float16_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg6ei16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, const float16_t *base, vuint16m1_t bindex,
    size_t vl);
void vloxseg7ei16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, const float16_t *base,
    vuint16m1_t bindex, size_t vl);
void vloxseg8ei16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vfloat16m1_t *v7, const
    float16_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg2ei16_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    const float16_t *base, vuint16m2_t bindex, size_t vl);
void vloxseg3ei16_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, const float16_t *base, vuint16m2_t bindex,
    size_t vl);
void vloxseg4ei16_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, const float16_t *base,
    vuint16m2_t bindex, size_t vl);
void vloxseg2ei16_v_f16m4 (vfloat16m4_t *v0, vfloat16m4_t *v1,
    const float16_t *base, vuint16m4_t bindex, size_t vl);
void vloxseg2ei32_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    const float16_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg3ei32_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, const float16_t *base, vuint32m2_t bindex,
    size_t vl);
void vloxseg4ei32_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, const float16_t *base,
    vuint32m2_t bindex, size_t vl);
void vloxseg5ei32_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4, const
    float16_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg6ei32_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, const float16_t *base, vuint32m2_t bindex,
    size_t vl);
void vloxseg7ei32_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, const float16_t *base,
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    vuint32m2_t bindex, size_t vl);
void vloxseg8ei32_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vfloat16m1_t *v7, const
    float16_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg2ei32_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    const float16_t *base, vuint32m4_t bindex, size_t vl);
void vloxseg3ei32_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, const float16_t *base, vuint32m4_t bindex,
    size_t vl);
void vloxseg4ei32_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, const float16_t *base,
    vuint32m4_t bindex, size_t vl);
void vloxseg2ei32_v_f16m4 (vfloat16m4_t *v0, vfloat16m4_t *v1,
    const float16_t *base, vuint32m8_t bindex, size_t vl);
void vloxseg2ei64_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    const float16_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg3ei64_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, const float16_t *base, vuint64m4_t bindex,
    size_t vl);
void vloxseg4ei64_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, const float16_t *base,
    vuint64m4_t bindex, size_t vl);
void vloxseg5ei64_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4, const
    float16_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg6ei64_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, const float16_t *base, vuint64m4_t bindex,
    size_t vl);
void vloxseg7ei64_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, const float16_t *base,
    vuint64m4_t bindex, size_t vl);
void vloxseg8ei64_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vfloat16m1_t *v7, const
    float16_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg2ei64_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    const float16_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg3ei64_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, const float16_t *base, vuint64m8_t bindex,
    size_t vl);
void vloxseg4ei64_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, const float16_t *base,
    vuint64m8_t bindex, size_t vl);
```

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void vloxseg2ei8_v_f32m4 (vfloat32m4_t *v0, vfloat32m4_t *v1,
    const float32_t *base, vuint8m1_t bindex, size_t vl);
void vloxseg2ei16_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    const float32_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg3ei16_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, const float32_t *base, vuint16m1_t bindex,
    size_t vl);
void vloxseg4ei16_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vfloat32m2_t *v3, const float32_t *base,
    vuint16m1_t bindex, size_t vl);
void vloxseg2ei16_v_f32m4 (vfloat32m4_t *v0, vfloat32m4_t *v1,
    const float32_t *base, vuint16m2_t bindex, size_t vl);
void vloxseg2ei32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    const float32_t *base, vuint32m1_t bindex, size_t vl);
void vloxseg3ei32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, const float32_t *base, vuint32m1_t bindex,
    size_t vl);
void vloxseg4ei32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, const float32_t *base,
    vuint32m1_t bindex, size_t vl);
void vloxseg5ei32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4, const
    float32_t *base, vuint32m1_t bindex, size_t vl);
void vloxseg6ei32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, const float32_t *base, vuint32m1_t bindex,
    size_t vl);
void vloxseg7ei32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, const float32_t *base,
    vuint32m1_t bindex, size_t vl);
void vloxseg8ei32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, vfloat32m1_t *v7, const
    float32_t *base, vuint32m1_t bindex, size_t vl);
void vloxseg2ei32_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    const float32_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg3ei32_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, const float32_t *base, vuint32m2_t bindex,
    size_t vl);
void vloxseg4ei32_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vfloat32m2_t *v3, const float32_t *base,
    vuint32m2_t bindex, size_t vl);
void vloxseg2ei32_v_f32m4 (vfloat32m4_t *v0, vfloat32m4_t *v1,
    const float32_t *base, vuint32m4_t bindex, size_t vl);
```

```
void vloxseg2ei64_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    const float32_t *base, vuint64m2_t bindex, size_t vl);
void vloxseg3ei64_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, const float32_t *base, vuint64m2_t bindex,
    size_t vl);
void vloxseg4ei64_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, const float32_t *base,
    vuint64m2_t bindex, size_t vl);
void vloxseg5ei64_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4, const
    float32_t *base, vuint64m2_t bindex, size_t vl);
void vloxseg6ei64_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, const float32_t *base, vuint64m2_t bindex,
    size_t vl);
void vloxseg7ei64_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, const float32_t *base,
    vuint64m2_t bindex, size_t vl);
void vloxseg8ei64_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, vfloat32m1_t *v7, const
    float32_t *base, vuint64m2_t bindex, size_t vl);
void vloxseg2ei64_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    const float32_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg3ei64_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, const float32_t *base, vuint64m4_t bindex,
    size_t vl);
void vloxseg4ei64_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vfloat32m2_t *v3, const float32_t *base,
    vuint64m4_t bindex, size_t vl);
void vloxseg2ei64_v_f32m4 (vfloat32m4_t *v0, vfloat32m4_t *v1,
    const float32_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg2ei16_v_f64m4 (vfloat64m4_t *v0, vfloat64m4_t *v1,
    const float64_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg2ei32_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    const float64_t *base, vuint32m1_t bindex, size_t vl);
void vloxseg3ei32_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, const float64_t *base, vuint32m1_t bindex,
    size_t vl);
void vloxseg4ei32_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vfloat64m2_t *v3, const float64_t *base,
    vuint32m1_t bindex, size_t vl);
void vloxseg2ei32_v_f64m4 (vfloat64m4_t *v0, vfloat64m4_t *v1,
    const float64_t *base, vuint32m2_t bindex, size_t vl);
```

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void vloxseg2ei64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    const float64_t *base, vuint64m1_t bindex, size_t vl);
void vloxseg3ei64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, const float64_t *base, vuint64m1_t bindex,
    size_t vl);
void vloxseg4ei64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, const float64_t *base,
    vuint64m1_t bindex, size_t vl);
void vloxseg5ei64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4, const
    float64_t *base, vuint64m1_t bindex, size_t vl);
void vloxseg6ei64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, const float64_t *base, vuint64m1_t bindex,
    size_t vl);
void vloxseg7ei64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, vfloat64m1_t *v6, const float64_t *base,
    vuint64m1_t bindex, size_t vl);
void vloxseg8ei64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, vfloat64m1_t *v6, vfloat64m1_t *v7, const
    float64_t *base, vuint64m1_t bindex, size_t vl);
void vloxseg2ei64_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    const float64_t *base, vuint64m2_t bindex, size_t vl);
void vloxseg3ei64_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, const float64_t *base, vuint64m2_t bindex,
    size_t vl);
void vloxseg4ei64_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vfloat64m2_t *v3, const float64_t *base,
    vuint64m2_t bindex, size_t vl);
void vloxseg2ei64_v_f64m4 (vfloat64m4_t *v0, vfloat64m4_t *v1,
    const float64_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg2ei8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, const
    int8_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg3ei8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, const int8_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg4ei8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, const int8_t *base, vuint8m1_t bindex,
    size_t vl);
void vluxseg5ei8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, const int8_t *base,
    vuint8m1_t bindex, size_t vl);
void vluxseg6ei8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, const
    int8_t *base, vuint8m1_t bindex, size_t vl);
```

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void vluxseg7ei8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, vint8m1_t
    *v6, const int8_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg8ei8_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, vint8m1_t
    *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5, vint8m1_t
    *v6, vint8m1_t *v7, const int8_t *base, vuint8m1_t bindex,
    size_t vl);
void vluxseg2ei8_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1, const
    int8_t *base, vuint8m2_t bindex, size_t vl);
void vluxseg3ei8_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1, vint8m2_t
    *v2, const int8_t *base, vuint8m2_t bindex, size_t vl);
void vluxseg4ei8_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1, vint8m2_t
    *v2, vint8m2_t *v3, const int8_t *base, vuint8m2_t bindex,
    size_t vl);
void vluxseg2ei8_v_i8m4 (vint8m4_t *v0, vint8m4_t *v1, const
    int8_t *base, vuint8m4_t bindex, size_t vl);
void vluxseg2ei16_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, const
    int8_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg3ei16_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, const int8_t *base, vuint16m2_t bindex,
    size_t vl);
void vluxseg4ei16_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, const int8_t *base,
    vuint16m2_t bindex, size_t vl);
void vluxseg5ei16_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, const int8_t
    *base, vuint16m2_t bindex, size_t vl);
void vluxseg6ei16_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    const int8_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg7ei16_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, const int8_t *base, vuint16m2_t bindex,
    size_t vl);
void vluxseg8ei16_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vint8m1_t *v7, const int8_t *base,
    vuint16m2_t bindex, size_t vl);
void vluxseg2ei16_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1, const
    int8_t *base, vuint16m4_t bindex, size_t vl);
void vluxseg3ei16_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1,
    vint8m2_t *v2, const int8_t *base, vuint16m4_t bindex,
    size_t vl);
void vluxseg4ei16_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1,
    vint8m2_t *v2, vint8m2_t *v3, const int8_t *base,
    vuint16m4_t bindex, size_t vl);
```

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void vluxseg2ei16_v_i8m4 (vint8m4_t *v0, vint8m4_t *v1, const
    int8_t *base, vuint16m8_t bindex, size_t vl);
void vluxseg2ei32_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, const
    int8_t *base, vuint32m4_t bindex, size_t vl);
void vluxseg3ei32_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, const int8_t *base, vuint32m4_t bindex,
    size_t vl);
void vluxseg4ei32_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, const int8_t *base,
    vuint32m4_t bindex, size_t vl);
void vluxseg5ei32_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, const int8_t
    *base, vuint32m4_t bindex, size_t vl);
void vluxseg6ei32_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    const int8_t *base, vuint32m4_t bindex, size_t vl);
void vluxseg7ei32_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, const int8_t *base, vuint32m4_t bindex,
    size_t vl);
void vluxseg8ei32_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vint8m1_t *v7, const int8_t *base,
    vuint32m4_t bindex, size_t vl);
void vluxseg2ei32_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1, const
    int8_t *base, vuint32m8_t bindex, size_t vl);
void vluxseg3ei32_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1,
    vint8m2_t *v2, const int8_t *base, vuint32m8_t bindex,
    size_t vl);
void vluxseg4ei32_v_i8m2 (vint8m2_t *v0, vint8m2_t *v1,
    vint8m2_t *v2, vint8m2_t *v3, const int8_t *base,
    vuint32m8_t bindex, size_t vl);
void vluxseg2ei64_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1, const
    int8_t *base, vuint64m8_t bindex, size_t vl);
void vluxseg3ei64_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, const int8_t *base, vuint64m8_t bindex,
    size_t vl);
void vluxseg4ei64_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, const int8_t *base,
    vuint64m8_t bindex, size_t vl);
void vluxseg5ei64_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, const int8_t
    *base, vuint64m8_t bindex, size_t vl);
void vluxseg6ei64_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    const int8_t *base, vuint64m8_t bindex, size_t vl);
```

```c
void vluxseg7ei64_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, const int8_t *base, vuint64m8_t bindex,
    size_t vl);
void vluxseg8ei64_v_i8m1 (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vint8m1_t *v7, const int8_t *base,
    vuint64m8_t bindex, size_t vl);
void vluxseg2ei8_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1, const
    int16_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg3ei8_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, const int16_t *base, vuint8m1_t bindex,
    size_t vl);
void vluxseg4ei8_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vint16m2_t *v3, const int16_t *base,
    vuint8m1_t bindex, size_t vl);
void vluxseg2ei8_v_i16m4 (vint16m4_t *v0, vint16m4_t *v1, const
    int16_t *base, vuint8m2_t bindex, size_t vl);
void vluxseg2ei16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1, const
    int16_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg3ei16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, const int16_t *base, vuint16m1_t bindex,
    size_t vl);
void vluxseg4ei16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, const int16_t *base,
    vuint16m1_t bindex, size_t vl);
void vluxseg5ei16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, const
    int16_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg6ei16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, const int16_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg7ei16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, const int16_t *base, vuint16m1_t
    bindex, size_t vl);
void vluxseg8ei16_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, vint16m1_t *v7, const int16_t *base,
    vuint16m1_t bindex, size_t vl);
void vluxseg2ei16_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1, const
    int16_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg3ei16_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, const int16_t *base, vuint16m2_t bindex,
    size_t vl);
```

```
void vluxseg4ei16_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vint16m2_t *v3, const int16_t *base,
    vuint16m2_t bindex, size_t vl);
void vluxseg2ei16_v_i16m4 (vint16m4_t *v0, vint16m4_t *v1, const
    int16_t *base, vuint16m4_t bindex, size_t vl);
void vluxseg2ei32_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1, const
    int16_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg3ei32_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, const int16_t *base, vuint32m2_t bindex,
    size_t vl);
void vluxseg4ei32_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, const int16_t *base,
    vuint32m2_t bindex, size_t vl);
void vluxseg5ei32_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, const
    int16_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg6ei32_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, const int16_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg7ei32_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, const int16_t *base, vuint32m2_t
    bindex, size_t vl);
void vluxseg8ei32_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, vint16m1_t *v7, const int16_t *base,
    vuint32m2_t bindex, size_t vl);
void vluxseg2ei32_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1, const
    int16_t *base, vuint32m4_t bindex, size_t vl);
void vluxseg3ei32_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, const int16_t *base, vuint32m4_t bindex,
    size_t vl);
void vluxseg4ei32_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vint16m2_t *v3, const int16_t *base,
    vuint32m4_t bindex, size_t vl);
void vluxseg2ei32_v_i16m4 (vint16m4_t *v0, vint16m4_t *v1, const
    int16_t *base, vuint32m8_t bindex, size_t vl);
void vluxseg2ei64_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1, const
    int16_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg3ei64_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, const int16_t *base, vuint64m4_t bindex,
    size_t vl);
void vluxseg4ei64_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, const int16_t *base,
    vuint64m4_t bindex, size_t vl);
```

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void vluxseg5ei64_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, const
    int16_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg6ei64_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, const int16_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg7ei64_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, const int16_t *base, vuint64m4_t
    bindex, size_t vl);
void vluxseg8ei64_v_i16m1 (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, vint16m1_t *v7, const int16_t *base,
    vuint64m4_t bindex, size_t vl);
void vluxseg2ei64_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1, const
    int16_t *base, vuint64m8_t bindex, size_t vl);
void vluxseg3ei64_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, const int16_t *base, vuint64m8_t bindex,
    size_t vl);
void vluxseg4ei64_v_i16m2 (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vint16m2_t *v3, const int16_t *base,
    vuint64m8_t bindex, size_t vl);
void vluxseg2ei8_v_i32m4 (vint32m4_t *v0, vint32m4_t *v1, const
    int32_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg2ei16_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1, const
    int32_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg3ei16_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, const int32_t *base, vuint16m1_t bindex,
    size_t vl);
void vluxseg4ei16_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vint32m2_t *v3, const int32_t *base,
    vuint16m1_t bindex, size_t vl);
void vluxseg2ei16_v_i32m4 (vint32m4_t *v0, vint32m4_t *v1, const
    int32_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg2ei32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1, const
    int32_t *base, vuint32m1_t bindex, size_t vl);
void vluxseg3ei32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, const int32_t *base, vuint32m1_t bindex,
    size_t vl);
void vluxseg4ei32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, const int32_t *base,
    vuint32m1_t bindex, size_t vl);
void vluxseg5ei32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, const
    int32_t *base, vuint32m1_t bindex, size_t vl);
```

```
void vluxseg6ei32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, const int32_t *base, vuint32m1_t bindex, size_t vl);
void vluxseg7ei32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, const int32_t *base, vuint32m1_t
    bindex, size_t vl);
void vluxseg8ei32_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, vint32m1_t *v7, const int32_t *base,
    vuint32m1_t bindex, size_t vl);
void vluxseg2ei32_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1, const
    int32_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg3ei32_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, const int32_t *base, vuint32m2_t bindex,
    size_t vl);
void vluxseg4ei32_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vint32m2_t *v3, const int32_t *base,
    vuint32m2_t bindex, size_t vl);
void vluxseg2ei32_v_i32m4 (vint32m4_t *v0, vint32m4_t *v1, const
    int32_t *base, vuint32m4_t bindex, size_t vl);
void vluxseg2ei64_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1, const
    int32_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg3ei64_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, const int32_t *base, vuint64m2_t bindex,
    size_t vl);
void vluxseg4ei64_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, const int32_t *base,
    vuint64m2_t bindex, size_t vl);
void vluxseg5ei64_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, const
    int32_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg6ei64_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, const int32_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg7ei64_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, const int32_t *base, vuint64m2_t
    bindex, size_t vl);
void vluxseg8ei64_v_i32m1 (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, vint32m1_t *v7, const int32_t *base,
    vuint64m2_t bindex, size_t vl);
void vluxseg2ei64_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1, const
    int32_t *base, vuint64m4_t bindex, size_t vl);
```

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void vluxseg3ei64_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, const int32_t *base, vuint64m4_t bindex,
    size_t vl);
void vluxseg4ei64_v_i32m2 (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vint32m2_t *v3, const int32_t *base,
    vuint64m4_t bindex, size_t vl);
void vluxseg2ei64_v_i32m4 (vint32m4_t *v0, vint32m4_t *v1, const
    int32_t *base, vuint64m8_t bindex, size_t vl);
void vluxseg2ei16_v_i64m4 (vint64m4_t *v0, vint64m4_t *v1, const
    int64_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg2ei32_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1, const
    int64_t *base, vuint32m1_t bindex, size_t vl);
void vluxseg3ei32_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1,
    vint64m2_t *v2, const int64_t *base, vuint32m1_t bindex,
    size_t vl);
void vluxseg4ei32_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1,
    vint64m2_t *v2, vint64m2_t *v3, const int64_t *base,
    vuint32m1_t bindex, size_t vl);
void vluxseg2ei32_v_i64m4 (vint64m4_t *v0, vint64m4_t *v1, const
    int64_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg2ei64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1, const
    int64_t *base, vuint64m1_t bindex, size_t vl);
void vluxseg3ei64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, const int64_t *base, vuint64m1_t bindex,
    size_t vl);
void vluxseg4ei64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, const int64_t *base,
    vuint64m1_t bindex, size_t vl);
void vluxseg5ei64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, const
    int64_t *base, vuint64m1_t bindex, size_t vl);
void vluxseg6ei64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, const int64_t *base, vuint64m1_t bindex, size_t vl);
void vluxseg7ei64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, vint64m1_t *v6, const int64_t *base, vuint64m1_t
    bindex, size_t vl);
void vluxseg8ei64_v_i64m1 (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, vint64m1_t *v6, vint64m1_t *v7, const int64_t *base,
    vuint64m1_t bindex, size_t vl);
void vluxseg2ei64_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1, const
    int64_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg3ei64_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1,
    vint64m2_t *v2, const int64_t *base, vuint64m2_t bindex,
```

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    size_t vl);
void vluxseg4ei64_v_i64m2 (vint64m2_t *v0, vint64m2_t *v1,
    vint64m2_t *v2, vint64m2_t *v3, const int64_t *base,
    vuint64m2_t bindex, size_t vl);
void vluxseg2ei64_v_i64m4 (vint64m4_t *v0, vint64m4_t *v1, const
    int64_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg2ei8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1, const
    uint8_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg3ei8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, const uint8_t *base, vuint8m1_t bindex,
    size_t vl);
void vluxseg4ei8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, const uint8_t *base,
    vuint8m1_t bindex, size_t vl);
void vluxseg5ei8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, const
    uint8_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg6ei8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, const uint8_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg7ei8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, const uint8_t *base, vuint8m1_t bindex,
    size_t vl);
void vluxseg8ei8_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vuint8m1_t *v7, const uint8_t *base,
    vuint8m1_t bindex, size_t vl);
void vluxseg2ei8_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1, const
    uint8_t *base, vuint8m2_t bindex, size_t vl);
void vluxseg3ei8_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, const uint8_t *base, vuint8m2_t bindex,
    size_t vl);
void vluxseg4ei8_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, vuint8m2_t *v3, const uint8_t *base,
    vuint8m2_t bindex, size_t vl);
void vluxseg2ei8_v_u8m4 (vuint8m4_t *v0, vuint8m4_t *v1, const
    uint8_t *base, vuint8m4_t bindex, size_t vl);
void vluxseg2ei16_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1, const
    uint8_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg3ei16_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, const uint8_t *base, vuint16m2_t bindex,
    size_t vl);
void vluxseg4ei16_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, const uint8_t *base,
    vuint16m2_t bindex, size_t vl);
```

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void vluxseg5ei16_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, const
    uint8_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg6ei16_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, const uint8_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg7ei16_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, const uint8_t *base, vuint16m2_t
    bindex, size_t vl);
void vluxseg8ei16_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vuint8m1_t *v7, const uint8_t *base,
    vuint16m2_t bindex, size_t vl);
void vluxseg2ei16_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1, const
    uint8_t *base, vuint16m4_t bindex, size_t vl);
void vluxseg3ei16_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, const uint8_t *base, vuint16m4_t bindex,
    size_t vl);
void vluxseg4ei16_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, vuint8m2_t *v3, const uint8_t *base,
    vuint16m4_t bindex, size_t vl);
void vluxseg2ei16_v_u8m4 (vuint8m4_t *v0, vuint8m4_t *v1, const
    uint8_t *base, vuint16m8_t bindex, size_t vl);
void vluxseg2ei32_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1, const
    uint8_t *base, vuint32m4_t bindex, size_t vl);
void vluxseg3ei32_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, const uint8_t *base, vuint32m4_t bindex,
    size_t vl);
void vluxseg4ei32_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, const uint8_t *base,
    vuint32m4_t bindex, size_t vl);
void vluxseg5ei32_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, const
    uint8_t *base, vuint32m4_t bindex, size_t vl);
void vluxseg6ei32_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, const uint8_t *base, vuint32m4_t bindex, size_t vl);
void vluxseg7ei32_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, const uint8_t *base, vuint32m4_t
    bindex, size_t vl);
void vluxseg8ei32_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vuint8m1_t *v7, const uint8_t *base,
    vuint32m4_t bindex, size_t vl);
```

```
void vluxseg2ei32_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1, const
    uint8_t *base, vuint32m8_t bindex, size_t vl);
void vluxseg3ei32_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, const uint8_t *base, vuint32m8_t bindex,
    size_t vl);
void vluxseg4ei32_v_u8m2 (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, vuint8m2_t *v3, const uint8_t *base,
    vuint32m8_t bindex, size_t vl);
void vluxseg2ei64_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1, const
    uint8_t *base, vuint64m8_t bindex, size_t vl);
void vluxseg3ei64_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, const uint8_t *base, vuint64m8_t bindex,
    size_t vl);
void vluxseg4ei64_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, const uint8_t *base,
    vuint64m8_t bindex, size_t vl);
void vluxseg5ei64_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, const
    uint8_t *base, vuint64m8_t bindex, size_t vl);
void vluxseg6ei64_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, const uint8_t *base, vuint64m8_t bindex, size_t vl);
void vluxseg7ei64_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, const uint8_t *base, vuint64m8_t
    bindex, size_t vl);
void vluxseg8ei64_v_u8m1 (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vuint8m1_t *v7, const uint8_t *base,
    vuint64m8_t bindex, size_t vl);
void vluxseg2ei8_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    const uint16_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg3ei8_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, const uint16_t *base, vuint8m1_t bindex,
    size_t vl);
void vluxseg4ei8_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vuint16m2_t *v3, const uint16_t *base,
    vuint8m1_t bindex, size_t vl);
void vluxseg2ei8_v_u16m4 (vuint16m4_t *v0, vuint16m4_t *v1,
    const uint16_t *base, vuint8m2_t bindex, size_t vl);
void vluxseg2ei16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    const uint16_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg3ei16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, const uint16_t *base, vuint16m1_t bindex,
    size_t vl);
```

```
void vluxseg4ei16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, const uint16_t *base,
    vuint16m1_t bindex, size_t vl);
void vluxseg5ei16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4, const
    uint16_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg6ei16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, const uint16_t *base, vuint16m1_t bindex,
    size_t vl);
void vluxseg7ei16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, const uint16_t *base,
    vuint16m1_t bindex, size_t vl);
void vluxseg8ei16_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vuint16m1_t *v7, const
    uint16_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg2ei16_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    const uint16_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg3ei16_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, const uint16_t *base, vuint16m2_t bindex,
    size_t vl);
void vluxseg4ei16_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vuint16m2_t *v3, const uint16_t *base,
    vuint16m2_t bindex, size_t vl);
void vluxseg2ei16_v_u16m4 (vuint16m4_t *v0, vuint16m4_t *v1,
    const uint16_t *base, vuint16m4_t bindex, size_t vl);
void vluxseg2ei32_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    const uint16_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg3ei32_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, const uint16_t *base, vuint32m2_t bindex,
    size_t vl);
void vluxseg4ei32_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, const uint16_t *base,
    vuint32m2_t bindex, size_t vl);
void vluxseg5ei32_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4, const
    uint16_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg6ei32_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, const uint16_t *base, vuint32m2_t bindex,
    size_t vl);
void vluxseg7ei32_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, const uint16_t *base,
```

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    vuint32m2_t bindex, size_t vl);
void vluxseg8ei32_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vuint16m1_t *v7, const
    uint16_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg2ei32_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    const uint16_t *base, vuint32m4_t bindex, size_t vl);
void vluxseg3ei32_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, const uint16_t *base, vuint32m4_t bindex,
    size_t vl);
void vluxseg4ei32_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vuint16m2_t *v3, const uint16_t *base,
    vuint32m4_t bindex, size_t vl);
void vluxseg2ei32_v_u16m4 (vuint16m4_t *v0, vuint16m4_t *v1,
    const uint16_t *base, vuint32m8_t bindex, size_t vl);
void vluxseg2ei64_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    const uint16_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg3ei64_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, const uint16_t *base, vuint64m4_t bindex,
    size_t vl);
void vluxseg4ei64_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, const uint16_t *base,
    vuint64m4_t bindex, size_t vl);
void vluxseg5ei64_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4, const
    uint16_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg6ei64_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, const uint16_t *base, vuint64m4_t bindex,
    size_t vl);
void vluxseg7ei64_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, const uint16_t *base,
    vuint64m4_t bindex, size_t vl);
void vluxseg8ei64_v_u16m1 (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vuint16m1_t *v7, const
    uint16_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg2ei64_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    const uint16_t *base, vuint64m8_t bindex, size_t vl);
void vluxseg3ei64_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, const uint16_t *base, vuint64m8_t bindex,
    size_t vl);
void vluxseg4ei64_v_u16m2 (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vuint16m2_t *v3, const uint16_t *base,
    vuint64m8_t bindex, size_t vl);
```

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void vluxseg2ei8_v_u32m4 (vuint32m4_t *v0, vuint32m4_t *v1,
    const uint32_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg2ei16_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    const uint32_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg3ei16_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, const uint32_t *base, vuint16m1_t bindex,
    size_t vl);
void vluxseg4ei16_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, vuint32m2_t *v3, const uint32_t *base,
    vuint16m1_t bindex, size_t vl);
void vluxseg2ei16_v_u32m4 (vuint32m4_t *v0, vuint32m4_t *v1,
    const uint32_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg2ei32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    const uint32_t *base, vuint32m1_t bindex, size_t vl);
void vluxseg3ei32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, const uint32_t *base, vuint32m1_t bindex,
    size_t vl);
void vluxseg4ei32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, const uint32_t *base,
    vuint32m1_t bindex, size_t vl);
void vluxseg5ei32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4, const
    uint32_t *base, vuint32m1_t bindex, size_t vl);
void vluxseg6ei32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, const uint32_t *base, vuint32m1_t bindex,
    size_t vl);
void vluxseg7ei32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, const uint32_t *base,
    vuint32m1_t bindex, size_t vl);
void vluxseg8ei32_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, vuint32m1_t *v7, const
    uint32_t *base, vuint32m1_t bindex, size_t vl);
void vluxseg2ei32_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    const uint32_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg3ei32_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, const uint32_t *base, vuint32m2_t bindex,
    size_t vl);
void vluxseg4ei32_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, vuint32m2_t *v3, const uint32_t *base,
    vuint32m2_t bindex, size_t vl);
void vluxseg2ei32_v_u32m4 (vuint32m4_t *v0, vuint32m4_t *v1,
    const uint32_t *base, vuint32m4_t bindex, size_t vl);
```

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void vluxseg2ei64_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    const uint32_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg3ei64_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, const uint32_t *base, vuint64m2_t bindex,
    size_t vl);
void vluxseg4ei64_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, const uint32_t *base,
    vuint64m2_t bindex, size_t vl);
void vluxseg5ei64_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4, const
    uint32_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg6ei64_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, const uint32_t *base, vuint64m2_t bindex,
    size_t vl);
void vluxseg7ei64_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, const uint32_t *base,
    vuint64m2_t bindex, size_t vl);
void vluxseg8ei64_v_u32m1 (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, vuint32m1_t *v7, const
    uint32_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg2ei64_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    const uint32_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg3ei64_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, const uint32_t *base, vuint64m4_t bindex,
    size_t vl);
void vluxseg4ei64_v_u32m2 (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, vuint32m2_t *v3, const uint32_t *base,
    vuint64m4_t bindex, size_t vl);
void vluxseg2ei64_v_u32m4 (vuint32m4_t *v0, vuint32m4_t *v1,
    const uint32_t *base, vuint64m8_t bindex, size_t vl);
void vluxseg2ei16_v_u64m4 (vuint64m4_t *v0, vuint64m4_t *v1,
    const uint64_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg2ei32_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1,
    const uint64_t *base, vuint32m1_t bindex, size_t vl);
void vluxseg3ei32_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, const uint64_t *base, vuint32m1_t bindex,
    size_t vl);
void vluxseg4ei32_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, vuint64m2_t *v3, const uint64_t *base,
    vuint32m1_t bindex, size_t vl);
void vluxseg2ei32_v_u64m4 (vuint64m4_t *v0, vuint64m4_t *v1,
    const uint64_t *base, vuint32m2_t bindex, size_t vl);
```

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void vluxseg2ei64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    const uint64_t *base, vuint64m1_t bindex, size_t vl);
void vluxseg3ei64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, const uint64_t *base, vuint64m1_t bindex,
    size_t vl);
void vluxseg4ei64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, const uint64_t *base,
    vuint64m1_t bindex, size_t vl);
void vluxseg5ei64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4, const
    uint64_t *base, vuint64m1_t bindex, size_t vl);
void vluxseg6ei64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, const uint64_t *base, vuint64m1_t bindex,
    size_t vl);
void vluxseg7ei64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vuint64m1_t *v6, const uint64_t *base,
    vuint64m1_t bindex, size_t vl);
void vluxseg8ei64_v_u64m1 (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vuint64m1_t *v6, vuint64m1_t *v7, const
    uint64_t *base, vuint64m1_t bindex, size_t vl);
void vluxseg2ei64_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1,
    const uint64_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg3ei64_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, const uint64_t *base, vuint64m2_t bindex,
    size_t vl);
void vluxseg4ei64_v_u64m2 (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, vuint64m2_t *v3, const uint64_t *base,
    vuint64m2_t bindex, size_t vl);
void vluxseg2ei64_v_u64m4 (vuint64m4_t *v0, vuint64m4_t *v1,
    const uint64_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg2ei8_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    const float16_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg3ei8_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, const float16_t *base, vuint8m1_t bindex,
    size_t vl);
void vluxseg4ei8_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, const float16_t *base,
    vuint8m1_t bindex, size_t vl);
void vluxseg2ei8_v_f16m4 (vfloat16m4_t *v0, vfloat16m4_t *v1,
    const float16_t *base, vuint8m2_t bindex, size_t vl);
void vluxseg2ei16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    const float16_t *base, vuint16m1_t bindex, size_t vl);
```

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void vluxseg3ei16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, const float16_t *base, vuint16m1_t bindex,
    size_t vl);
void vluxseg4ei16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, const float16_t *base,
    vuint16m1_t bindex, size_t vl);
void vluxseg5ei16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4, const
    float16_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg6ei16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, const float16_t *base, vuint16m1_t bindex,
    size_t vl);
void vluxseg7ei16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, const float16_t *base,
    vuint16m1_t bindex, size_t vl);
void vluxseg8ei16_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vfloat16m1_t *v7, const
    float16_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg2ei16_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    const float16_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg3ei16_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, const float16_t *base, vuint16m2_t bindex,
    size_t vl);
void vluxseg4ei16_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, const float16_t *base,
    vuint16m2_t bindex, size_t vl);
void vluxseg2ei16_v_f16m4 (vfloat16m4_t *v0, vfloat16m4_t *v1,
    const float16_t *base, vuint16m4_t bindex, size_t vl);
void vluxseg2ei32_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    const float16_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg3ei32_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, const float16_t *base, vuint32m2_t bindex,
    size_t vl);
void vluxseg4ei32_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, const float16_t *base,
    vuint32m2_t bindex, size_t vl);
void vluxseg5ei32_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4, const
    float16_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg6ei32_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, const float16_t *base, vuint32m2_t bindex,
    size_t vl);
```

```
void vluxseg7ei32_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, const float16_t *base,
    vuint32m2_t bindex, size_t vl);
void vluxseg8ei32_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vfloat16m1_t *v7, const
    float16_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg2ei32_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    const float16_t *base, vuint32m4_t bindex, size_t vl);
void vluxseg3ei32_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, const float16_t *base, vuint32m4_t bindex,
    size_t vl);
void vluxseg4ei32_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, const float16_t *base,
    vuint32m4_t bindex, size_t vl);
void vluxseg2ei32_v_f16m4 (vfloat16m4_t *v0, vfloat16m4_t *v1,
    const float16_t *base, vuint32m8_t bindex, size_t vl);
void vluxseg2ei64_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    const float16_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg3ei64_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, const float16_t *base, vuint64m4_t bindex,
    size_t vl);
void vluxseg4ei64_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, const float16_t *base,
    vuint64m4_t bindex, size_t vl);
void vluxseg5ei64_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4, const
    float16_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg6ei64_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, const float16_t *base, vuint64m4_t bindex,
    size_t vl);
void vluxseg7ei64_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, const float16_t *base,
    vuint64m4_t bindex, size_t vl);
void vluxseg8ei64_v_f16m1 (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vfloat16m1_t *v7, const
    float16_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg2ei64_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    const float16_t *base, vuint64m8_t bindex, size_t vl);
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    vfloat16m2_t *v2, const float16_t *base, vuint64m8_t bindex,
    size_t vl);
```

```
void vluxseg4ei64_v_f16m2 (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, const float16_t *base,
    vuint64m8_t bindex, size_t vl);
void vluxseg2ei8_v_f32m4 (vfloat32m4_t *v0, vfloat32m4_t *v1,
    const float32_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg2ei16_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    const float32_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg3ei16_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, const float32_t *base, vuint16m1_t bindex,
    size_t vl);
void vluxseg4ei16_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vfloat32m2_t *v3, const float32_t *base,
    vuint16m1_t bindex, size_t vl);
void vluxseg2ei16_v_f32m4 (vfloat32m4_t *v0, vfloat32m4_t *v1,
    const float32_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg2ei32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    const float32_t *base, vuint32m1_t bindex, size_t vl);
void vluxseg3ei32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, const float32_t *base, vuint32m1_t bindex,
    size_t vl);
void vluxseg4ei32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, const float32_t *base,
    vuint32m1_t bindex, size_t vl);
void vluxseg5ei32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4, const
    float32_t *base, vuint32m1_t bindex, size_t vl);
void vluxseg6ei32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, const float32_t *base, vuint32m1_t bindex,
    size_t vl);
void vluxseg7ei32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, const float32_t *base,
    vuint32m1_t bindex, size_t vl);
void vluxseg8ei32_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, vfloat32m1_t *v7, const
    float32_t *base, vuint32m1_t bindex, size_t vl);
void vluxseg2ei32_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    const float32_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg3ei32_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, const float32_t *base, vuint32m2_t bindex,
    size_t vl);
void vluxseg4ei32_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vfloat32m2_t *v3, const float32_t *base,
    vuint32m2_t bindex, size_t vl);
```

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void vluxseg2ei32_v_f32m4 (vfloat32m4_t *v0, vfloat32m4_t *v1,
    const float32_t *base, vuint32m4_t bindex, size_t vl);
void vluxseg2ei64_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    const float32_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg3ei64_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, const float32_t *base, vuint64m2_t bindex,
    size_t vl);
void vluxseg4ei64_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, const float32_t *base,
    vuint64m2_t bindex, size_t vl);
void vluxseg5ei64_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4, const
    float32_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg6ei64_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, const float32_t *base, vuint64m2_t bindex,
    size_t vl);
void vluxseg7ei64_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, const float32_t *base,
    vuint64m2_t bindex, size_t vl);
void vluxseg8ei64_v_f32m1 (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, vfloat32m1_t *v7, const
    float32_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg2ei64_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    const float32_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg3ei64_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, const float32_t *base, vuint64m4_t bindex,
    size_t vl);
void vluxseg4ei64_v_f32m2 (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vfloat32m2_t *v3, const float32_t *base,
    vuint64m4_t bindex, size_t vl);
void vluxseg2ei64_v_f32m4 (vfloat32m4_t *v0, vfloat32m4_t *v1,
    const float32_t *base, vuint64m8_t bindex, size_t vl);
void vluxseg2ei16_v_f64m4 (vfloat64m4_t *v0, vfloat64m4_t *v1,
    const float64_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg2ei32_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    const float64_t *base, vuint32m1_t bindex, size_t vl);
void vluxseg3ei32_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, const float64_t *base, vuint32m1_t bindex,
    size_t vl);
void vluxseg4ei32_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vfloat64m2_t *v3, const float64_t *base,
    vuint32m1_t bindex, size_t vl);
```

```c
void vluxseg2ei32_v_f64m4 (vfloat64m4_t *v0, vfloat64m4_t *v1,
    const float64_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg2ei64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    const float64_t *base, vuint64m1_t bindex, size_t vl);
void vluxseg3ei64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, const float64_t *base, vuint64m1_t bindex,
    size_t vl);
void vluxseg4ei64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, const float64_t *base,
    vuint64m1_t bindex, size_t vl);
void vluxseg5ei64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4, const
    float64_t *base, vuint64m1_t bindex, size_t vl);
void vluxseg6ei64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, const float64_t *base, vuint64m1_t bindex,
    size_t vl);
void vluxseg7ei64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, vfloat64m1_t *v6, const float64_t *base,
    vuint64m1_t bindex, size_t vl);
void vluxseg8ei64_v_f64m1 (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, vfloat64m1_t *v6, vfloat64m1_t *v7, const
    float64_t *base, vuint64m1_t bindex, size_t vl);
void vluxseg2ei64_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    const float64_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg3ei64_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, const float64_t *base, vuint64m2_t bindex,
    size_t vl);
void vluxseg4ei64_v_f64m2 (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vfloat64m2_t *v3, const float64_t *base,
    vuint64m2_t bindex, size_t vl);
void vluxseg2ei64_v_f64m4 (vfloat64m4_t *v0, vfloat64m4_t *v1,
    const float64_t *base, vuint64m4_t bindex, size_t vl);
// masked functions
void vloxseg2ei8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1,
    const int8_t *base, vuint8m1_t bindex, size_t vl);
void vloxseg3ei8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, const int8_t
    *base, vuint8m1_t bindex, size_t vl);
void vloxseg4ei8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vbool8_t mask, vint8m1_t
    maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
```

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            vint8m1_t maskedoff3, const int8_t *base, vuint8m1_t bindex,
            size_t vl);
void vloxseg5ei8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
            vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vbool8_t mask,
            vint8m1_t maskedoff0, vint8m1_t maskedoff1, vint8m1_t
            maskedoff2, vint8m1_t maskedoff3, vint8m1_t maskedoff4,
            const int8_t *base, vuint8m1_t bindex, size_t vl);
void vloxseg6ei8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
            vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
            vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1,
            vint8m1_t maskedoff2, vint8m1_t maskedoff3, vint8m1_t
            maskedoff4, vint8m1_t maskedoff5, const int8_t *base,
            vuint8m1_t bindex, size_t vl);
void vloxseg7ei8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
            vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
            vint8m1_t *v6, vbool8_t mask, vint8m1_t maskedoff0,
            vint8m1_t maskedoff1, vint8m1_t maskedoff2, vint8m1_t
            maskedoff3, vint8m1_t maskedoff4, vint8m1_t maskedoff5,
            vint8m1_t maskedoff6, const int8_t *base, vuint8m1_t bindex,
            size_t vl);
void vloxseg8ei8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
            vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
            vint8m1_t *v6, vint8m1_t *v7, vbool8_t mask, vint8m1_t
            maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
            vint8m1_t maskedoff3, vint8m1_t maskedoff4, vint8m1_t
            maskedoff5, vint8m1_t maskedoff6, vint8m1_t maskedoff7,
            const int8_t *base, vuint8m1_t bindex, size_t vl);
void vloxseg2ei8_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
            vbool4_t mask, vint8m2_t maskedoff0, vint8m2_t maskedoff1,
            const int8_t *base, vuint8m2_t bindex, size_t vl);
void vloxseg3ei8_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
            vint8m2_t *v2, vbool4_t mask, vint8m2_t maskedoff0,
            vint8m2_t maskedoff1, vint8m2_t maskedoff2, const int8_t
            *base, vuint8m2_t bindex, size_t vl);
void vloxseg4ei8_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
            vint8m2_t *v2, vint8m2_t *v3, vbool4_t mask, vint8m2_t
            maskedoff0, vint8m2_t maskedoff1, vint8m2_t maskedoff2,
            vint8m2_t maskedoff3, const int8_t *base, vuint8m2_t bindex,
            size_t vl);
void vloxseg2ei8_v_i8m4_m (vint8m4_t *v0, vint8m4_t *v1,
            vbool2_t mask, vint8m4_t maskedoff0, vint8m4_t maskedoff1,
            const int8_t *base, vuint8m4_t bindex, size_t vl);
void vloxseg2ei16_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
            vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1,
            const int8_t *base, vuint16m2_t bindex, size_t vl);
```

```
void vloxseg3ei16_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, const int8_t
    *base, vuint16m2_t bindex, size_t vl);
void vloxseg4ei16_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vbool8_t mask, vint8m1_t
    maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
    vint8m1_t maskedoff3, const int8_t *base, vuint16m2_t
    bindex, size_t vl);
void vloxseg5ei16_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vbool8_t mask,
    vint8m1_t maskedoff0, vint8m1_t maskedoff1, vint8m1_t
    maskedoff2, vint8m1_t maskedoff3, vint8m1_t maskedoff4,
    const int8_t *base, vuint16m2_t bindex, size_t vl);
void vloxseg6ei16_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1,
    vint8m1_t maskedoff2, vint8m1_t maskedoff3, vint8m1_t
    maskedoff4, vint8m1_t maskedoff5, const int8_t *base,
    vuint16m2_t bindex, size_t vl);
void vloxseg7ei16_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, vint8m1_t
    maskedoff3, vint8m1_t maskedoff4, vint8m1_t maskedoff5,
    vint8m1_t maskedoff6, const int8_t *base, vuint16m2_t
    bindex, size_t vl);
void vloxseg8ei16_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vint8m1_t *v7, vbool8_t mask, vint8m1_t
    maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
    vint8m1_t maskedoff3, vint8m1_t maskedoff4, vint8m1_t
    maskedoff5, vint8m1_t maskedoff6, vint8m1_t maskedoff7,
    const int8_t *base, vuint16m2_t bindex, size_t vl);
void vloxseg2ei16_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
    vbool4_t mask, vint8m2_t maskedoff0, vint8m2_t maskedoff1,
    const int8_t *base, vuint16m4_t bindex, size_t vl);
void vloxseg3ei16_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
    vint8m2_t *v2, vbool4_t mask, vint8m2_t maskedoff0,
    vint8m2_t maskedoff1, vint8m2_t maskedoff2, const int8_t
    *base, vuint16m4_t bindex, size_t vl);
void vloxseg4ei16_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
    vint8m2_t *v2, vint8m2_t *v3, vbool4_t mask, vint8m2_t
    maskedoff0, vint8m2_t maskedoff1, vint8m2_t maskedoff2,
    vint8m2_t maskedoff3, const int8_t *base, vuint16m4_t
    bindex, size_t vl);
```

```
void vloxseg2ei16_v_i8m4_m (vint8m4_t *v0, vint8m4_t *v1,
    vbool2_t mask, vint8m4_t maskedoff0, vint8m4_t maskedoff1,
    const int8_t *base, vuint16m8_t bindex, size_t vl);
void vloxseg2ei32_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1,
    const int8_t *base, vuint32m4_t bindex, size_t vl);
void vloxseg3ei32_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, const int8_t
    *base, vuint32m4_t bindex, size_t vl);
void vloxseg4ei32_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vbool8_t mask, vint8m1_t
    maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
    vint8m1_t maskedoff3, const int8_t *base, vuint32m4_t
    bindex, size_t vl);
void vloxseg5ei32_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vbool8_t mask,
    vint8m1_t maskedoff0, vint8m1_t maskedoff1, vint8m1_t
    maskedoff2, vint8m1_t maskedoff3, vint8m1_t maskedoff4,
    const int8_t *base, vuint32m4_t bindex, size_t vl);
void vloxseg6ei32_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1,
    vint8m1_t maskedoff2, vint8m1_t maskedoff3, vint8m1_t
    maskedoff4, vint8m1_t maskedoff5, const int8_t *base,
    vuint32m4_t bindex, size_t vl);
void vloxseg7ei32_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, vint8m1_t
    maskedoff3, vint8m1_t maskedoff4, vint8m1_t maskedoff5,
    vint8m1_t maskedoff6, const int8_t *base, vuint32m4_t
    bindex, size_t vl);
void vloxseg8ei32_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vint8m1_t *v7, vbool8_t mask, vint8m1_t
    maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
    vint8m1_t maskedoff3, vint8m1_t maskedoff4, vint8m1_t
    maskedoff5, vint8m1_t maskedoff6, vint8m1_t maskedoff7,
    const int8_t *base, vuint32m4_t bindex, size_t vl);
void vloxseg2ei32_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
    vbool4_t mask, vint8m2_t maskedoff0, vint8m2_t maskedoff1,
    const int8_t *base, vuint32m8_t bindex, size_t vl);
void vloxseg3ei32_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
    vint8m2_t *v2, vbool4_t mask, vint8m2_t maskedoff0,
    vint8m2_t maskedoff1, vint8m2_t maskedoff2, const int8_t
```

```
                *base, vuint32m8_t bindex, size_t vl);
void vloxseg4ei32_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
    vint8m2_t *v2, vint8m2_t *v3, vbool4_t mask, vint8m2_t
    maskedoff0, vint8m2_t maskedoff1, vint8m2_t maskedoff2,
    vint8m2_t maskedoff3, const int8_t *base, vuint32m8_t
    bindex, size_t vl);
void vloxseg2ei64_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1,
    const int8_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg3ei64_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, const int8_t
    *base, vuint64m8_t bindex, size_t vl);
void vloxseg4ei64_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vbool8_t mask, vint8m1_t
    maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
    vint8m1_t maskedoff3, const int8_t *base, vuint64m8_t
    bindex, size_t vl);
void vloxseg5ei64_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vbool8_t mask,
    vint8m1_t maskedoff0, vint8m1_t maskedoff1, vint8m1_t
    maskedoff2, vint8m1_t maskedoff3, vint8m1_t maskedoff4,
    const int8_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg6ei64_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1,
    vint8m1_t maskedoff2, vint8m1_t maskedoff3, vint8m1_t
    maskedoff4, vint8m1_t maskedoff5, const int8_t *base,
    vuint64m8_t bindex, size_t vl);
void vloxseg7ei64_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, vint8m1_t
    maskedoff3, vint8m1_t maskedoff4, vint8m1_t maskedoff5,
    vint8m1_t maskedoff6, const int8_t *base, vuint64m8_t
    bindex, size_t vl);
void vloxseg8ei64_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vint8m1_t *v7, vbool8_t mask, vint8m1_t
    maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
    vint8m1_t maskedoff3, vint8m1_t maskedoff4, vint8m1_t
    maskedoff5, vint8m1_t maskedoff6, vint8m1_t maskedoff7,
    const int8_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg2ei8_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vbool8_t mask, vint16m2_t maskedoff0, vint16m2_t maskedoff1,
    const int16_t *base, vuint8m1_t bindex, size_t vl);
```

```
void vloxseg3ei8_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vbool8_t mask, vint16m2_t maskedoff0,
    vint16m2_t maskedoff1, vint16m2_t maskedoff2, const int16_t
    *base, vuint8m1_t bindex, size_t vl);
void vloxseg4ei8_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vint16m2_t *v3, vbool8_t mask, vint16m2_t
    maskedoff0, vint16m2_t maskedoff1, vint16m2_t maskedoff2,
    vint16m2_t maskedoff3, const int16_t *base, vuint8m1_t
    bindex, size_t vl);
void vloxseg2ei8_v_i16m4_m (vint16m4_t *v0, vint16m4_t *v1,
    vbool4_t mask, vint16m4_t maskedoff0, vint16m4_t maskedoff1,
    const int16_t *base, vuint8m2_t bindex, size_t vl);
void vloxseg2ei16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vbool16_t mask, vint16m1_t maskedoff0, vint16m1_t
    maskedoff1, const int16_t *base, vuint16m1_t bindex, size_t
    vl);
void vloxseg3ei16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vbool16_t mask, vint16m1_t maskedoff0,
    vint16m1_t maskedoff1, vint16m1_t maskedoff2, const int16_t
    *base, vuint16m1_t bindex, size_t vl);
void vloxseg4ei16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vbool16_t mask, vint16m1_t
    maskedoff0, vint16m1_t maskedoff1, vint16m1_t maskedoff2,
    vint16m1_t maskedoff3, const int16_t *base, vuint16m1_t
    bindex, size_t vl);
void vloxseg5ei16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vbool16_t
    mask, vint16m1_t maskedoff0, vint16m1_t maskedoff1,
    vint16m1_t maskedoff2, vint16m1_t maskedoff3, vint16m1_t
    maskedoff4, const int16_t *base, vuint16m1_t bindex, size_t
    vl);
void vloxseg6ei16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vbool16_t mask, vint16m1_t maskedoff0, vint16m1_t
    maskedoff1, vint16m1_t maskedoff2, vint16m1_t maskedoff3,
    vint16m1_t maskedoff4, vint16m1_t maskedoff5, const int16_t
    *base, vuint16m1_t bindex, size_t vl);
void vloxseg7ei16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, vbool16_t mask, vint16m1_t maskedoff0,
    vint16m1_t maskedoff1, vint16m1_t maskedoff2, vint16m1_t
    maskedoff3, vint16m1_t maskedoff4, vint16m1_t maskedoff5,
    vint16m1_t maskedoff6, const int16_t *base, vuint16m1_t
    bindex, size_t vl);
void vloxseg8ei16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
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        *v5, vint16m1_t *v6, vint16m1_t *v7, vbool16_t mask,
        vint16m1_t maskedoff0, vint16m1_t maskedoff1, vint16m1_t
        maskedoff2, vint16m1_t maskedoff3, vint16m1_t maskedoff4,
        vint16m1_t maskedoff5, vint16m1_t maskedoff6, vint16m1_t
        maskedoff7, const int16_t *base, vuint16m1_t bindex, size_t
        vl);
void vloxseg2ei16_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
        vbool8_t mask, vint16m2_t maskedoff0, vint16m2_t maskedoff1,
        const int16_t *base, vuint16m2_t bindex, size_t vl);
void vloxseg3ei16_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
        vint16m2_t *v2, vbool8_t mask, vint16m2_t maskedoff0,
        vint16m2_t maskedoff1, vint16m2_t maskedoff2, const int16_t
        *base, vuint16m2_t bindex, size_t vl);
void vloxseg4ei16_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
        vint16m2_t *v2, vint16m2_t *v3, vbool8_t mask, vint16m2_t
        maskedoff0, vint16m2_t maskedoff1, vint16m2_t maskedoff2,
        vint16m2_t maskedoff3, const int16_t *base, vuint16m2_t
        bindex, size_t vl);
void vloxseg2ei16_v_i16m4_m (vint16m4_t *v0, vint16m4_t *v1,
        vbool4_t mask, vint16m4_t maskedoff0, vint16m4_t maskedoff1,
        const int16_t *base, vuint16m4_t bindex, size_t vl);
void vloxseg2ei32_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
        vbool16_t mask, vint16m1_t maskedoff0, vint16m1_t
        maskedoff1, const int16_t *base, vuint32m2_t bindex, size_t
        vl);
void vloxseg3ei32_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
        vint16m1_t *v2, vbool16_t mask, vint16m1_t maskedoff0,
        vint16m1_t maskedoff1, vint16m1_t maskedoff2, const int16_t
        *base, vuint32m2_t bindex, size_t vl);
void vloxseg4ei32_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
        vint16m1_t *v2, vint16m1_t *v3, vbool16_t mask, vint16m1_t
        maskedoff0, vint16m1_t maskedoff1, vint16m1_t maskedoff2,
        vint16m1_t maskedoff3, const int16_t *base, vuint32m2_t
        bindex, size_t vl);
void vloxseg5ei32_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
        vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vbool16_t
        mask, vint16m1_t maskedoff0, vint16m1_t maskedoff1,
        vint16m1_t maskedoff2, vint16m1_t maskedoff3, vint16m1_t
        maskedoff4, const int16_t *base, vuint32m2_t bindex, size_t
        vl);
void vloxseg6ei32_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
        vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
        *v5, vbool16_t mask, vint16m1_t maskedoff0, vint16m1_t
        maskedoff1, vint16m1_t maskedoff2, vint16m1_t maskedoff3,
        vint16m1_t maskedoff4, vint16m1_t maskedoff5, const int16_t
        *base, vuint32m2_t bindex, size_t vl);
```

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void vloxseg7ei32_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, vbool16_t mask, vint16m1_t maskedoff0,
    vint16m1_t maskedoff1, vint16m1_t maskedoff2, vint16m1_t
    maskedoff3, vint16m1_t maskedoff4, vint16m1_t maskedoff5,
    vint16m1_t maskedoff6, const int16_t *base, vuint32m2_t
    bindex, size_t vl);
void vloxseg8ei32_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, vint16m1_t *v7, vbool16_t mask,
    vint16m1_t maskedoff0, vint16m1_t maskedoff1, vint16m1_t
    maskedoff2, vint16m1_t maskedoff3, vint16m1_t maskedoff4,
    vint16m1_t maskedoff5, vint16m1_t maskedoff6, vint16m1_t
    maskedoff7, const int16_t *base, vuint32m2_t bindex, size_t
    vl);
void vloxseg2ei32_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vbool8_t mask, vint16m2_t maskedoff0, vint16m2_t maskedoff1,
    const int16_t *base, vuint32m4_t bindex, size_t vl);
void vloxseg3ei32_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vbool8_t mask, vint16m2_t maskedoff0,
    vint16m2_t maskedoff1, vint16m2_t maskedoff2, const int16_t
    *base, vuint32m4_t bindex, size_t vl);
void vloxseg4ei32_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vint16m2_t *v3, vbool8_t mask, vint16m2_t
    maskedoff0, vint16m2_t maskedoff1, vint16m2_t maskedoff2,
    vint16m2_t maskedoff3, const int16_t *base, vuint32m4_t
    bindex, size_t vl);
void vloxseg2ei32_v_i16m4_m (vint16m4_t *v0, vint16m4_t *v1,
    vbool4_t mask, vint16m4_t maskedoff0, vint16m4_t maskedoff1,
    const int16_t *base, vuint32m8_t bindex, size_t vl);
void vloxseg2ei64_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vbool16_t mask, vint16m1_t maskedoff0, vint16m1_t
    maskedoff1, const int16_t *base, vuint64m4_t bindex, size_t
    vl);
void vloxseg3ei64_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vbool16_t mask, vint16m1_t maskedoff0,
    vint16m1_t maskedoff1, vint16m1_t maskedoff2, const int16_t
    *base, vuint64m4_t bindex, size_t vl);
void vloxseg4ei64_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vbool16_t mask, vint16m1_t
    maskedoff0, vint16m1_t maskedoff1, vint16m1_t maskedoff2,
    vint16m1_t maskedoff3, const int16_t *base, vuint64m4_t
    bindex, size_t vl);
void vloxseg5ei64_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vbool16_t
    mask, vint16m1_t maskedoff0, vint16m1_t maskedoff1,
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            vint16m1_t maskedoff2, vint16m1_t maskedoff3, vint16m1_t
            maskedoff4, const int16_t *base, vuint64m4_t bindex, size_t
            vl);
void vloxseg6ei64_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
            vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
            *v5, vbool16_t mask, vint16m1_t maskedoff0, vint16m1_t
            maskedoff1, vint16m1_t maskedoff2, vint16m1_t maskedoff3,
            vint16m1_t maskedoff4, vint16m1_t maskedoff5, const int16_t
            *base, vuint64m4_t bindex, size_t vl);
void vloxseg7ei64_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
            vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
            *v5, vint16m1_t *v6, vbool16_t mask, vint16m1_t maskedoff0,
            vint16m1_t maskedoff1, vint16m1_t maskedoff2, vint16m1_t
            maskedoff3, vint16m1_t maskedoff4, vint16m1_t maskedoff5,
            vint16m1_t maskedoff6, const int16_t *base, vuint64m4_t
            bindex, size_t vl);
void vloxseg8ei64_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
            vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
            *v5, vint16m1_t *v6, vint16m1_t *v7, vbool16_t mask,
            vint16m1_t maskedoff0, vint16m1_t maskedoff1, vint16m1_t
            maskedoff2, vint16m1_t maskedoff3, vint16m1_t maskedoff4,
            vint16m1_t maskedoff5, vint16m1_t maskedoff6, vint16m1_t
            maskedoff7, const int16_t *base, vuint64m4_t bindex, size_t
            vl);
void vloxseg2ei64_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
            vbool8_t mask, vint16m2_t maskedoff0, vint16m2_t maskedoff1,
            const int16_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg3ei64_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
            vint16m2_t *v2, vbool8_t mask, vint16m2_t maskedoff0,
            vint16m2_t maskedoff1, vint16m2_t maskedoff2, const int16_t
            *base, vuint64m8_t bindex, size_t vl);
void vloxseg4ei64_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
            vint16m2_t *v2, vint16m2_t *v3, vbool8_t mask, vint16m2_t
            maskedoff0, vint16m2_t maskedoff1, vint16m2_t maskedoff2,
            vint16m2_t maskedoff3, const int16_t *base, vuint64m8_t
            bindex, size_t vl);
void vloxseg2ei8_v_i32m4_m (vint32m4_t *v0, vint32m4_t *v1,
            vbool8_t mask, vint32m4_t maskedoff0, vint32m4_t maskedoff1,
            const int32_t *base, vuint8m1_t bindex, size_t vl);
void vloxseg2ei16_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
            vbool16_t mask, vint32m2_t maskedoff0, vint32m2_t
            maskedoff1, const int32_t *base, vuint16m1_t bindex, size_t
            vl);
void vloxseg3ei16_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
            vint32m2_t *v2, vbool16_t mask, vint32m2_t maskedoff0,
            vint32m2_t maskedoff1, vint32m2_t maskedoff2, const int32_t
```

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*base, vuint16m1_t bindex, size_t vl);
void vloxseg4ei16_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vint32m2_t *v3, vbool16_t mask, vint32m2_t
    maskedoff0, vint32m2_t maskedoff1, vint32m2_t maskedoff2,
    vint32m2_t maskedoff3, const int32_t *base, vuint16m1_t
    bindex, size_t vl);
void vloxseg2ei16_v_i32m4_m (vint32m4_t *v0, vint32m4_t *v1,
    vbool8_t mask, vint32m4_t maskedoff0, vint32m4_t maskedoff1,
    const int32_t *base, vuint16m2_t bindex, size_t vl);
void vloxseg2ei32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vbool32_t mask, vint32m1_t maskedoff0, vint32m1_t
    maskedoff1, const int32_t *base, vuint32m1_t bindex, size_t
    vl);
void vloxseg3ei32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vbool32_t mask, vint32m1_t maskedoff0,
    vint32m1_t maskedoff1, vint32m1_t maskedoff2, const int32_t
    *base, vuint32m1_t bindex, size_t vl);
void vloxseg4ei32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vbool32_t mask, vint32m1_t
    maskedoff0, vint32m1_t maskedoff1, vint32m1_t maskedoff2,
    vint32m1_t maskedoff3, const int32_t *base, vuint32m1_t
    bindex, size_t vl);
void vloxseg5ei32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vbool32_t
    mask, vint32m1_t maskedoff0, vint32m1_t maskedoff1,
    vint32m1_t maskedoff2, vint32m1_t maskedoff3, vint32m1_t
    maskedoff4, const int32_t *base, vuint32m1_t bindex, size_t
    vl);
void vloxseg6ei32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vbool32_t mask, vint32m1_t maskedoff0, vint32m1_t
    maskedoff1, vint32m1_t maskedoff2, vint32m1_t maskedoff3,
    vint32m1_t maskedoff4, vint32m1_t maskedoff5, const int32_t
    *base, vuint32m1_t bindex, size_t vl);
void vloxseg7ei32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, vbool32_t mask, vint32m1_t maskedoff0,
    vint32m1_t maskedoff1, vint32m1_t maskedoff2, vint32m1_t
    maskedoff3, vint32m1_t maskedoff4, vint32m1_t maskedoff5,
    vint32m1_t maskedoff6, const int32_t *base, vuint32m1_t
    bindex, size_t vl);
void vloxseg8ei32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, vint32m1_t *v7, vbool32_t mask,
    vint32m1_t maskedoff0, vint32m1_t maskedoff1, vint32m1_t
    maskedoff2, vint32m1_t maskedoff3, vint32m1_t maskedoff4,
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    vint32m1_t maskedoff5, vint32m1_t maskedoff6, vint32m1_t
    maskedoff7, const int32_t *base, vuint32m1_t bindex, size_t
    vl);
void vloxseg2ei32_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
    vbool16_t mask, vint32m2_t maskedoff0, vint32m2_t
    maskedoff1, const int32_t *base, vuint32m2_t bindex, size_t
    vl);
void vloxseg3ei32_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vbool16_t mask, vint32m2_t maskedoff0,
    vint32m2_t maskedoff1, vint32m2_t maskedoff2, const int32_t
    *base, vuint32m2_t bindex, size_t vl);
void vloxseg4ei32_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vint32m2_t *v3, vbool16_t mask, vint32m2_t
    maskedoff0, vint32m2_t maskedoff1, vint32m2_t maskedoff2,
    vint32m2_t maskedoff3, const int32_t *base, vuint32m2_t
    bindex, size_t vl);
void vloxseg2ei32_v_i32m4_m (vint32m4_t *v0, vint32m4_t *v1,
    vbool8_t mask, vint32m4_t maskedoff0, vint32m4_t maskedoff1,
    const int32_t *base, vuint32m4_t bindex, size_t vl);
void vloxseg2ei64_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vbool32_t mask, vint32m1_t maskedoff0, vint32m1_t
    maskedoff1, const int32_t *base, vuint64m2_t bindex, size_t
    vl);
void vloxseg3ei64_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vbool32_t mask, vint32m1_t maskedoff0,
    vint32m1_t maskedoff1, vint32m1_t maskedoff2, const int32_t
    *base, vuint64m2_t bindex, size_t vl);
void vloxseg4ei64_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vbool32_t mask, vint32m1_t
    maskedoff0, vint32m1_t maskedoff1, vint32m1_t maskedoff2,
    vint32m1_t maskedoff3, const int32_t *base, vuint64m2_t
    bindex, size_t vl);
void vloxseg5ei64_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vbool32_t
    mask, vint32m1_t maskedoff0, vint32m1_t maskedoff1,
    vint32m1_t maskedoff2, vint32m1_t maskedoff3, vint32m1_t
    maskedoff4, const int32_t *base, vuint64m2_t bindex, size_t
    vl);
void vloxseg6ei64_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vbool32_t mask, vint32m1_t maskedoff0, vint32m1_t
    maskedoff1, vint32m1_t maskedoff2, vint32m1_t maskedoff3,
    vint32m1_t maskedoff4, vint32m1_t maskedoff5, const int32_t
    *base, vuint64m2_t bindex, size_t vl);
void vloxseg7ei64_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
```

```
                  *v5, vint32m1_t *v6, vbool32_t mask, vint32m1_t maskedoff0,
                  vint32m1_t maskedoff1, vint32m1_t maskedoff2, vint32m1_t
                  maskedoff3, vint32m1_t maskedoff4, vint32m1_t maskedoff5,
                  vint32m1_t maskedoff6, const int32_t *base, vuint64m2_t
                  bindex, size_t vl);
void vloxseg8ei64_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
                  vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
                  *v5, vint32m1_t *v6, vint32m1_t *v7, vbool32_t mask,
                  vint32m1_t maskedoff0, vint32m1_t maskedoff1, vint32m1_t
                  maskedoff2, vint32m1_t maskedoff3, vint32m1_t maskedoff4,
                  vint32m1_t maskedoff5, vint32m1_t maskedoff6, vint32m1_t
                  maskedoff7, const int32_t *base, vuint64m2_t bindex, size_t
                  vl);
void vloxseg2ei64_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
                  vbool16_t mask, vint32m2_t maskedoff0, vint32m2_t
                  maskedoff1, const int32_t *base, vuint64m4_t bindex, size_t
                  vl);
void vloxseg3ei64_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
                  vint32m2_t *v2, vbool16_t mask, vint32m2_t maskedoff0,
                  vint32m2_t maskedoff1, vint32m2_t maskedoff2, const int32_t
                  *base, vuint64m4_t bindex, size_t vl);
void vloxseg4ei64_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
                  vint32m2_t *v2, vint32m2_t *v3, vbool16_t mask, vint32m2_t
                  maskedoff0, vint32m2_t maskedoff1, vint32m2_t maskedoff2,
                  vint32m2_t maskedoff3, const int32_t *base, vuint64m4_t
                  bindex, size_t vl);
void vloxseg2ei64_v_i32m4_m (vint32m4_t *v0, vint32m4_t *v1,
                  vbool8_t mask, vint32m4_t maskedoff0, vint32m4_t maskedoff1,
                  const int32_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg2ei16_v_i64m4_m (vint64m4_t *v0, vint64m4_t *v1,
                  vbool16_t mask, vint64m4_t maskedoff0, vint64m4_t
                  maskedoff1, const int64_t *base, vuint16m1_t bindex, size_t
                  vl);
void vloxseg2ei32_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
                  vbool32_t mask, vint64m2_t maskedoff0, vint64m2_t
                  maskedoff1, const int64_t *base, vuint32m1_t bindex, size_t
                  vl);
void vloxseg3ei32_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
                  vint64m2_t *v2, vbool32_t mask, vint64m2_t maskedoff0,
                  vint64m2_t maskedoff1, vint64m2_t maskedoff2, const int64_t
                  *base, vuint32m1_t bindex, size_t vl);
void vloxseg4ei32_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
                  vint64m2_t *v2, vint64m2_t *v3, vbool32_t mask, vint64m2_t
                  maskedoff0, vint64m2_t maskedoff1, vint64m2_t maskedoff2,
                  vint64m2_t maskedoff3, const int64_t *base, vuint32m1_t
                  bindex, size_t vl);
```

```
void vloxseg2ei32_v_i64m4_m (vint64m4_t *v0, vint64m4_t *v1,
    vbool16_t mask, vint64m4_t maskedoff0, vint64m4_t
    maskedoff1, const int64_t *base, vuint32m2_t bindex, size_t
    vl);
void vloxseg2ei64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
    vbool64_t mask, vint64m1_t maskedoff0, vint64m1_t
    maskedoff1, const int64_t *base, vuint64m1_t bindex, size_t
    vl);
void vloxseg3ei64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vbool64_t mask, vint64m1_t maskedoff0,
    vint64m1_t maskedoff1, vint64m1_t maskedoff2, const int64_t
    *base, vuint64m1_t bindex, size_t vl);
void vloxseg4ei64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vbool64_t mask, vint64m1_t
    maskedoff0, vint64m1_t maskedoff1, vint64m1_t maskedoff2,
    vint64m1_t maskedoff3, const int64_t *base, vuint64m1_t
    bindex, size_t vl);
void vloxseg5ei64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vbool64_t
    mask, vint64m1_t maskedoff0, vint64m1_t maskedoff1,
    vint64m1_t maskedoff2, vint64m1_t maskedoff3, vint64m1_t
    maskedoff4, const int64_t *base, vuint64m1_t bindex, size_t
    vl);
void vloxseg6ei64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, vbool64_t mask, vint64m1_t maskedoff0, vint64m1_t
    maskedoff1, vint64m1_t maskedoff2, vint64m1_t maskedoff3,
    vint64m1_t maskedoff4, vint64m1_t maskedoff5, const int64_t
    *base, vuint64m1_t bindex, size_t vl);
void vloxseg7ei64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, vint64m1_t *v6, vbool64_t mask, vint64m1_t maskedoff0,
    vint64m1_t maskedoff1, vint64m1_t maskedoff2, vint64m1_t
    maskedoff3, vint64m1_t maskedoff4, vint64m1_t maskedoff5,
    vint64m1_t maskedoff6, const int64_t *base, vuint64m1_t
    bindex, size_t vl);
void vloxseg8ei64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
    vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
    *v5, vint64m1_t *v6, vint64m1_t *v7, vbool64_t mask,
    vint64m1_t maskedoff0, vint64m1_t maskedoff1, vint64m1_t
    maskedoff2, vint64m1_t maskedoff3, vint64m1_t maskedoff4,
    vint64m1_t maskedoff5, vint64m1_t maskedoff6, vint64m1_t
    maskedoff7, const int64_t *base, vuint64m1_t bindex, size_t
    vl);
void vloxseg2ei64_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
    vbool32_t mask, vint64m2_t maskedoff0, vint64m2_t
```

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      maskedoff1, const int64_t *base, vuint64m2_t bindex, size_t
      vl);
void vloxseg3ei64_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
      vint64m2_t *v2, vbool32_t mask, vint64m2_t maskedoff0,
      vint64m2_t maskedoff1, vint64m2_t maskedoff2, const int64_t
      *base, vuint64m2_t bindex, size_t vl);
void vloxseg4ei64_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
      vint64m2_t *v2, vint64m2_t *v3, vbool32_t mask, vint64m2_t
      maskedoff0, vint64m2_t maskedoff1, vint64m2_t maskedoff2,
      vint64m2_t maskedoff3, const int64_t *base, vuint64m2_t
      bindex, size_t vl);
void vloxseg2ei64_v_i64m4_m (vint64m4_t *v0, vint64m4_t *v1,
      vbool16_t mask, vint64m4_t maskedoff0, vint64m4_t
      maskedoff1, const int64_t *base, vuint64m4_t bindex, size_t
      vl);
void vloxseg2ei8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
      vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
      const uint8_t *base, vuint8m1_t bindex, size_t vl);
void vloxseg3ei8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
      vuint8m1_t *v2, vbool8_t mask, vuint8m1_t maskedoff0,
      vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, const uint8_t
      *base, vuint8m1_t bindex, size_t vl);
void vloxseg4ei8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
      vuint8m1_t *v2, vuint8m1_t *v3, vbool8_t mask, vuint8m1_t
      maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t maskedoff2,
      vuint8m1_t maskedoff3, const uint8_t *base, vuint8m1_t
      bindex, size_t vl);
void vloxseg5ei8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
      vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vbool8_t
      mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
      vuint8m1_t maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t
      maskedoff4, const uint8_t *base, vuint8m1_t bindex, size_t
      vl);
void vloxseg6ei8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
      vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
      *v5, vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t
      maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t maskedoff3,
      vuint8m1_t maskedoff4, vuint8m1_t maskedoff5, const uint8_t
      *base, vuint8m1_t bindex, size_t vl);
void vloxseg7ei8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
      vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
      *v5, vuint8m1_t *v6, vbool8_t mask, vuint8m1_t maskedoff0,
      vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t
      maskedoff3, vuint8m1_t maskedoff4, vuint8m1_t maskedoff5,
      vuint8m1_t maskedoff6, const uint8_t *base, vuint8m1_t
      bindex, size_t vl);
```

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void vloxseg8ei8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vuint8m1_t *v7, vbool8_t mask,
    vuint8m1_t maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t
    maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t maskedoff4,
    vuint8m1_t maskedoff5, vuint8m1_t maskedoff6, vuint8m1_t
    maskedoff7, const uint8_t *base, vuint8m1_t bindex, size_t
    vl);
void vloxseg2ei8_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
    vbool4_t mask, vuint8m2_t maskedoff0, vuint8m2_t maskedoff1,
    const uint8_t *base, vuint8m2_t bindex, size_t vl);
void vloxseg3ei8_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, vbool4_t mask, vuint8m2_t maskedoff0,
    vuint8m2_t maskedoff1, vuint8m2_t maskedoff2, const uint8_t
    *base, vuint8m2_t bindex, size_t vl);
void vloxseg4ei8_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, vuint8m2_t *v3, vbool4_t mask, vuint8m2_t
    maskedoff0, vuint8m2_t maskedoff1, vuint8m2_t maskedoff2,
    vuint8m2_t maskedoff3, const uint8_t *base, vuint8m2_t
    bindex, size_t vl);
void vloxseg2ei8_v_u8m4_m (vuint8m4_t *v0, vuint8m4_t *v1,
    vbool2_t mask, vuint8m4_t maskedoff0, vuint8m4_t maskedoff1,
    const uint8_t *base, vuint8m4_t bindex, size_t vl);
void vloxseg2ei16_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
    const uint8_t *base, vuint16m2_t bindex, size_t vl);
void vloxseg3ei16_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vbool8_t mask, vuint8m1_t maskedoff0,
    vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, const uint8_t
    *base, vuint16m2_t bindex, size_t vl);
void vloxseg4ei16_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vbool8_t mask, vuint8m1_t
    maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t maskedoff2,
    vuint8m1_t maskedoff3, const uint8_t *base, vuint16m2_t
    bindex, size_t vl);
void vloxseg5ei16_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vbool8_t
    mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
    vuint8m1_t maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t
    maskedoff4, const uint8_t *base, vuint16m2_t bindex, size_t
    vl);
void vloxseg6ei16_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t
    maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t maskedoff3,
    vuint8m1_t maskedoff4, vuint8m1_t maskedoff5, const uint8_t
```

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   *base, vuint16m2_t bindex, size_t vl);
void vloxseg7ei16_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
   vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
   *v5, vuint8m1_t *v6, vbool8_t mask, vuint8m1_t maskedoff0,
   vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t
   maskedoff3, vuint8m1_t maskedoff4, vuint8m1_t maskedoff5,
   vuint8m1_t maskedoff6, const uint8_t *base, vuint16m2_t
   bindex, size_t vl);
void vloxseg8ei16_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
   vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
   *v5, vuint8m1_t *v6, vuint8m1_t *v7, vbool8_t mask,
   vuint8m1_t maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t
   maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t maskedoff4,
   vuint8m1_t maskedoff5, vuint8m1_t maskedoff6, vuint8m1_t
   maskedoff7, const uint8_t *base, vuint16m2_t bindex, size_t
   vl);
void vloxseg2ei16_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
   vbool4_t mask, vuint8m2_t maskedoff0, vuint8m2_t maskedoff1,
   const uint8_t *base, vuint16m4_t bindex, size_t vl);
void vloxseg3ei16_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
   vuint8m2_t *v2, vbool4_t mask, vuint8m2_t maskedoff0,
   vuint8m2_t maskedoff1, vuint8m2_t maskedoff2, const uint8_t
   *base, vuint16m4_t bindex, size_t vl);
void vloxseg4ei16_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
   vuint8m2_t *v2, vuint8m2_t *v3, vbool4_t mask, vuint8m2_t
   maskedoff0, vuint8m2_t maskedoff1, vuint8m2_t maskedoff2,
   vuint8m2_t maskedoff3, const uint8_t *base, vuint16m4_t
   bindex, size_t vl);
void vloxseg2ei16_v_u8m4_m (vuint8m4_t *v0, vuint8m4_t *v1,
   vbool2_t mask, vuint8m4_t maskedoff0, vuint8m4_t maskedoff1,
   const uint8_t *base, vuint16m8_t bindex, size_t vl);
void vloxseg2ei32_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
   vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
   const uint8_t *base, vuint32m4_t bindex, size_t vl);
void vloxseg3ei32_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
   vuint8m1_t *v2, vbool8_t mask, vuint8m1_t maskedoff0,
   vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, const uint8_t
   *base, vuint32m4_t bindex, size_t vl);
void vloxseg4ei32_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
   vuint8m1_t *v2, vuint8m1_t *v3, vbool8_t mask, vuint8m1_t
   maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t maskedoff2,
   vuint8m1_t maskedoff3, const uint8_t *base, vuint32m4_t
   bindex, size_t vl);
void vloxseg5ei32_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
   vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vbool8_t
   mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
```

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               vuint8m1_t maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t
               maskedoff4, const uint8_t *base, vuint32m4_t bindex, size_t
               vl);
void vloxseg6ei32_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
               vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
               *v5, vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t
               maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t maskedoff3,
               vuint8m1_t maskedoff4, vuint8m1_t maskedoff5, const uint8_t
               *base, vuint32m4_t bindex, size_t vl);
void vloxseg7ei32_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
               vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
               *v5, vuint8m1_t *v6, vbool8_t mask, vuint8m1_t maskedoff0,
               vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t
               maskedoff3, vuint8m1_t maskedoff4, vuint8m1_t maskedoff5,
               vuint8m1_t maskedoff6, const uint8_t *base, vuint32m4_t
               bindex, size_t vl);
void vloxseg8ei32_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
               vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
               *v5, vuint8m1_t *v6, vuint8m1_t *v7, vbool8_t mask,
               vuint8m1_t maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t
               maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t maskedoff4,
               vuint8m1_t maskedoff5, vuint8m1_t maskedoff6, vuint8m1_t
               maskedoff7, const uint8_t *base, vuint32m4_t bindex, size_t
               vl);
void vloxseg2ei32_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
               vbool4_t mask, vuint8m2_t maskedoff0, vuint8m2_t maskedoff1,
               const uint8_t *base, vuint32m8_t bindex, size_t vl);
void vloxseg3ei32_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
               vuint8m2_t *v2, vbool4_t mask, vuint8m2_t maskedoff0,
               vuint8m2_t maskedoff1, vuint8m2_t maskedoff2, const uint8_t
               *base, vuint32m8_t bindex, size_t vl);
void vloxseg4ei32_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
               vuint8m2_t *v2, vuint8m2_t *v3, vbool4_t mask, vuint8m2_t
               maskedoff0, vuint8m2_t maskedoff1, vuint8m2_t maskedoff2,
               vuint8m2_t maskedoff3, const uint8_t *base, vuint32m8_t
               bindex, size_t vl);
void vloxseg2ei64_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
               vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
               const uint8_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg3ei64_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
               vuint8m1_t *v2, vbool8_t mask, vuint8m1_t maskedoff0,
               vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, const uint8_t
               *base, vuint64m8_t bindex, size_t vl);
void vloxseg4ei64_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
               vuint8m1_t *v2, vuint8m1_t *v3, vbool8_t mask, vuint8m1_t
               maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t maskedoff2,
```

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      vuint8m1_t maskedoff3, const uint8_t *base, vuint64m8_t
      bindex, size_t vl);
void vloxseg5ei64_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
      vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vbool8_t
      mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
      vuint8m1_t maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t
      maskedoff4, const uint8_t *base, vuint64m8_t bindex, size_t
      vl);
void vloxseg6ei64_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
      vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
      *v5, vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t
      maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t maskedoff3,
      vuint8m1_t maskedoff4, vuint8m1_t maskedoff5, const uint8_t
      *base, vuint64m8_t bindex, size_t vl);
void vloxseg7ei64_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
      vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
      *v5, vuint8m1_t *v6, vbool8_t mask, vuint8m1_t maskedoff0,
      vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t
      maskedoff3, vuint8m1_t maskedoff4, vuint8m1_t maskedoff5,
      vuint8m1_t maskedoff6, const uint8_t *base, vuint64m8_t
      bindex, size_t vl);
void vloxseg8ei64_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
      vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
      *v5, vuint8m1_t *v6, vuint8m1_t *v7, vbool8_t mask,
      vuint8m1_t maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t
      maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t maskedoff4,
      vuint8m1_t maskedoff5, vuint8m1_t maskedoff6, vuint8m1_t
      maskedoff7, const uint8_t *base, vuint64m8_t bindex, size_t
      vl);
void vloxseg2ei8_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
      vbool8_t mask, vuint16m2_t maskedoff0, vuint16m2_t
      maskedoff1, const uint16_t *base, vuint8m1_t bindex, size_t
      vl);
void vloxseg3ei8_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
      vuint16m2_t *v2, vbool8_t mask, vuint16m2_t maskedoff0,
      vuint16m2_t maskedoff1, vuint16m2_t maskedoff2, const
      uint16_t *base, vuint8m1_t bindex, size_t vl);
void vloxseg4ei8_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
      vuint16m2_t *v2, vuint16m2_t *v3, vbool8_t mask, vuint16m2_t
      maskedoff0, vuint16m2_t maskedoff1, vuint16m2_t maskedoff2,
      vuint16m2_t maskedoff3, const uint16_t *base, vuint8m1_t
      bindex, size_t vl);
void vloxseg2ei8_v_u16m4_m (vuint16m4_t *v0, vuint16m4_t *v1,
      vbool4_t mask, vuint16m4_t maskedoff0, vuint16m4_t
      maskedoff1, const uint16_t *base, vuint8m2_t bindex, size_t
      vl);
```

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void vloxseg2ei16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vbool16_t mask, vuint16m1_t maskedoff0, vuint16m1_t
    maskedoff1, const uint16_t *base, vuint16m1_t bindex, size_t
    vl);
void vloxseg3ei16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vbool16_t mask, vuint16m1_t maskedoff0,
    vuint16m1_t maskedoff1, vuint16m1_t maskedoff2, const
    uint16_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg4ei16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vbool16_t mask,
    vuint16m1_t maskedoff0, vuint16m1_t maskedoff1, vuint16m1_t
    maskedoff2, vuint16m1_t maskedoff3, const uint16_t *base,
    vuint16m1_t bindex, size_t vl);
void vloxseg5ei16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4, vbool16_t
    mask, vuint16m1_t maskedoff0, vuint16m1_t maskedoff1,
    vuint16m1_t maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t
    maskedoff4, const uint16_t *base, vuint16m1_t bindex, size_t
    vl);
void vloxseg6ei16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vbool16_t mask, vuint16m1_t maskedoff0,
    vuint16m1_t maskedoff1, vuint16m1_t maskedoff2, vuint16m1_t
    maskedoff3, vuint16m1_t maskedoff4, vuint16m1_t maskedoff5,
    const uint16_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg7ei16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vbool16_t mask,
    vuint16m1_t maskedoff0, vuint16m1_t maskedoff1, vuint16m1_t
    maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t maskedoff4,
    vuint16m1_t maskedoff5, vuint16m1_t maskedoff6, const
    uint16_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg8ei16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vuint16m1_t *v7, vbool16_t
    mask, vuint16m1_t maskedoff0, vuint16m1_t maskedoff1,
    vuint16m1_t maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t
    maskedoff4, vuint16m1_t maskedoff5, vuint16m1_t maskedoff6,
    vuint16m1_t maskedoff7, const uint16_t *base, vuint16m1_t
    bindex, size_t vl);
void vloxseg2ei16_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vbool8_t mask, vuint16m2_t maskedoff0, vuint16m2_t
    maskedoff1, const uint16_t *base, vuint16m2_t bindex, size_t
    vl);
void vloxseg3ei16_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vbool8_t mask, vuint16m2_t maskedoff0,
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                 vuint16m2_t maskedoff1, vuint16m2_t maskedoff2, const
                 uint16_t *base, vuint16m2_t bindex, size_t vl);
void vloxseg4ei16_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
                 vuint16m2_t *v2, vuint16m2_t *v3, vbool8_t mask, vuint16m2_t
                 maskedoff0, vuint16m2_t maskedoff1, vuint16m2_t maskedoff2,
                 vuint16m2_t maskedoff3, const uint16_t *base, vuint16m2_t
                 bindex, size_t vl);
void vloxseg2ei16_v_u16m4_m (vuint16m4_t *v0, vuint16m4_t *v1,
                 vbool4_t mask, vuint16m4_t maskedoff0, vuint16m4_t
                 maskedoff1, const uint16_t *base, vuint16m4_t bindex, size_t
                 vl);
void vloxseg2ei32_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
                 vbool16_t mask, vuint16m1_t maskedoff0, vuint16m1_t
                 maskedoff1, const uint16_t *base, vuint32m2_t bindex, size_t
                 vl);
void vloxseg3ei32_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
                 vuint16m1_t *v2, vbool16_t mask, vuint16m1_t maskedoff0,
                 vuint16m1_t maskedoff1, vuint16m1_t maskedoff2, const
                 uint16_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg4ei32_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
                 vuint16m1_t *v2, vuint16m1_t *v3, vbool16_t mask,
                 vuint16m1_t maskedoff0, vuint16m1_t maskedoff1, vuint16m1_t
                 maskedoff2, vuint16m1_t maskedoff3, const uint16_t *base,
                 vuint32m2_t bindex, size_t vl);
void vloxseg5ei32_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
                 vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4, vbool16_t
                 mask, vuint16m1_t maskedoff0, vuint16m1_t maskedoff1,
                 vuint16m1_t maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t
                 maskedoff4, const uint16_t *base, vuint32m2_t bindex, size_t
                 vl);
void vloxseg6ei32_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
                 vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
                 vuint16m1_t *v5, vbool16_t mask, vuint16m1_t maskedoff0,
                 vuint16m1_t maskedoff1, vuint16m1_t maskedoff2, vuint16m1_t
                 maskedoff3, vuint16m1_t maskedoff4, vuint16m1_t maskedoff5,
                 const uint16_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg7ei32_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
                 vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
                 vuint16m1_t *v5, vuint16m1_t *v6, vbool16_t mask,
                 vuint16m1_t maskedoff0, vuint16m1_t maskedoff1, vuint16m1_t
                 maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t maskedoff4,
                 vuint16m1_t maskedoff5, vuint16m1_t maskedoff6, const
                 uint16_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg8ei32_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
                 vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
                 vuint16m1_t *v5, vuint16m1_t *v6, vuint16m1_t *v7, vbool16_t
```

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    mask, vuint16m1_t maskedoff0, vuint16m1_t maskedoff1,
    vuint16m1_t maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t
    maskedoff4, vuint16m1_t maskedoff5, vuint16m1_t maskedoff6,
    vuint16m1_t maskedoff7, const uint16_t *base, vuint32m2_t
    bindex, size_t vl);
void vloxseg2ei32_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vbool8_t mask, vuint16m2_t maskedoff0, vuint16m2_t
    maskedoff1, const uint16_t *base, vuint32m4_t bindex, size_t
    vl);
void vloxseg3ei32_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vbool8_t mask, vuint16m2_t maskedoff0,
    vuint16m2_t maskedoff1, vuint16m2_t maskedoff2, const
    uint16_t *base, vuint32m4_t bindex, size_t vl);
void vloxseg4ei32_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vuint16m2_t *v3, vbool8_t mask, vuint16m2_t
    maskedoff0, vuint16m2_t maskedoff1, vuint16m2_t maskedoff2,
    vuint16m2_t maskedoff3, const uint16_t *base, vuint32m4_t
    bindex, size_t vl);
void vloxseg2ei32_v_u16m4_m (vuint16m4_t *v0, vuint16m4_t *v1,
    vbool4_t mask, vuint16m4_t maskedoff0, vuint16m4_t
    maskedoff1, const uint16_t *base, vuint32m8_t bindex, size_t
    vl);
void vloxseg2ei64_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vbool16_t mask, vuint16m1_t maskedoff0, vuint16m1_t
    maskedoff1, const uint16_t *base, vuint64m4_t bindex, size_t
    vl);
void vloxseg3ei64_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vbool16_t mask, vuint16m1_t maskedoff0,
    vuint16m1_t maskedoff1, vuint16m1_t maskedoff2, const
    uint16_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg4ei64_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vbool16_t mask,
    vuint16m1_t maskedoff0, vuint16m1_t maskedoff1, vuint16m1_t
    maskedoff2, vuint16m1_t maskedoff3, const uint16_t *base,
    vuint64m4_t bindex, size_t vl);
void vloxseg5ei64_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4, vbool16_t
    mask, vuint16m1_t maskedoff0, vuint16m1_t maskedoff1,
    vuint16m1_t maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t
    maskedoff4, const uint16_t *base, vuint64m4_t bindex, size_t
    vl);
void vloxseg6ei64_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vbool16_t mask, vuint16m1_t maskedoff0,
    vuint16m1_t maskedoff1, vuint16m1_t maskedoff2, vuint16m1_t
    maskedoff3, vuint16m1_t maskedoff4, vuint16m1_t maskedoff5,
```

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        const uint16_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg7ei64_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vbool16_t mask,
    vuint16m1_t maskedoff0, vuint16m1_t maskedoff1, vuint16m1_t
    maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t maskedoff4,
    vuint16m1_t maskedoff5, vuint16m1_t maskedoff6, const
    uint16_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg8ei64_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vuint16m1_t *v7, vbool16_t
    mask, vuint16m1_t maskedoff0, vuint16m1_t maskedoff1,
    vuint16m1_t maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t
    maskedoff4, vuint16m1_t maskedoff5, vuint16m1_t maskedoff6,
    vuint16m1_t maskedoff7, const uint16_t *base, vuint64m4_t
    bindex, size_t vl);
void vloxseg2ei64_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vbool8_t mask, vuint16m2_t maskedoff0, vuint16m2_t
    maskedoff1, const uint16_t *base, vuint64m8_t bindex, size_t
    vl);
void vloxseg3ei64_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vbool8_t mask, vuint16m2_t maskedoff0,
    vuint16m2_t maskedoff1, vuint16m2_t maskedoff2, const
    uint16_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg4ei64_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vuint16m2_t *v3, vbool8_t mask, vuint16m2_t
    maskedoff0, vuint16m2_t maskedoff1, vuint16m2_t maskedoff2,
    vuint16m2_t maskedoff3, const uint16_t *base, vuint64m8_t
    bindex, size_t vl);
void vloxseg2ei8_v_u32m4_m (vuint32m4_t *v0, vuint32m4_t *v1,
    vbool8_t mask, vuint32m4_t maskedoff0, vuint32m4_t
    maskedoff1, const uint32_t *base, vuint8m1_t bindex, size_t
    vl);
void vloxseg2ei16_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
    vbool16_t mask, vuint32m2_t maskedoff0, vuint32m2_t
    maskedoff1, const uint32_t *base, vuint16m1_t bindex, size_t
    vl);
void vloxseg3ei16_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, vbool16_t mask, vuint32m2_t maskedoff0,
    vuint32m2_t maskedoff1, vuint32m2_t maskedoff2, const
    uint32_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg4ei16_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, vuint32m2_t *v3, vbool16_t mask,
    vuint32m2_t maskedoff0, vuint32m2_t maskedoff1, vuint32m2_t
    maskedoff2, vuint32m2_t maskedoff3, const uint32_t *base,
    vuint16m1_t bindex, size_t vl);
```

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void vloxseg2ei16_v_u32m4_m (vuint32m4_t *v0, vuint32m4_t *v1,
    vbool8_t mask, vuint32m4_t maskedoff0, vuint32m4_t
    maskedoff1, const uint32_t *base, vuint16m2_t bindex, size_t
    vl);
void vloxseg2ei32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vbool32_t mask, vuint32m1_t maskedoff0, vuint32m1_t
    maskedoff1, const uint32_t *base, vuint32m1_t bindex, size_t
    vl);
void vloxseg3ei32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vbool32_t mask, vuint32m1_t maskedoff0,
    vuint32m1_t maskedoff1, vuint32m1_t maskedoff2, const
    uint32_t *base, vuint32m1_t bindex, size_t vl);
void vloxseg4ei32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vbool32_t mask,
    vuint32m1_t maskedoff0, vuint32m1_t maskedoff1, vuint32m1_t
    maskedoff2, vuint32m1_t maskedoff3, const uint32_t *base,
    vuint32m1_t bindex, size_t vl);
void vloxseg5ei32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4, vbool32_t
    mask, vuint32m1_t maskedoff0, vuint32m1_t maskedoff1,
    vuint32m1_t maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t
    maskedoff4, const uint32_t *base, vuint32m1_t bindex, size_t
    vl);
void vloxseg6ei32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vbool32_t mask, vuint32m1_t maskedoff0,
    vuint32m1_t maskedoff1, vuint32m1_t maskedoff2, vuint32m1_t
    maskedoff3, vuint32m1_t maskedoff4, vuint32m1_t maskedoff5,
    const uint32_t *base, vuint32m1_t bindex, size_t vl);
void vloxseg7ei32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, vbool32_t mask,
    vuint32m1_t maskedoff0, vuint32m1_t maskedoff1, vuint32m1_t
    maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t maskedoff4,
    vuint32m1_t maskedoff5, vuint32m1_t maskedoff6, const
    uint32_t *base, vuint32m1_t bindex, size_t vl);
void vloxseg8ei32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, vuint32m1_t *v7, vbool32_t
    mask, vuint32m1_t maskedoff0, vuint32m1_t maskedoff1,
    vuint32m1_t maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t
    maskedoff4, vuint32m1_t maskedoff5, vuint32m1_t maskedoff6,
    vuint32m1_t maskedoff7, const uint32_t *base, vuint32m1_t
    bindex, size_t vl);
void vloxseg2ei32_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
    vbool16_t mask, vuint32m2_t maskedoff0, vuint32m2_t
```

```
      maskedoff1, const uint32_t *base, vuint32m2_t bindex, size_t
      vl);
void vloxseg3ei32_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
      vuint32m2_t *v2, vbool16_t mask, vuint32m2_t maskedoff0,
      vuint32m2_t maskedoff1, vuint32m2_t maskedoff2, const
      uint32_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg4ei32_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
      vuint32m2_t *v2, vuint32m2_t *v3, vbool16_t mask,
      vuint32m2_t maskedoff0, vuint32m2_t maskedoff1, vuint32m2_t
      maskedoff2, vuint32m2_t maskedoff3, const uint32_t *base,
      vuint32m2_t bindex, size_t vl);
void vloxseg2ei32_v_u32m4_m (vuint32m4_t *v0, vuint32m4_t *v1,
      vbool8_t mask, vuint32m4_t maskedoff0, vuint32m4_t
      maskedoff1, const uint32_t *base, vuint32m4_t bindex, size_t
      vl);
void vloxseg2ei64_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
      vbool32_t mask, vuint32m1_t maskedoff0, vuint32m1_t
      maskedoff1, const uint32_t *base, vuint64m2_t bindex, size_t
      vl);
void vloxseg3ei64_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
      vuint32m1_t *v2, vbool32_t mask, vuint32m1_t maskedoff0,
      vuint32m1_t maskedoff1, vuint32m1_t maskedoff2, const
      uint32_t *base, vuint64m2_t bindex, size_t vl);
void vloxseg4ei64_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
      vuint32m1_t *v2, vuint32m1_t *v3, vbool32_t mask,
      vuint32m1_t maskedoff0, vuint32m1_t maskedoff1, vuint32m1_t
      maskedoff2, vuint32m1_t maskedoff3, const uint32_t *base,
      vuint64m2_t bindex, size_t vl);
void vloxseg5ei64_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
      vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4, vbool32_t
      mask, vuint32m1_t maskedoff0, vuint32m1_t maskedoff1,
      vuint32m1_t maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t
      maskedoff4, const uint32_t *base, vuint64m2_t bindex, size_t
      vl);
void vloxseg6ei64_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
      vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
      vuint32m1_t *v5, vbool32_t mask, vuint32m1_t maskedoff0,
      vuint32m1_t maskedoff1, vuint32m1_t maskedoff2, vuint32m1_t
      maskedoff3, vuint32m1_t maskedoff4, vuint32m1_t maskedoff5,
      const uint32_t *base, vuint64m2_t bindex, size_t vl);
void vloxseg7ei64_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
      vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
      vuint32m1_t *v5, vuint32m1_t *v6, vbool32_t mask,
      vuint32m1_t maskedoff0, vuint32m1_t maskedoff1, vuint32m1_t
      maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t maskedoff4,
      vuint32m1_t maskedoff5, vuint32m1_t maskedoff6, const
```

```
   uint32_t *base, vuint64m2_t bindex, size_t vl);
void vloxseg8ei64_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
   vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
   vuint32m1_t *v5, vuint32m1_t *v6, vuint32m1_t *v7, vbool32_t
   mask, vuint32m1_t maskedoff0, vuint32m1_t maskedoff1,
   vuint32m1_t maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t
   maskedoff4, vuint32m1_t maskedoff5, vuint32m1_t maskedoff6,
   vuint32m1_t maskedoff7, const uint32_t *base, vuint64m2_t
   bindex, size_t vl);
void vloxseg2ei64_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
   vbool16_t mask, vuint32m2_t maskedoff0, vuint32m2_t
   maskedoff1, const uint32_t *base, vuint64m4_t bindex, size_t
   vl);
void vloxseg3ei64_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
   vuint32m2_t *v2, vbool16_t mask, vuint32m2_t maskedoff0,
   vuint32m2_t maskedoff1, vuint32m2_t maskedoff2, const
   uint32_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg4ei64_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
   vuint32m2_t *v2, vuint32m2_t *v3, vbool16_t mask,
   vuint32m2_t maskedoff0, vuint32m2_t maskedoff1, vuint32m2_t
   maskedoff2, vuint32m2_t maskedoff3, const uint32_t *base,
   vuint64m4_t bindex, size_t vl);
void vloxseg2ei64_v_u32m4_m (vuint32m4_t *v0, vuint32m4_t *v1,
   vbool8_t mask, vuint32m4_t maskedoff0, vuint32m4_t
   maskedoff1, const uint32_t *base, vuint64m8_t bindex, size_t
   vl);
void vloxseg2ei16_v_u64m4_m (vuint64m4_t *v0, vuint64m4_t *v1,
   vbool16_t mask, vuint64m4_t maskedoff0, vuint64m4_t
   maskedoff1, const uint64_t *base, vuint16m1_t bindex, size_t
   vl);
void vloxseg2ei32_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
   vbool32_t mask, vuint64m2_t maskedoff0, vuint64m2_t
   maskedoff1, const uint64_t *base, vuint32m1_t bindex, size_t
   vl);
void vloxseg3ei32_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
   vuint64m2_t *v2, vbool32_t mask, vuint64m2_t maskedoff0,
   vuint64m2_t maskedoff1, vuint64m2_t maskedoff2, const
   uint64_t *base, vuint32m1_t bindex, size_t vl);
void vloxseg4ei32_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
   vuint64m2_t *v2, vuint64m2_t *v3, vbool32_t mask,
   vuint64m2_t maskedoff0, vuint64m2_t maskedoff1, vuint64m2_t
   maskedoff2, vuint64m2_t maskedoff3, const uint64_t *base,
   vuint32m1_t bindex, size_t vl);
void vloxseg2ei32_v_u64m4_m (vuint64m4_t *v0, vuint64m4_t *v1,
   vbool16_t mask, vuint64m4_t maskedoff0, vuint64m4_t
   maskedoff1, const uint64_t *base, vuint32m2_t bindex, size_t
```

```c
    vl);
void vloxseg2ei64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vbool64_t mask, vuint64m1_t maskedoff0, vuint64m1_t
    maskedoff1, const uint64_t *base, vuint64m1_t bindex, size_t
    vl);
void vloxseg3ei64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vbool64_t mask, vuint64m1_t maskedoff0,
    vuint64m1_t maskedoff1, vuint64m1_t maskedoff2, const
    uint64_t *base, vuint64m1_t bindex, size_t vl);
void vloxseg4ei64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vbool64_t mask,
    vuint64m1_t maskedoff0, vuint64m1_t maskedoff1, vuint64m1_t
    maskedoff2, vuint64m1_t maskedoff3, const uint64_t *base,
    vuint64m1_t bindex, size_t vl);
void vloxseg5ei64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4, vbool64_t
    mask, vuint64m1_t maskedoff0, vuint64m1_t maskedoff1,
    vuint64m1_t maskedoff2, vuint64m1_t maskedoff3, vuint64m1_t
    maskedoff4, const uint64_t *base, vuint64m1_t bindex, size_t
    vl);
void vloxseg6ei64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vbool64_t mask, vuint64m1_t maskedoff0,
    vuint64m1_t maskedoff1, vuint64m1_t maskedoff2, vuint64m1_t
    maskedoff3, vuint64m1_t maskedoff4, vuint64m1_t maskedoff5,
    const uint64_t *base, vuint64m1_t bindex, size_t vl);
void vloxseg7ei64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vuint64m1_t *v6, vbool64_t mask,
    vuint64m1_t maskedoff0, vuint64m1_t maskedoff1, vuint64m1_t
    maskedoff2, vuint64m1_t maskedoff3, vuint64m1_t maskedoff4,
    vuint64m1_t maskedoff5, vuint64m1_t maskedoff6, const
    uint64_t *base, vuint64m1_t bindex, size_t vl);
void vloxseg8ei64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
    vuint64m1_t *v5, vuint64m1_t *v6, vuint64m1_t *v7, vbool64_t
    mask, vuint64m1_t maskedoff0, vuint64m1_t maskedoff1,
    vuint64m1_t maskedoff2, vuint64m1_t maskedoff3, vuint64m1_t
    maskedoff4, vuint64m1_t maskedoff5, vuint64m1_t maskedoff6,
    vuint64m1_t maskedoff7, const uint64_t *base, vuint64m1_t
    bindex, size_t vl);
void vloxseg2ei64_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
    vbool32_t mask, vuint64m2_t maskedoff0, vuint64m2_t
    maskedoff1, const uint64_t *base, vuint64m2_t bindex, size_t
    vl);
```

305

```
void vloxseg3ei64_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, vbool32_t mask, vuint64m2_t maskedoff0,
    vuint64m2_t maskedoff1, vuint64m2_t maskedoff2, const
    uint64_t *base, vuint64m2_t bindex, size_t vl);
void vloxseg4ei64_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, vuint64m2_t *v3, vbool32_t mask,
    vuint64m2_t maskedoff0, vuint64m2_t maskedoff1, vuint64m2_t
    maskedoff2, vuint64m2_t maskedoff3, const uint64_t *base,
    vuint64m2_t bindex, size_t vl);
void vloxseg2ei64_v_u64m4_m (vuint64m4_t *v0, vuint64m4_t *v1,
    vbool16_t mask, vuint64m4_t maskedoff0, vuint64m4_t
    maskedoff1, const uint64_t *base, vuint64m4_t bindex, size_t
    vl);
void vloxseg2ei8_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vbool8_t mask, vfloat16m2_t maskedoff0, vfloat16m2_t
    maskedoff1, const float16_t *base, vuint8m1_t bindex, size_t
    vl);
void vloxseg3ei8_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vbool8_t mask, vfloat16m2_t maskedoff0,
    vfloat16m2_t maskedoff1, vfloat16m2_t maskedoff2, const
    float16_t *base, vuint8m1_t bindex, size_t vl);
void vloxseg4ei8_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, vbool8_t mask,
    vfloat16m2_t maskedoff0, vfloat16m2_t maskedoff1,
    vfloat16m2_t maskedoff2, vfloat16m2_t maskedoff3, const
    float16_t *base, vuint8m1_t bindex, size_t vl);
void vloxseg2ei8_v_f16m4_m (vfloat16m4_t *v0, vfloat16m4_t *v1,
    vbool4_t mask, vfloat16m4_t maskedoff0, vfloat16m4_t
    maskedoff1, const float16_t *base, vuint8m2_t bindex, size_t
    vl);
void vloxseg2ei16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, const float16_t *base, vuint16m1_t bindex,
    size_t vl);
void vloxseg3ei16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vbool16_t mask, vfloat16m1_t maskedoff0,
    vfloat16m1_t maskedoff1, vfloat16m1_t maskedoff2, const
    float16_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg4ei16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vbool16_t mask,
    vfloat16m1_t maskedoff0, vfloat16m1_t maskedoff1,
    vfloat16m1_t maskedoff2, vfloat16m1_t maskedoff3, const
    float16_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg5ei16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
```

```c
         maskedoff1, vfloat16m1_t maskedoff2, vfloat16m1_t
         maskedoff3, vfloat16m1_t maskedoff4, const float16_t *base,
         vuint16m1_t bindex, size_t vl);
void vloxseg6ei16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
         vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
         vfloat16m1_t *v5, vbool16_t mask, vfloat16m1_t maskedoff0,
         vfloat16m1_t maskedoff1, vfloat16m1_t maskedoff2,
         vfloat16m1_t maskedoff3, vfloat16m1_t maskedoff4,
         vfloat16m1_t maskedoff5, const float16_t *base, vuint16m1_t
         bindex, size_t vl);
void vloxseg7ei16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
         vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
         vfloat16m1_t *v5, vfloat16m1_t *v6, vbool16_t mask,
         vfloat16m1_t maskedoff0, vfloat16m1_t maskedoff1,
         vfloat16m1_t maskedoff2, vfloat16m1_t maskedoff3,
         vfloat16m1_t maskedoff4, vfloat16m1_t maskedoff5,
         vfloat16m1_t maskedoff6, const float16_t *base, vuint16m1_t
         bindex, size_t vl);
void vloxseg8ei16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
         vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
         vfloat16m1_t *v5, vfloat16m1_t *v6, vfloat16m1_t *v7,
         vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
         maskedoff1, vfloat16m1_t maskedoff2, vfloat16m1_t
         maskedoff3, vfloat16m1_t maskedoff4, vfloat16m1_t
         maskedoff5, vfloat16m1_t maskedoff6, vfloat16m1_t
         maskedoff7, const float16_t *base, vuint16m1_t bindex,
         size_t vl);
void vloxseg2ei16_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
         vbool8_t mask, vfloat16m2_t maskedoff0, vfloat16m2_t
         maskedoff1, const float16_t *base, vuint16m2_t bindex,
         size_t vl);
void vloxseg3ei16_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
         vfloat16m2_t *v2, vbool8_t mask, vfloat16m2_t maskedoff0,
         vfloat16m2_t maskedoff1, vfloat16m2_t maskedoff2, const
         float16_t *base, vuint16m2_t bindex, size_t vl);
void vloxseg4ei16_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
         vfloat16m2_t *v2, vfloat16m2_t *v3, vbool8_t mask,
         vfloat16m2_t maskedoff0, vfloat16m2_t maskedoff1,
         vfloat16m2_t maskedoff2, vfloat16m2_t maskedoff3, const
         float16_t *base, vuint16m2_t bindex, size_t vl);
void vloxseg2ei16_v_f16m4_m (vfloat16m4_t *v0, vfloat16m4_t *v1,
         vbool4_t mask, vfloat16m4_t maskedoff0, vfloat16m4_t
         maskedoff1, const float16_t *base, vuint16m4_t bindex,
         size_t vl);
void vloxseg2ei32_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
         vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
```

```
      maskedoff1, const float16_t *base, vuint32m2_t bindex,
      size_t vl);
void vloxseg3ei32_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
      vfloat16m1_t *v2, vbool16_t mask, vfloat16m1_t maskedoff0,
      vfloat16m1_t maskedoff1, vfloat16m1_t maskedoff2, const
      float16_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg4ei32_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
      vfloat16m1_t *v2, vfloat16m1_t *v3, vbool16_t mask,
      vfloat16m1_t maskedoff0, vfloat16m1_t maskedoff1,
      vfloat16m1_t maskedoff2, vfloat16m1_t maskedoff3, const
      float16_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg5ei32_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
      vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
      vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
      maskedoff1, vfloat16m1_t maskedoff2, vfloat16m1_t
      maskedoff3, vfloat16m1_t maskedoff4, const float16_t *base,
      vuint32m2_t bindex, size_t vl);
void vloxseg6ei32_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
      vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
      vfloat16m1_t *v5, vbool16_t mask, vfloat16m1_t maskedoff0,
      vfloat16m1_t maskedoff1, vfloat16m1_t maskedoff2,
      vfloat16m1_t maskedoff3, vfloat16m1_t maskedoff4,
      vfloat16m1_t maskedoff5, const float16_t *base, vuint32m2_t
      bindex, size_t vl);
void vloxseg7ei32_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
      vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
      vfloat16m1_t *v5, vfloat16m1_t *v6, vbool16_t mask,
      vfloat16m1_t maskedoff0, vfloat16m1_t maskedoff1,
      vfloat16m1_t maskedoff2, vfloat16m1_t maskedoff3,
      vfloat16m1_t maskedoff4, vfloat16m1_t maskedoff5,
      vfloat16m1_t maskedoff6, const float16_t *base, vuint32m2_t
      bindex, size_t vl);
void vloxseg8ei32_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
      vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
      vfloat16m1_t *v5, vfloat16m1_t *v6, vfloat16m1_t *v7,
      vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
      maskedoff1, vfloat16m1_t maskedoff2, vfloat16m1_t
      maskedoff3, vfloat16m1_t maskedoff4, vfloat16m1_t
      maskedoff5, vfloat16m1_t maskedoff6, vfloat16m1_t
      maskedoff7, const float16_t *base, vuint32m2_t bindex,
      size_t vl);
void vloxseg2ei32_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
      vbool8_t mask, vfloat16m2_t maskedoff0, vfloat16m2_t
      maskedoff1, const float16_t *base, vuint32m4_t bindex,
      size_t vl);
```

```
void vloxseg3ei32_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vbool8_t mask, vfloat16m2_t maskedoff0,
    vfloat16m2_t maskedoff1, vfloat16m2_t maskedoff2, const
    float16_t *base, vuint32m4_t bindex, size_t vl);
void vloxseg4ei32_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, vbool8_t mask,
    vfloat16m2_t maskedoff0, vfloat16m2_t maskedoff1,
    vfloat16m2_t maskedoff2, vfloat16m2_t maskedoff3, const
    float16_t *base, vuint32m4_t bindex, size_t vl);
void vloxseg2ei32_v_f16m4_m (vfloat16m4_t *v0, vfloat16m4_t *v1,
    vbool4_t mask, vfloat16m4_t maskedoff0, vfloat16m4_t
    maskedoff1, const float16_t *base, vuint32m8_t bindex,
    size_t vl);
void vloxseg2ei64_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, const float16_t *base, vuint64m4_t bindex,
    size_t vl);
void vloxseg3ei64_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vbool16_t mask, vfloat16m1_t maskedoff0,
    vfloat16m1_t maskedoff1, vfloat16m1_t maskedoff2, const
    float16_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg4ei64_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vbool16_t mask,
    vfloat16m1_t maskedoff0, vfloat16m1_t maskedoff1,
    vfloat16m1_t maskedoff2, vfloat16m1_t maskedoff3, const
    float16_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg5ei64_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, vfloat16m1_t maskedoff2, vfloat16m1_t
    maskedoff3, vfloat16m1_t maskedoff4, const float16_t *base,
    vuint64m4_t bindex, size_t vl);
void vloxseg6ei64_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vbool16_t mask, vfloat16m1_t maskedoff0,
    vfloat16m1_t maskedoff1, vfloat16m1_t maskedoff2,
    vfloat16m1_t maskedoff3, vfloat16m1_t maskedoff4,
    vfloat16m1_t maskedoff5, const float16_t *base, vuint64m4_t
    bindex, size_t vl);
void vloxseg7ei64_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vbool16_t mask,
    vfloat16m1_t maskedoff0, vfloat16m1_t maskedoff1,
    vfloat16m1_t maskedoff2, vfloat16m1_t maskedoff3,
    vfloat16m1_t maskedoff4, vfloat16m1_t maskedoff5,
    vfloat16m1_t maskedoff6, const float16_t *base, vuint64m4_t
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309

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    bindex, size_t vl);
void vloxseg8ei64_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vfloat16m1_t *v7,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, vfloat16m1_t maskedoff2, vfloat16m1_t
    maskedoff3, vfloat16m1_t maskedoff4, vfloat16m1_t
    maskedoff5, vfloat16m1_t maskedoff6, vfloat16m1_t
    maskedoff7, const float16_t *base, vuint64m4_t bindex,
    size_t vl);
void vloxseg2ei64_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vbool8_t mask, vfloat16m2_t maskedoff0, vfloat16m2_t
    maskedoff1, const float16_t *base, vuint64m8_t bindex,
    size_t vl);
void vloxseg3ei64_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vbool8_t mask, vfloat16m2_t maskedoff0,
    vfloat16m2_t maskedoff1, vfloat16m2_t maskedoff2, const
    float16_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg4ei64_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, vbool8_t mask,
    vfloat16m2_t maskedoff0, vfloat16m2_t maskedoff1,
    vfloat16m2_t maskedoff2, vfloat16m2_t maskedoff3, const
    float16_t *base, vuint64m8_t bindex, size_t vl);
void vloxseg2ei8_v_f32m4_m (vfloat32m4_t *v0, vfloat32m4_t *v1,
    vbool8_t mask, vfloat32m4_t maskedoff0, vfloat32m4_t
    maskedoff1, const float32_t *base, vuint8m1_t bindex, size_t
    vl);
void vloxseg2ei16_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vbool16_t mask, vfloat32m2_t maskedoff0, vfloat32m2_t
    maskedoff1, const float32_t *base, vuint16m1_t bindex,
    size_t vl);
void vloxseg3ei16_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vbool16_t mask, vfloat32m2_t maskedoff0,
    vfloat32m2_t maskedoff1, vfloat32m2_t maskedoff2, const
    float32_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg4ei16_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vfloat32m2_t *v3, vbool16_t mask,
    vfloat32m2_t maskedoff0, vfloat32m2_t maskedoff1,
    vfloat32m2_t maskedoff2, vfloat32m2_t maskedoff3, const
    float32_t *base, vuint16m1_t bindex, size_t vl);
void vloxseg2ei16_v_f32m4_m (vfloat32m4_t *v0, vfloat32m4_t *v1,
    vbool8_t mask, vfloat32m4_t maskedoff0, vfloat32m4_t
    maskedoff1, const float32_t *base, vuint16m2_t bindex,
    size_t vl);
void vloxseg2ei32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
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310

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    maskedoff1, const float32_t *base, vuint32m1_t bindex,
    size_t vl);
void vloxseg3ei32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vbool32_t mask, vfloat32m1_t maskedoff0,
    vfloat32m1_t maskedoff1, vfloat32m1_t maskedoff2, const
    float32_t *base, vuint32m1_t bindex, size_t vl);
void vloxseg4ei32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vbool32_t mask,
    vfloat32m1_t maskedoff0, vfloat32m1_t maskedoff1,
    vfloat32m1_t maskedoff2, vfloat32m1_t maskedoff3, const
    float32_t *base, vuint32m1_t bindex, size_t vl);
void vloxseg5ei32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
    maskedoff1, vfloat32m1_t maskedoff2, vfloat32m1_t
    maskedoff3, vfloat32m1_t maskedoff4, const float32_t *base,
    vuint32m1_t bindex, size_t vl);
void vloxseg6ei32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vbool32_t mask, vfloat32m1_t maskedoff0,
    vfloat32m1_t maskedoff1, vfloat32m1_t maskedoff2,
    vfloat32m1_t maskedoff3, vfloat32m1_t maskedoff4,
    vfloat32m1_t maskedoff5, const float32_t *base, vuint32m1_t
    bindex, size_t vl);
void vloxseg7ei32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, vbool32_t mask,
    vfloat32m1_t maskedoff0, vfloat32m1_t maskedoff1,
    vfloat32m1_t maskedoff2, vfloat32m1_t maskedoff3,
    vfloat32m1_t maskedoff4, vfloat32m1_t maskedoff5,
    vfloat32m1_t maskedoff6, const float32_t *base, vuint32m1_t
    bindex, size_t vl);
void vloxseg8ei32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, vfloat32m1_t *v7,
    vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
    maskedoff1, vfloat32m1_t maskedoff2, vfloat32m1_t
    maskedoff3, vfloat32m1_t maskedoff4, vfloat32m1_t
    maskedoff5, vfloat32m1_t maskedoff6, vfloat32m1_t
    maskedoff7, const float32_t *base, vuint32m1_t bindex,
    size_t vl);
void vloxseg2ei32_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vbool16_t mask, vfloat32m2_t maskedoff0, vfloat32m2_t
    maskedoff1, const float32_t *base, vuint32m2_t bindex,
    size_t vl);
```

```
void vloxseg3ei32_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vbool16_t mask, vfloat32m2_t maskedoff0,
    vfloat32m2_t maskedoff1, vfloat32m2_t maskedoff2, const
    float32_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg4ei32_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vfloat32m2_t *v3, vbool16_t mask,
    vfloat32m2_t maskedoff0, vfloat32m2_t maskedoff1,
    vfloat32m2_t maskedoff2, vfloat32m2_t maskedoff3, const
    float32_t *base, vuint32m2_t bindex, size_t vl);
void vloxseg2ei32_v_f32m4_m (vfloat32m4_t *v0, vfloat32m4_t *v1,
    vbool8_t mask, vfloat32m4_t maskedoff0, vfloat32m4_t
    maskedoff1, const float32_t *base, vuint32m4_t bindex,
    size_t vl);
void vloxseg2ei64_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
    maskedoff1, const float32_t *base, vuint64m2_t bindex,
    size_t vl);
void vloxseg3ei64_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vbool32_t mask, vfloat32m1_t maskedoff0,
    vfloat32m1_t maskedoff1, vfloat32m1_t maskedoff2, const
    float32_t *base, vuint64m2_t bindex, size_t vl);
void vloxseg4ei64_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vbool32_t mask,
    vfloat32m1_t maskedoff0, vfloat32m1_t maskedoff1,
    vfloat32m1_t maskedoff2, vfloat32m1_t maskedoff3, const
    float32_t *base, vuint64m2_t bindex, size_t vl);
void vloxseg5ei64_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
    maskedoff1, vfloat32m1_t maskedoff2, vfloat32m1_t
    maskedoff3, vfloat32m1_t maskedoff4, const float32_t *base,
    vuint64m2_t bindex, size_t vl);
void vloxseg6ei64_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vbool32_t mask, vfloat32m1_t maskedoff0,
    vfloat32m1_t maskedoff1, vfloat32m1_t maskedoff2,
    vfloat32m1_t maskedoff3, vfloat32m1_t maskedoff4,
    vfloat32m1_t maskedoff5, const float32_t *base, vuint64m2_t
    bindex, size_t vl);
void vloxseg7ei64_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, vbool32_t mask,
    vfloat32m1_t maskedoff0, vfloat32m1_t maskedoff1,
    vfloat32m1_t maskedoff2, vfloat32m1_t maskedoff3,
    vfloat32m1_t maskedoff4, vfloat32m1_t maskedoff5,
    vfloat32m1_t maskedoff6, const float32_t *base, vuint64m2_t
```

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    bindex, size_t vl);
void vloxseg8ei64_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, vfloat32m1_t *v7,
    vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
    maskedoff1, vfloat32m1_t maskedoff2, vfloat32m1_t
    maskedoff3, vfloat32m1_t maskedoff4, vfloat32m1_t
    maskedoff5, vfloat32m1_t maskedoff6, vfloat32m1_t
    maskedoff7, const float32_t *base, vuint64m2_t bindex,
    size_t vl);
void vloxseg2ei64_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vbool16_t mask, vfloat32m2_t maskedoff0, vfloat32m2_t
    maskedoff1, const float32_t *base, vuint64m4_t bindex,
    size_t vl);
void vloxseg3ei64_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vbool16_t mask, vfloat32m2_t maskedoff0,
    vfloat32m2_t maskedoff1, vfloat32m2_t maskedoff2, const
    float32_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg4ei64_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vfloat32m2_t *v3, vbool16_t mask,
    vfloat32m2_t maskedoff0, vfloat32m2_t maskedoff1,
    vfloat32m2_t maskedoff2, vfloat32m2_t maskedoff3, const
    float32_t *base, vuint64m4_t bindex, size_t vl);
void vloxseg2ei64_v_f32m4_m (vfloat32m4_t *v0, vfloat32m4_t *v1,
    vbool8_t mask, vfloat32m4_t maskedoff0, vfloat32m4_t
    maskedoff1, const float32_t *base, vuint64m8_t bindex,
    size_t vl);
void vloxseg2ei16_v_f64m4_m (vfloat64m4_t *v0, vfloat64m4_t *v1,
    vbool16_t mask, vfloat64m4_t maskedoff0, vfloat64m4_t
    maskedoff1, const float64_t *base, vuint16m1_t bindex,
    size_t vl);
void vloxseg2ei32_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vbool32_t mask, vfloat64m2_t maskedoff0, vfloat64m2_t
    maskedoff1, const float64_t *base, vuint32m1_t bindex,
    size_t vl);
void vloxseg3ei32_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vbool32_t mask, vfloat64m2_t maskedoff0,
    vfloat64m2_t maskedoff1, vfloat64m2_t maskedoff2, const
    float64_t *base, vuint32m1_t bindex, size_t vl);
void vloxseg4ei32_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vfloat64m2_t *v3, vbool32_t mask,
    vfloat64m2_t maskedoff0, vfloat64m2_t maskedoff1,
    vfloat64m2_t maskedoff2, vfloat64m2_t maskedoff3, const
    float64_t *base, vuint32m1_t bindex, size_t vl);
void vloxseg2ei32_v_f64m4_m (vfloat64m4_t *v0, vfloat64m4_t *v1,
    vbool16_t mask, vfloat64m4_t maskedoff0, vfloat64m4_t
```

```
    maskedoff1, const float64_t *base, vuint32m2_t bindex,
    size_t vl);
void vloxseg2ei64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vbool64_t mask, vfloat64m1_t maskedoff0, vfloat64m1_t
    maskedoff1, const float64_t *base, vuint64m1_t bindex,
    size_t vl);
void vloxseg3ei64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vbool64_t mask, vfloat64m1_t maskedoff0,
    vfloat64m1_t maskedoff1, vfloat64m1_t maskedoff2, const
    float64_t *base, vuint64m1_t bindex, size_t vl);
void vloxseg4ei64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vbool64_t mask,
    vfloat64m1_t maskedoff0, vfloat64m1_t maskedoff1,
    vfloat64m1_t maskedoff2, vfloat64m1_t maskedoff3, const
    float64_t *base, vuint64m1_t bindex, size_t vl);
void vloxseg5ei64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vbool64_t mask, vfloat64m1_t maskedoff0, vfloat64m1_t
    maskedoff1, vfloat64m1_t maskedoff2, vfloat64m1_t
    maskedoff3, vfloat64m1_t maskedoff4, const float64_t *base,
    vuint64m1_t bindex, size_t vl);
void vloxseg6ei64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, vbool64_t mask, vfloat64m1_t maskedoff0,
    vfloat64m1_t maskedoff1, vfloat64m1_t maskedoff2,
    vfloat64m1_t maskedoff3, vfloat64m1_t maskedoff4,
    vfloat64m1_t maskedoff5, const float64_t *base, vuint64m1_t
    bindex, size_t vl);
void vloxseg7ei64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, vfloat64m1_t *v6, vbool64_t mask,
    vfloat64m1_t maskedoff0, vfloat64m1_t maskedoff1,
    vfloat64m1_t maskedoff2, vfloat64m1_t maskedoff3,
    vfloat64m1_t maskedoff4, vfloat64m1_t maskedoff5,
    vfloat64m1_t maskedoff6, const float64_t *base, vuint64m1_t
    bindex, size_t vl);
void vloxseg8ei64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, vfloat64m1_t *v6, vfloat64m1_t *v7,
    vbool64_t mask, vfloat64m1_t maskedoff0, vfloat64m1_t
    maskedoff1, vfloat64m1_t maskedoff2, vfloat64m1_t
    maskedoff3, vfloat64m1_t maskedoff4, vfloat64m1_t
    maskedoff5, vfloat64m1_t maskedoff6, vfloat64m1_t
    maskedoff7, const float64_t *base, vuint64m1_t bindex,
    size_t vl);
```

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void vloxseg2ei64_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vbool32_t mask, vfloat64m2_t maskedoff0, vfloat64m2_t
    maskedoff1, const float64_t *base, vuint64m2_t bindex,
    size_t vl);
void vloxseg3ei64_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vbool32_t mask, vfloat64m2_t maskedoff0,
    vfloat64m2_t maskedoff1, vfloat64m2_t maskedoff2, const
    float64_t *base, vuint64m2_t bindex, size_t vl);
void vloxseg4ei64_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vfloat64m2_t *v3, vbool32_t mask,
    vfloat64m2_t maskedoff0, vfloat64m2_t maskedoff1,
    vfloat64m2_t maskedoff2, vfloat64m2_t maskedoff3, const
    float64_t *base, vuint64m2_t bindex, size_t vl);
void vloxseg2ei64_v_f64m4_m (vfloat64m4_t *v0, vfloat64m4_t *v1,
    vbool16_t mask, vfloat64m4_t maskedoff0, vfloat64m4_t
    maskedoff1, const float64_t *base, vuint64m4_t bindex,
    size_t vl);
void vluxseg2ei8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1,
    const int8_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg3ei8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, const int8_t
    *base, vuint8m1_t bindex, size_t vl);
void vluxseg4ei8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vbool8_t mask, vint8m1_t
    maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
    vint8m1_t maskedoff3, const int8_t *base, vuint8m1_t bindex,
    size_t vl);
void vluxseg5ei8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vbool8_t mask,
    vint8m1_t maskedoff0, vint8m1_t maskedoff1, vint8m1_t
    maskedoff2, vint8m1_t maskedoff3, vint8m1_t maskedoff4,
    const int8_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg6ei8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1,
    vint8m1_t maskedoff2, vint8m1_t maskedoff3, vint8m1_t
    maskedoff4, vint8m1_t maskedoff5, const int8_t *base,
    vuint8m1_t bindex, size_t vl);
void vluxseg7ei8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, vint8m1_t
    maskedoff3, vint8m1_t maskedoff4, vint8m1_t maskedoff5,
    vint8m1_t maskedoff6, const int8_t *base, vuint8m1_t bindex,
```

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                size_t vl);
void vluxseg8ei8_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vint8m1_t *v7, vbool8_t mask, vint8m1_t
    maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
    vint8m1_t maskedoff3, vint8m1_t maskedoff4, vint8m1_t
    maskedoff5, vint8m1_t maskedoff6, vint8m1_t maskedoff7,
    const int8_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg2ei8_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
    vbool4_t mask, vint8m2_t maskedoff0, vint8m2_t maskedoff1,
    const int8_t *base, vuint8m2_t bindex, size_t vl);
void vluxseg3ei8_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
    vint8m2_t *v2, vbool4_t mask, vint8m2_t maskedoff0,
    vint8m2_t maskedoff1, vint8m2_t maskedoff2, const int8_t
    *base, vuint8m2_t bindex, size_t vl);
void vluxseg4ei8_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
    vint8m2_t *v2, vint8m2_t *v3, vbool4_t mask, vint8m2_t
    maskedoff0, vint8m2_t maskedoff1, vint8m2_t maskedoff2,
    vint8m2_t maskedoff3, const int8_t *base, vuint8m2_t bindex,
    size_t vl);
void vluxseg2ei8_v_i8m4_m (vint8m4_t *v0, vint8m4_t *v1,
    vbool2_t mask, vint8m4_t maskedoff0, vint8m4_t maskedoff1,
    const int8_t *base, vuint8m4_t bindex, size_t vl);
void vluxseg2ei16_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1,
    const int8_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg3ei16_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, const int8_t
    *base, vuint16m2_t bindex, size_t vl);
void vluxseg4ei16_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vbool8_t mask, vint8m1_t
    maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
    vint8m1_t maskedoff3, const int8_t *base, vuint16m2_t
    bindex, size_t vl);
void vluxseg5ei16_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vbool8_t mask,
    vint8m1_t maskedoff0, vint8m1_t maskedoff1, vint8m1_t
    maskedoff2, vint8m1_t maskedoff3, vint8m1_t maskedoff4,
    const int8_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg6ei16_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1,
    vint8m1_t maskedoff2, vint8m1_t maskedoff3, vint8m1_t
    maskedoff4, vint8m1_t maskedoff5, const int8_t *base,
    vuint16m2_t bindex, size_t vl);
```

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void vluxseg7ei16_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, vint8m1_t
    maskedoff3, vint8m1_t maskedoff4, vint8m1_t maskedoff5,
    vint8m1_t maskedoff6, const int8_t *base, vuint16m2_t
    bindex, size_t vl);
void vluxseg8ei16_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vint8m1_t *v7, vbool8_t mask, vint8m1_t
    maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
    vint8m1_t maskedoff3, vint8m1_t maskedoff4, vint8m1_t
    maskedoff5, vint8m1_t maskedoff6, vint8m1_t maskedoff7,
    const int8_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg2ei16_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
    vbool4_t mask, vint8m2_t maskedoff0, vint8m2_t maskedoff1,
    const int8_t *base, vuint16m4_t bindex, size_t vl);
void vluxseg3ei16_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
    vint8m2_t *v2, vbool4_t mask, vint8m2_t maskedoff0,
    vint8m2_t maskedoff1, vint8m2_t maskedoff2, const int8_t
    *base, vuint16m4_t bindex, size_t vl);
void vluxseg4ei16_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
    vint8m2_t *v2, vint8m2_t *v3, vbool4_t mask, vint8m2_t
    maskedoff0, vint8m2_t maskedoff1, vint8m2_t maskedoff2,
    vint8m2_t maskedoff3, const int8_t *base, vuint16m4_t
    bindex, size_t vl);
void vluxseg2ei16_v_i8m4_m (vint8m4_t *v0, vint8m4_t *v1,
    vbool2_t mask, vint8m4_t maskedoff0, vint8m4_t maskedoff1,
    const int8_t *base, vuint16m8_t bindex, size_t vl);
void vluxseg2ei32_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1,
    const int8_t *base, vuint32m4_t bindex, size_t vl);
void vluxseg3ei32_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, const int8_t
    *base, vuint32m4_t bindex, size_t vl);
void vluxseg4ei32_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vbool8_t mask, vint8m1_t
    maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
    vint8m1_t maskedoff3, const int8_t *base, vuint32m4_t
    bindex, size_t vl);
void vluxseg5ei32_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vbool8_t mask,
    vint8m1_t maskedoff0, vint8m1_t maskedoff1, vint8m1_t
    maskedoff2, vint8m1_t maskedoff3, vint8m1_t maskedoff4,
    const int8_t *base, vuint32m4_t bindex, size_t vl);
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317

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void vluxseg6ei32_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1,
    vint8m1_t maskedoff2, vint8m1_t maskedoff3, vint8m1_t
    maskedoff4, vint8m1_t maskedoff5, const int8_t *base,
    vuint32m4_t bindex, size_t vl);
void vluxseg7ei32_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, vint8m1_t
    maskedoff3, vint8m1_t maskedoff4, vint8m1_t maskedoff5,
    vint8m1_t maskedoff6, const int8_t *base, vuint32m4_t
    bindex, size_t vl);
void vluxseg8ei32_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vint8m1_t *v7, vbool8_t mask, vint8m1_t
    maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
    vint8m1_t maskedoff3, vint8m1_t maskedoff4, vint8m1_t
    maskedoff5, vint8m1_t maskedoff6, vint8m1_t maskedoff7,
    const int8_t *base, vuint32m4_t bindex, size_t vl);
void vluxseg2ei32_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
    vbool4_t mask, vint8m2_t maskedoff0, vint8m2_t maskedoff1,
    const int8_t *base, vuint32m8_t bindex, size_t vl);
void vluxseg3ei32_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
    vint8m2_t *v2, vbool4_t mask, vint8m2_t maskedoff0,
    vint8m2_t maskedoff1, vint8m2_t maskedoff2, const int8_t
    *base, vuint32m8_t bindex, size_t vl);
void vluxseg4ei32_v_i8m2_m (vint8m2_t *v0, vint8m2_t *v1,
    vint8m2_t *v2, vint8m2_t *v3, vbool4_t mask, vint8m2_t
    maskedoff0, vint8m2_t maskedoff1, vint8m2_t maskedoff2,
    vint8m2_t maskedoff3, const int8_t *base, vuint32m8_t
    bindex, size_t vl);
void vluxseg2ei64_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1,
    const int8_t *base, vuint64m8_t bindex, size_t vl);
void vluxseg3ei64_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, const int8_t
    *base, vuint64m8_t bindex, size_t vl);
void vluxseg4ei64_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vbool8_t mask, vint8m1_t
    maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
    vint8m1_t maskedoff3, const int8_t *base, vuint64m8_t
    bindex, size_t vl);
void vluxseg5ei64_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vbool8_t mask,
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    vint8m1_t maskedoff0, vint8m1_t maskedoff1, vint8m1_t
    maskedoff2, vint8m1_t maskedoff3, vint8m1_t maskedoff4,
    const int8_t *base, vuint64m8_t bindex, size_t vl);
void vluxseg6ei64_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vbool8_t mask, vint8m1_t maskedoff0, vint8m1_t maskedoff1,
    vint8m1_t maskedoff2, vint8m1_t maskedoff3, vint8m1_t
    maskedoff4, vint8m1_t maskedoff5, const int8_t *base,
    vuint64m8_t bindex, size_t vl);
void vluxseg7ei64_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vbool8_t mask, vint8m1_t maskedoff0,
    vint8m1_t maskedoff1, vint8m1_t maskedoff2, vint8m1_t
    maskedoff3, vint8m1_t maskedoff4, vint8m1_t maskedoff5,
    vint8m1_t maskedoff6, const int8_t *base, vuint64m8_t
    bindex, size_t vl);
void vluxseg8ei64_v_i8m1_m (vint8m1_t *v0, vint8m1_t *v1,
    vint8m1_t *v2, vint8m1_t *v3, vint8m1_t *v4, vint8m1_t *v5,
    vint8m1_t *v6, vint8m1_t *v7, vbool8_t mask, vint8m1_t
    maskedoff0, vint8m1_t maskedoff1, vint8m1_t maskedoff2,
    vint8m1_t maskedoff3, vint8m1_t maskedoff4, vint8m1_t
    maskedoff5, vint8m1_t maskedoff6, vint8m1_t maskedoff7,
    const int8_t *base, vuint64m8_t bindex, size_t vl);
void vluxseg2ei8_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vbool8_t mask, vint16m2_t maskedoff0, vint16m2_t maskedoff1,
    const int16_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg3ei8_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vbool8_t mask, vint16m2_t maskedoff0,
    vint16m2_t maskedoff1, vint16m2_t maskedoff2, const int16_t
    *base, vuint8m1_t bindex, size_t vl);
void vluxseg4ei8_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vint16m2_t *v3, vbool8_t mask, vint16m2_t
    maskedoff0, vint16m2_t maskedoff1, vint16m2_t maskedoff2,
    vint16m2_t maskedoff3, const int16_t *base, vuint8m1_t
    bindex, size_t vl);
void vluxseg2ei8_v_i16m4_m (vint16m4_t *v0, vint16m4_t *v1,
    vbool4_t mask, vint16m4_t maskedoff0, vint16m4_t maskedoff1,
    const int16_t *base, vuint8m2_t bindex, size_t vl);
void vluxseg2ei16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vbool16_t mask, vint16m1_t maskedoff0, vint16m1_t
    maskedoff1, const int16_t *base, vuint16m1_t bindex, size_t
    vl);
void vluxseg3ei16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vbool16_t mask, vint16m1_t maskedoff0,
    vint16m1_t maskedoff1, vint16m1_t maskedoff2, const int16_t
    *base, vuint16m1_t bindex, size_t vl);
```

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void vluxseg4ei16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vbool16_t mask, vint16m1_t
    maskedoff0, vint16m1_t maskedoff1, vint16m1_t maskedoff2,
    vint16m1_t maskedoff3, const int16_t *base, vuint16m1_t
    bindex, size_t vl);
void vluxseg5ei16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vbool16_t
    mask, vint16m1_t maskedoff0, vint16m1_t maskedoff1,
    vint16m1_t maskedoff2, vint16m1_t maskedoff3, vint16m1_t
    maskedoff4, const int16_t *base, vuint16m1_t bindex, size_t
    vl);
void vluxseg6ei16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vbool16_t mask, vint16m1_t maskedoff0, vint16m1_t
    maskedoff1, vint16m1_t maskedoff2, vint16m1_t maskedoff3,
    vint16m1_t maskedoff4, vint16m1_t maskedoff5, const int16_t
    *base, vuint16m1_t bindex, size_t vl);
void vluxseg7ei16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, vbool16_t mask, vint16m1_t maskedoff0,
    vint16m1_t maskedoff1, vint16m1_t maskedoff2, vint16m1_t
    maskedoff3, vint16m1_t maskedoff4, vint16m1_t maskedoff5,
    vint16m1_t maskedoff6, const int16_t *base, vuint16m1_t
    bindex, size_t vl);
void vluxseg8ei16_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, vint16m1_t *v7, vbool16_t mask,
    vint16m1_t maskedoff0, vint16m1_t maskedoff1, vint16m1_t
    maskedoff2, vint16m1_t maskedoff3, vint16m1_t maskedoff4,
    vint16m1_t maskedoff5, vint16m1_t maskedoff6, vint16m1_t
    maskedoff7, const int16_t *base, vuint16m1_t bindex, size_t
    vl);
void vluxseg2ei16_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vbool8_t mask, vint16m2_t maskedoff0, vint16m2_t maskedoff1,
    const int16_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg3ei16_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vbool8_t mask, vint16m2_t maskedoff0,
    vint16m2_t maskedoff1, vint16m2_t maskedoff2, const int16_t
    *base, vuint16m2_t bindex, size_t vl);
void vluxseg4ei16_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vint16m2_t *v3, vbool8_t mask, vint16m2_t
    maskedoff0, vint16m2_t maskedoff1, vint16m2_t maskedoff2,
    vint16m2_t maskedoff3, const int16_t *base, vuint16m2_t
    bindex, size_t vl);
void vluxseg2ei16_v_i16m4_m (vint16m4_t *v0, vint16m4_t *v1,
    vbool4_t mask, vint16m4_t maskedoff0, vint16m4_t maskedoff1,
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320

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        const int16_t *base, vuint16m4_t bindex, size_t vl);
void vluxseg2ei32_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vbool16_t mask, vint16m1_t maskedoff0, vint16m1_t
    maskedoff1, const int16_t *base, vuint32m2_t bindex, size_t
    vl);
void vluxseg3ei32_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vbool16_t mask, vint16m1_t maskedoff0,
    vint16m1_t maskedoff1, vint16m1_t maskedoff2, const int16_t
    *base, vuint32m2_t bindex, size_t vl);
void vluxseg4ei32_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vbool16_t mask, vint16m1_t
    maskedoff0, vint16m1_t maskedoff1, vint16m1_t maskedoff2,
    vint16m1_t maskedoff3, const int16_t *base, vuint32m2_t
    bindex, size_t vl);
void vluxseg5ei32_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vbool16_t
    mask, vint16m1_t maskedoff0, vint16m1_t maskedoff1,
    vint16m1_t maskedoff2, vint16m1_t maskedoff3, vint16m1_t
    maskedoff4, const int16_t *base, vuint32m2_t bindex, size_t
    vl);
void vluxseg6ei32_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vbool16_t mask, vint16m1_t maskedoff0, vint16m1_t
    maskedoff1, vint16m1_t maskedoff2, vint16m1_t maskedoff3,
    vint16m1_t maskedoff4, vint16m1_t maskedoff5, const int16_t
    *base, vuint32m2_t bindex, size_t vl);
void vluxseg7ei32_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, vbool16_t mask, vint16m1_t maskedoff0,
    vint16m1_t maskedoff1, vint16m1_t maskedoff2, vint16m1_t
    maskedoff3, vint16m1_t maskedoff4, vint16m1_t maskedoff5,
    vint16m1_t maskedoff6, const int16_t *base, vuint32m2_t
    bindex, size_t vl);
void vluxseg8ei32_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
    vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
    *v5, vint16m1_t *v6, vint16m1_t *v7, vbool16_t mask,
    vint16m1_t maskedoff0, vint16m1_t maskedoff1, vint16m1_t
    maskedoff2, vint16m1_t maskedoff3, vint16m1_t maskedoff4,
    vint16m1_t maskedoff5, vint16m1_t maskedoff6, vint16m1_t
    maskedoff7, const int16_t *base, vuint32m2_t bindex, size_t
    vl);
void vluxseg2ei32_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vbool8_t mask, vint16m2_t maskedoff0, vint16m2_t maskedoff1,
    const int16_t *base, vuint32m4_t bindex, size_t vl);
void vluxseg3ei32_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vbool8_t mask, vint16m2_t maskedoff0,
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                             vint16m2_t maskedoff1, vint16m2_t maskedoff2, const int16_t
                             *base, vuint32m4_t bindex, size_t vl);
void vluxseg4ei32_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
      vint16m2_t *v2, vint16m2_t *v3, vbool8_t mask, vint16m2_t
      maskedoff0, vint16m2_t maskedoff1, vint16m2_t maskedoff2,
      vint16m2_t maskedoff3, const int16_t *base, vuint32m4_t
      bindex, size_t vl);
void vluxseg2ei32_v_i16m4_m (vint16m4_t *v0, vint16m4_t *v1,
      vbool4_t mask, vint16m4_t maskedoff0, vint16m4_t maskedoff1,
      const int16_t *base, vuint32m8_t bindex, size_t vl);
void vluxseg2ei64_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
      vbool16_t mask, vint16m1_t maskedoff0, vint16m1_t
      maskedoff1, const int16_t *base, vuint64m4_t bindex, size_t
      vl);
void vluxseg3ei64_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
      vint16m1_t *v2, vbool16_t mask, vint16m1_t maskedoff0,
      vint16m1_t maskedoff1, vint16m1_t maskedoff2, const int16_t
      *base, vuint64m4_t bindex, size_t vl);
void vluxseg4ei64_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
      vint16m1_t *v2, vint16m1_t *v3, vbool16_t mask, vint16m1_t
      maskedoff0, vint16m1_t maskedoff1, vint16m1_t maskedoff2,
      vint16m1_t maskedoff3, const int16_t *base, vuint64m4_t
      bindex, size_t vl);
void vluxseg5ei64_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
      vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vbool16_t
      mask, vint16m1_t maskedoff0, vint16m1_t maskedoff1,
      vint16m1_t maskedoff2, vint16m1_t maskedoff3, vint16m1_t
      maskedoff4, const int16_t *base, vuint64m4_t bindex, size_t
      vl);
void vluxseg6ei64_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
      vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
      *v5, vbool16_t mask, vint16m1_t maskedoff0, vint16m1_t
      maskedoff1, vint16m1_t maskedoff2, vint16m1_t maskedoff3,
      vint16m1_t maskedoff4, vint16m1_t maskedoff5, const int16_t
      *base, vuint64m4_t bindex, size_t vl);
void vluxseg7ei64_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
      vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
      *v5, vint16m1_t *v6, vbool16_t mask, vint16m1_t maskedoff0,
      vint16m1_t maskedoff1, vint16m1_t maskedoff2, vint16m1_t
      maskedoff3, vint16m1_t maskedoff4, vint16m1_t maskedoff5,
      vint16m1_t maskedoff6, const int16_t *base, vuint64m4_t
      bindex, size_t vl);
void vluxseg8ei64_v_i16m1_m (vint16m1_t *v0, vint16m1_t *v1,
      vint16m1_t *v2, vint16m1_t *v3, vint16m1_t *v4, vint16m1_t
      *v5, vint16m1_t *v6, vint16m1_t *v7, vbool16_t mask,
      vint16m1_t maskedoff0, vint16m1_t maskedoff1, vint16m1_t
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    maskedoff2, vint16m1_t maskedoff3, vint16m1_t maskedoff4,
    vint16m1_t maskedoff5, vint16m1_t maskedoff6, vint16m1_t
    maskedoff7, const int16_t *base, vuint64m4_t bindex, size_t
    vl);
void vluxseg2ei64_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vbool8_t mask, vint16m2_t maskedoff0, vint16m2_t maskedoff1,
    const int16_t *base, vuint64m8_t bindex, size_t vl);
void vluxseg3ei64_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vbool8_t mask, vint16m2_t maskedoff0,
    vint16m2_t maskedoff1, vint16m2_t maskedoff2, const int16_t
    *base, vuint64m8_t bindex, size_t vl);
void vluxseg4ei64_v_i16m2_m (vint16m2_t *v0, vint16m2_t *v1,
    vint16m2_t *v2, vint16m2_t *v3, vbool8_t mask, vint16m2_t
    maskedoff0, vint16m2_t maskedoff1, vint16m2_t maskedoff2,
    vint16m2_t maskedoff3, const int16_t *base, vuint64m8_t
    bindex, size_t vl);
void vluxseg2ei8_v_i32m4_m (vint32m4_t *v0, vint32m4_t *v1,
    vbool8_t mask, vint32m4_t maskedoff0, vint32m4_t maskedoff1,
    const int32_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg2ei16_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
    vbool16_t mask, vint32m2_t maskedoff0, vint32m2_t
    maskedoff1, const int32_t *base, vuint16m1_t bindex, size_t
    vl);
void vluxseg3ei16_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vbool16_t mask, vint32m2_t maskedoff0,
    vint32m2_t maskedoff1, vint32m2_t maskedoff2, const int32_t
    *base, vuint16m1_t bindex, size_t vl);
void vluxseg4ei16_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vint32m2_t *v3, vbool16_t mask, vint32m2_t
    maskedoff0, vint32m2_t maskedoff1, vint32m2_t maskedoff2,
    vint32m2_t maskedoff3, const int32_t *base, vuint16m1_t
    bindex, size_t vl);
void vluxseg2ei16_v_i32m4_m (vint32m4_t *v0, vint32m4_t *v1,
    vbool8_t mask, vint32m4_t maskedoff0, vint32m4_t maskedoff1,
    const int32_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg2ei32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vbool32_t mask, vint32m1_t maskedoff0, vint32m1_t
    maskedoff1, const int32_t *base, vuint32m1_t bindex, size_t
    vl);
void vluxseg3ei32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vbool32_t mask, vint32m1_t maskedoff0,
    vint32m1_t maskedoff1, vint32m1_t maskedoff2, const int32_t
    *base, vuint32m1_t bindex, size_t vl);
void vluxseg4ei32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vbool32_t mask, vint32m1_t
    maskedoff0, vint32m1_t maskedoff1, vint32m1_t maskedoff2,
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    vint32m1_t maskedoff3, const int32_t *base, vuint32m1_t
    bindex, size_t vl);
void vluxseg5ei32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vbool32_t
    mask, vint32m1_t maskedoff0, vint32m1_t maskedoff1,
    vint32m1_t maskedoff2, vint32m1_t maskedoff3, vint32m1_t
    maskedoff4, const int32_t *base, vuint32m1_t bindex, size_t
    vl);
void vluxseg6ei32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vbool32_t mask, vint32m1_t maskedoff0, vint32m1_t
    maskedoff1, vint32m1_t maskedoff2, vint32m1_t maskedoff3,
    vint32m1_t maskedoff4, vint32m1_t maskedoff5, const int32_t
    *base, vuint32m1_t bindex, size_t vl);
void vluxseg7ei32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, vbool32_t mask, vint32m1_t maskedoff0,
    vint32m1_t maskedoff1, vint32m1_t maskedoff2, vint32m1_t
    maskedoff3, vint32m1_t maskedoff4, vint32m1_t maskedoff5,
    vint32m1_t maskedoff6, const int32_t *base, vuint32m1_t
    bindex, size_t vl);
void vluxseg8ei32_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, vint32m1_t *v7, vbool32_t mask,
    vint32m1_t maskedoff0, vint32m1_t maskedoff1, vint32m1_t
    maskedoff2, vint32m1_t maskedoff3, vint32m1_t maskedoff4,
    vint32m1_t maskedoff5, vint32m1_t maskedoff6, vint32m1_t
    maskedoff7, const int32_t *base, vuint32m1_t bindex, size_t
    vl);
void vluxseg2ei32_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
    vbool16_t mask, vint32m2_t maskedoff0, vint32m2_t
    maskedoff1, const int32_t *base, vuint32m2_t bindex, size_t
    vl);
void vluxseg3ei32_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vbool16_t mask, vint32m2_t maskedoff0,
    vint32m2_t maskedoff1, vint32m2_t maskedoff2, const int32_t
    *base, vuint32m2_t bindex, size_t vl);
void vluxseg4ei32_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vint32m2_t *v3, vbool16_t mask, vint32m2_t
    maskedoff0, vint32m2_t maskedoff1, vint32m2_t maskedoff2,
    vint32m2_t maskedoff3, const int32_t *base, vuint32m2_t
    bindex, size_t vl);
void vluxseg2ei32_v_i32m4_m (vint32m4_t *v0, vint32m4_t *v1,
    vbool8_t mask, vint32m4_t maskedoff0, vint32m4_t maskedoff1,
    const int32_t *base, vuint32m4_t bindex, size_t vl);
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void vluxseg2ei64_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vbool32_t mask, vint32m1_t maskedoff0, vint32m1_t
    maskedoff1, const int32_t *base, vuint64m2_t bindex, size_t
    vl);
void vluxseg3ei64_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vbool32_t mask, vint32m1_t maskedoff0,
    vint32m1_t maskedoff1, vint32m1_t maskedoff2, const int32_t
    *base, vuint64m2_t bindex, size_t vl);
void vluxseg4ei64_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vbool32_t mask, vint32m1_t
    maskedoff0, vint32m1_t maskedoff1, vint32m1_t maskedoff2,
    vint32m1_t maskedoff3, const int32_t *base, vuint64m2_t
    bindex, size_t vl);
void vluxseg5ei64_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vbool32_t
    mask, vint32m1_t maskedoff0, vint32m1_t maskedoff1,
    vint32m1_t maskedoff2, vint32m1_t maskedoff3, vint32m1_t
    maskedoff4, const int32_t *base, vuint64m2_t bindex, size_t
    vl);
void vluxseg6ei64_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vbool32_t mask, vint32m1_t maskedoff0, vint32m1_t
    maskedoff1, vint32m1_t maskedoff2, vint32m1_t maskedoff3,
    vint32m1_t maskedoff4, vint32m1_t maskedoff5, const int32_t
    *base, vuint64m2_t bindex, size_t vl);
void vluxseg7ei64_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, vbool32_t mask, vint32m1_t maskedoff0,
    vint32m1_t maskedoff1, vint32m1_t maskedoff2, vint32m1_t
    maskedoff3, vint32m1_t maskedoff4, vint32m1_t maskedoff5,
    vint32m1_t maskedoff6, const int32_t *base, vuint64m2_t
    bindex, size_t vl);
void vluxseg8ei64_v_i32m1_m (vint32m1_t *v0, vint32m1_t *v1,
    vint32m1_t *v2, vint32m1_t *v3, vint32m1_t *v4, vint32m1_t
    *v5, vint32m1_t *v6, vint32m1_t *v7, vbool32_t mask,
    vint32m1_t maskedoff0, vint32m1_t maskedoff1, vint32m1_t
    maskedoff2, vint32m1_t maskedoff3, vint32m1_t maskedoff4,
    vint32m1_t maskedoff5, vint32m1_t maskedoff6, vint32m1_t
    maskedoff7, const int32_t *base, vuint64m2_t bindex, size_t
    vl);
void vluxseg2ei64_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
    vbool16_t mask, vint32m2_t maskedoff0, vint32m2_t
    maskedoff1, const int32_t *base, vuint64m4_t bindex, size_t
    vl);
void vluxseg3ei64_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
    vint32m2_t *v2, vbool16_t mask, vint32m2_t maskedoff0,
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325

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      vint32m2_t maskedoff1, vint32m2_t maskedoff2, const int32_t
      *base, vuint64m4_t bindex, size_t vl);
void vluxseg4ei64_v_i32m2_m (vint32m2_t *v0, vint32m2_t *v1,
      vint32m2_t *v2, vint32m2_t *v3, vbool16_t mask, vint32m2_t
      maskedoff0, vint32m2_t maskedoff1, vint32m2_t maskedoff2,
      vint32m2_t maskedoff3, const int32_t *base, vuint64m4_t
      bindex, size_t vl);
void vluxseg2ei64_v_i32m4_m (vint32m4_t *v0, vint32m4_t *v1,
      vbool8_t mask, vint32m4_t maskedoff0, vint32m4_t maskedoff1,
      const int32_t *base, vuint64m8_t bindex, size_t vl);
void vluxseg2ei16_v_i64m4_m (vint64m4_t *v0, vint64m4_t *v1,
      vbool16_t mask, vint64m4_t maskedoff0, vint64m4_t
      maskedoff1, const int64_t *base, vuint16m1_t bindex, size_t
      vl);
void vluxseg2ei32_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
      vbool32_t mask, vint64m2_t maskedoff0, vint64m2_t
      maskedoff1, const int64_t *base, vuint32m1_t bindex, size_t
      vl);
void vluxseg3ei32_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
      vint64m2_t *v2, vbool32_t mask, vint64m2_t maskedoff0,
      vint64m2_t maskedoff1, vint64m2_t maskedoff2, const int64_t
      *base, vuint32m1_t bindex, size_t vl);
void vluxseg4ei32_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
      vint64m2_t *v2, vint64m2_t *v3, vbool32_t mask, vint64m2_t
      maskedoff0, vint64m2_t maskedoff1, vint64m2_t maskedoff2,
      vint64m2_t maskedoff3, const int64_t *base, vuint32m1_t
      bindex, size_t vl);
void vluxseg2ei32_v_i64m4_m (vint64m4_t *v0, vint64m4_t *v1,
      vbool16_t mask, vint64m4_t maskedoff0, vint64m4_t
      maskedoff1, const int64_t *base, vuint32m2_t bindex, size_t
      vl);
void vluxseg2ei64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
      vbool64_t mask, vint64m1_t maskedoff0, vint64m1_t
      maskedoff1, const int64_t *base, vuint64m1_t bindex, size_t
      vl);
void vluxseg3ei64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
      vint64m1_t *v2, vbool64_t mask, vint64m1_t maskedoff0,
      vint64m1_t maskedoff1, vint64m1_t maskedoff2, const int64_t
      *base, vuint64m1_t bindex, size_t vl);
void vluxseg4ei64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
      vint64m1_t *v2, vint64m1_t *v3, vbool64_t mask, vint64m1_t
      maskedoff0, vint64m1_t maskedoff1, vint64m1_t maskedoff2,
      vint64m1_t maskedoff3, const int64_t *base, vuint64m1_t
      bindex, size_t vl);
void vluxseg5ei64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
      vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vbool64_t
```

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      mask, vint64m1_t maskedoff0, vint64m1_t maskedoff1,
      vint64m1_t maskedoff2, vint64m1_t maskedoff3, vint64m1_t
      maskedoff4, const int64_t *base, vuint64m1_t bindex, size_t
      vl);
void vluxseg6ei64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
      vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
      *v5, vbool64_t mask, vint64m1_t maskedoff0, vint64m1_t
      maskedoff1, vint64m1_t maskedoff2, vint64m1_t maskedoff3,
      vint64m1_t maskedoff4, vint64m1_t maskedoff5, const int64_t
      *base, vuint64m1_t bindex, size_t vl);
void vluxseg7ei64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
      vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
      *v5, vint64m1_t *v6, vbool64_t mask, vint64m1_t maskedoff0,
      vint64m1_t maskedoff1, vint64m1_t maskedoff2, vint64m1_t
      maskedoff3, vint64m1_t maskedoff4, vint64m1_t maskedoff5,
      vint64m1_t maskedoff6, const int64_t *base, vuint64m1_t
      bindex, size_t vl);
void vluxseg8ei64_v_i64m1_m (vint64m1_t *v0, vint64m1_t *v1,
      vint64m1_t *v2, vint64m1_t *v3, vint64m1_t *v4, vint64m1_t
      *v5, vint64m1_t *v6, vint64m1_t *v7, vbool64_t mask,
      vint64m1_t maskedoff0, vint64m1_t maskedoff1, vint64m1_t
      maskedoff2, vint64m1_t maskedoff3, vint64m1_t maskedoff4,
      vint64m1_t maskedoff5, vint64m1_t maskedoff6, vint64m1_t
      maskedoff7, const int64_t *base, vuint64m1_t bindex, size_t
      vl);
void vluxseg2ei64_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
      vbool32_t mask, vint64m2_t maskedoff0, vint64m2_t
      maskedoff1, const int64_t *base, vuint64m2_t bindex, size_t
      vl);
void vluxseg3ei64_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
      vint64m2_t *v2, vbool32_t mask, vint64m2_t maskedoff0,
      vint64m2_t maskedoff1, vint64m2_t maskedoff2, const int64_t
      *base, vuint64m2_t bindex, size_t vl);
void vluxseg4ei64_v_i64m2_m (vint64m2_t *v0, vint64m2_t *v1,
      vint64m2_t *v2, vint64m2_t *v3, vbool32_t mask, vint64m2_t
      maskedoff0, vint64m2_t maskedoff1, vint64m2_t maskedoff2,
      vint64m2_t maskedoff3, const int64_t *base, vuint64m2_t
      bindex, size_t vl);
void vluxseg2ei64_v_i64m4_m (vint64m4_t *v0, vint64m4_t *v1,
      vbool16_t mask, vint64m4_t maskedoff0, vint64m4_t
      maskedoff1, const int64_t *base, vuint64m4_t bindex, size_t
      vl);
void vluxseg2ei8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
      vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
      const uint8_t *base, vuint8m1_t bindex, size_t vl);
```

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void vluxseg3ei8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vbool8_t mask, vuint8m1_t maskedoff0,
    vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, const uint8_t
    *base, vuint8m1_t bindex, size_t vl);
void vluxseg4ei8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vbool8_t mask, vuint8m1_t
    maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t maskedoff2,
    vuint8m1_t maskedoff3, const uint8_t *base, vuint8m1_t
    bindex, size_t vl);
void vluxseg5ei8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vbool8_t
    mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
    vuint8m1_t maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t
    maskedoff4, const uint8_t *base, vuint8m1_t bindex, size_t
    vl);
void vluxseg6ei8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t
    maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t maskedoff3,
    vuint8m1_t maskedoff4, vuint8m1_t maskedoff5, const uint8_t
    *base, vuint8m1_t bindex, size_t vl);
void vluxseg7ei8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vbool8_t mask, vuint8m1_t maskedoff0,
    vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t
    maskedoff3, vuint8m1_t maskedoff4, vuint8m1_t maskedoff5,
    vuint8m1_t maskedoff6, const uint8_t *base, vuint8m1_t
    bindex, size_t vl);
void vluxseg8ei8_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vuint8m1_t *v7, vbool8_t mask,
    vuint8m1_t maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t
    maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t maskedoff4,
    vuint8m1_t maskedoff5, vuint8m1_t maskedoff6, vuint8m1_t
    maskedoff7, const uint8_t *base, vuint8m1_t bindex, size_t
    vl);
void vluxseg2ei8_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
    vbool4_t mask, vuint8m2_t maskedoff0, vuint8m2_t maskedoff1,
    const uint8_t *base, vuint8m2_t bindex, size_t vl);
void vluxseg3ei8_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, vbool4_t mask, vuint8m2_t maskedoff0,
    vuint8m2_t maskedoff1, vuint8m2_t maskedoff2, const uint8_t
    *base, vuint8m2_t bindex, size_t vl);
void vluxseg4ei8_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, vuint8m2_t *v3, vbool4_t mask, vuint8m2_t
    maskedoff0, vuint8m2_t maskedoff1, vuint8m2_t maskedoff2,
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    vuint8m2_t maskedoff3, const uint8_t *base, vuint8m2_t
    bindex, size_t vl);
void vluxseg2ei8_v_u8m4_m (vuint8m4_t *v0, vuint8m4_t *v1,
    vbool2_t mask, vuint8m4_t maskedoff0, vuint8m4_t maskedoff1,
    const uint8_t *base, vuint8m4_t bindex, size_t vl);
void vluxseg2ei16_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
    const uint8_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg3ei16_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vbool8_t mask, vuint8m1_t maskedoff0,
    vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, const uint8_t
    *base, vuint16m2_t bindex, size_t vl);
void vluxseg4ei16_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vbool8_t mask, vuint8m1_t
    maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t maskedoff2,
    vuint8m1_t maskedoff3, const uint8_t *base, vuint16m2_t
    bindex, size_t vl);
void vluxseg5ei16_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vbool8_t
    mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
    vuint8m1_t maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t
    maskedoff4, const uint8_t *base, vuint16m2_t bindex, size_t
    vl);
void vluxseg6ei16_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t
    maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t maskedoff3,
    vuint8m1_t maskedoff4, vuint8m1_t maskedoff5, const uint8_t
    *base, vuint16m2_t bindex, size_t vl);
void vluxseg7ei16_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vbool8_t mask, vuint8m1_t maskedoff0,
    vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t
    maskedoff3, vuint8m1_t maskedoff4, vuint8m1_t maskedoff5,
    vuint8m1_t maskedoff6, const uint8_t *base, vuint16m2_t
    bindex, size_t vl);
void vluxseg8ei16_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vuint8m1_t *v7, vbool8_t mask,
    vuint8m1_t maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t
    maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t maskedoff4,
    vuint8m1_t maskedoff5, vuint8m1_t maskedoff6, vuint8m1_t
    maskedoff7, const uint8_t *base, vuint16m2_t bindex, size_t
    vl);
void vluxseg2ei16_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
    vbool4_t mask, vuint8m2_t maskedoff0, vuint8m2_t maskedoff1,
```

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                        const uint8_t *base, vuint16m4_t bindex, size_t vl);
void vluxseg3ei16_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, vbool4_t mask, vuint8m2_t maskedoff0,
    vuint8m2_t maskedoff1, vuint8m2_t maskedoff2, const uint8_t
    *base, vuint16m4_t bindex, size_t vl);
void vluxseg4ei16_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, vuint8m2_t *v3, vbool4_t mask, vuint8m2_t
    maskedoff0, vuint8m2_t maskedoff1, vuint8m2_t maskedoff2,
    vuint8m2_t maskedoff3, const uint8_t *base, vuint16m4_t
    bindex, size_t vl);
void vluxseg2ei16_v_u8m4_m (vuint8m4_t *v0, vuint8m4_t *v1,
    vbool2_t mask, vuint8m4_t maskedoff0, vuint8m4_t maskedoff1,
    const uint8_t *base, vuint16m8_t bindex, size_t vl);
void vluxseg2ei32_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
    const uint8_t *base, vuint32m4_t bindex, size_t vl);
void vluxseg3ei32_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vbool8_t mask, vuint8m1_t maskedoff0,
    vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, const uint8_t
    *base, vuint32m4_t bindex, size_t vl);
void vluxseg4ei32_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vbool8_t mask, vuint8m1_t
    maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t maskedoff2,
    vuint8m1_t maskedoff3, const uint8_t *base, vuint32m4_t
    bindex, size_t vl);
void vluxseg5ei32_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vbool8_t
    mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
    vuint8m1_t maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t
    maskedoff4, const uint8_t *base, vuint32m4_t bindex, size_t
    vl);
void vluxseg6ei32_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t
    maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t maskedoff3,
    vuint8m1_t maskedoff4, vuint8m1_t maskedoff5, const uint8_t
    *base, vuint32m4_t bindex, size_t vl);
void vluxseg7ei32_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vbool8_t mask, vuint8m1_t maskedoff0,
    vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t
    maskedoff3, vuint8m1_t maskedoff4, vuint8m1_t maskedoff5,
    vuint8m1_t maskedoff6, const uint8_t *base, vuint32m4_t
    bindex, size_t vl);
void vluxseg8ei32_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
```

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    *v5, vuint8m1_t *v6, vuint8m1_t *v7, vbool8_t mask,
    vuint8m1_t maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t
    maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t maskedoff4,
    vuint8m1_t maskedoff5, vuint8m1_t maskedoff6, vuint8m1_t
    maskedoff7, const uint8_t *base, vuint32m4_t bindex, size_t
    vl);
void vluxseg2ei32_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
    vbool4_t mask, vuint8m2_t maskedoff0, vuint8m2_t maskedoff1,
    const uint8_t *base, vuint32m8_t bindex, size_t vl);
void vluxseg3ei32_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, vbool4_t mask, vuint8m2_t maskedoff0,
    vuint8m2_t maskedoff1, vuint8m2_t maskedoff2, const uint8_t
    *base, vuint32m8_t bindex, size_t vl);
void vluxseg4ei32_v_u8m2_m (vuint8m2_t *v0, vuint8m2_t *v1,
    vuint8m2_t *v2, vuint8m2_t *v3, vbool4_t mask, vuint8m2_t
    maskedoff0, vuint8m2_t maskedoff1, vuint8m2_t maskedoff2,
    vuint8m2_t maskedoff3, const uint8_t *base, vuint32m8_t
    bindex, size_t vl);
void vluxseg2ei64_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
    const uint8_t *base, vuint64m8_t bindex, size_t vl);
void vluxseg3ei64_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vbool8_t mask, vuint8m1_t maskedoff0,
    vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, const uint8_t
    *base, vuint64m8_t bindex, size_t vl);
void vluxseg4ei64_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vbool8_t mask, vuint8m1_t
    maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t maskedoff2,
    vuint8m1_t maskedoff3, const uint8_t *base, vuint64m8_t
    bindex, size_t vl);
void vluxseg5ei64_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vbool8_t
    mask, vuint8m1_t maskedoff0, vuint8m1_t maskedoff1,
    vuint8m1_t maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t
    maskedoff4, const uint8_t *base, vuint64m8_t bindex, size_t
    vl);
void vluxseg6ei64_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vbool8_t mask, vuint8m1_t maskedoff0, vuint8m1_t
    maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t maskedoff3,
    vuint8m1_t maskedoff4, vuint8m1_t maskedoff5, const uint8_t
    *base, vuint64m8_t bindex, size_t vl);
void vluxseg7ei64_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
    vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
    *v5, vuint8m1_t *v6, vbool8_t mask, vuint8m1_t maskedoff0,
    vuint8m1_t maskedoff1, vuint8m1_t maskedoff2, vuint8m1_t
```

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           maskedoff3, vuint8m1_t maskedoff4, vuint8m1_t maskedoff5,
           vuint8m1_t maskedoff6, const uint8_t *base, vuint64m8_t
           bindex, size_t vl);
void vluxseg8ei64_v_u8m1_m (vuint8m1_t *v0, vuint8m1_t *v1,
           vuint8m1_t *v2, vuint8m1_t *v3, vuint8m1_t *v4, vuint8m1_t
           *v5, vuint8m1_t *v6, vuint8m1_t *v7, vbool8_t mask,
           vuint8m1_t maskedoff0, vuint8m1_t maskedoff1, vuint8m1_t
           maskedoff2, vuint8m1_t maskedoff3, vuint8m1_t maskedoff4,
           vuint8m1_t maskedoff5, vuint8m1_t maskedoff6, vuint8m1_t
           maskedoff7, const uint8_t *base, vuint64m8_t bindex, size_t
           vl);
void vluxseg2ei8_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
           vbool8_t mask, vuint16m2_t maskedoff0, vuint16m2_t
           maskedoff1, const uint16_t *base, vuint8m1_t bindex, size_t
           vl);
void vluxseg3ei8_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
           vuint16m2_t *v2, vbool8_t mask, vuint16m2_t maskedoff0,
           vuint16m2_t maskedoff1, vuint16m2_t maskedoff2, const
           uint16_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg4ei8_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
           vuint16m2_t *v2, vuint16m2_t *v3, vbool8_t mask, vuint16m2_t
           maskedoff0, vuint16m2_t maskedoff1, vuint16m2_t maskedoff2,
           vuint16m2_t maskedoff3, const uint16_t *base, vuint8m1_t
           bindex, size_t vl);
void vluxseg2ei8_v_u16m4_m (vuint16m4_t *v0, vuint16m4_t *v1,
           vbool4_t mask, vuint16m4_t maskedoff0, vuint16m4_t
           maskedoff1, const uint16_t *base, vuint8m2_t bindex, size_t
           vl);
void vluxseg2ei16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
           vbool16_t mask, vuint16m1_t maskedoff0, vuint16m1_t
           maskedoff1, const uint16_t *base, vuint16m1_t bindex, size_t
           vl);
void vluxseg3ei16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
           vuint16m1_t *v2, vbool16_t mask, vuint16m1_t maskedoff0,
           vuint16m1_t maskedoff1, vuint16m1_t maskedoff2, const
           uint16_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg4ei16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
           vuint16m1_t *v2, vuint16m1_t *v3, vbool16_t mask,
           vuint16m1_t maskedoff0, vuint16m1_t maskedoff1, vuint16m1_t
           maskedoff2, vuint16m1_t maskedoff3, const uint16_t *base,
           vuint16m1_t bindex, size_t vl);
void vluxseg5ei16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
           vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4, vbool16_t
           mask, vuint16m1_t maskedoff0, vuint16m1_t maskedoff1,
           vuint16m1_t maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t
           maskedoff4, const uint16_t *base, vuint16m1_t bindex, size_t
```

```
    vl);
void vluxseg6ei16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vbool16_t mask, vuint16m1_t maskedoff0,
    vuint16m1_t maskedoff1, vuint16m1_t maskedoff2, vuint16m1_t
    maskedoff3, vuint16m1_t maskedoff4, vuint16m1_t maskedoff5,
    const uint16_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg7ei16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vbool16_t mask,
    vuint16m1_t maskedoff0, vuint16m1_t maskedoff1, vuint16m1_t
    maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t maskedoff4,
    vuint16m1_t maskedoff5, vuint16m1_t maskedoff6, const
    uint16_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg8ei16_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vuint16m1_t *v7, vbool16_t
    mask, vuint16m1_t maskedoff0, vuint16m1_t maskedoff1,
    vuint16m1_t maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t
    maskedoff4, vuint16m1_t maskedoff5, vuint16m1_t maskedoff6,
    vuint16m1_t maskedoff7, const uint16_t *base, vuint16m1_t
    bindex, size_t vl);
void vluxseg2ei16_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vbool8_t mask, vuint16m2_t maskedoff0, vuint16m2_t
    maskedoff1, const uint16_t *base, vuint16m2_t bindex, size_t
    vl);
void vluxseg3ei16_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vbool8_t mask, vuint16m2_t maskedoff0,
    vuint16m2_t maskedoff1, vuint16m2_t maskedoff2, const
    uint16_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg4ei16_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vuint16m2_t *v3, vbool8_t mask, vuint16m2_t
    maskedoff0, vuint16m2_t maskedoff1, vuint16m2_t maskedoff2,
    vuint16m2_t maskedoff3, const uint16_t *base, vuint16m2_t
    bindex, size_t vl);
void vluxseg2ei16_v_u16m4_m (vuint16m4_t *v0, vuint16m4_t *v1,
    vbool4_t mask, vuint16m4_t maskedoff0, vuint16m4_t
    maskedoff1, const uint16_t *base, vuint16m4_t bindex, size_t
    vl);
void vluxseg2ei32_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vbool16_t mask, vuint16m1_t maskedoff0, vuint16m1_t
    maskedoff1, const uint16_t *base, vuint32m2_t bindex, size_t
    vl);
void vluxseg3ei32_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vbool16_t mask, vuint16m1_t maskedoff0,
    vuint16m1_t maskedoff1, vuint16m1_t maskedoff2, const
```

```
    uint16_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg4ei32_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vbool16_t mask,
    vuint16m1_t maskedoff0, vuint16m1_t maskedoff1, vuint16m1_t
    maskedoff2, vuint16m1_t maskedoff3, const uint16_t *base,
    vuint32m2_t bindex, size_t vl);
void vluxseg5ei32_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4, vbool16_t
    mask, vuint16m1_t maskedoff0, vuint16m1_t maskedoff1,
    vuint16m1_t maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t
    maskedoff4, const uint16_t *base, vuint32m2_t bindex, size_t
    vl);
void vluxseg6ei32_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vbool16_t mask, vuint16m1_t maskedoff0,
    vuint16m1_t maskedoff1, vuint16m1_t maskedoff2, vuint16m1_t
    maskedoff3, vuint16m1_t maskedoff4, vuint16m1_t maskedoff5,
    const uint16_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg7ei32_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vbool16_t mask,
    vuint16m1_t maskedoff0, vuint16m1_t maskedoff1, vuint16m1_t
    maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t maskedoff4,
    vuint16m1_t maskedoff5, vuint16m1_t maskedoff6, const
    uint16_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg8ei32_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vuint16m1_t *v7, vbool16_t
    mask, vuint16m1_t maskedoff0, vuint16m1_t maskedoff1,
    vuint16m1_t maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t
    maskedoff4, vuint16m1_t maskedoff5, vuint16m1_t maskedoff6,
    vuint16m1_t maskedoff7, const uint16_t *base, vuint32m2_t
    bindex, size_t vl);
void vluxseg2ei32_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vbool8_t mask, vuint16m2_t maskedoff0, vuint16m2_t
    maskedoff1, const uint16_t *base, vuint32m4_t bindex, size_t
    vl);
void vluxseg3ei32_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vbool8_t mask, vuint16m2_t maskedoff0,
    vuint16m2_t maskedoff1, vuint16m2_t maskedoff2, const
    uint16_t *base, vuint32m4_t bindex, size_t vl);
void vluxseg4ei32_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vuint16m2_t *v2, vuint16m2_t *v3, vbool8_t mask, vuint16m2_t
    maskedoff0, vuint16m2_t maskedoff1, vuint16m2_t maskedoff2,
    vuint16m2_t maskedoff3, const uint16_t *base, vuint32m4_t
    bindex, size_t vl);
```

```
void vluxseg2ei32_v_u16m4_m (vuint16m4_t *v0, vuint16m4_t *v1,
    vbool4_t mask, vuint16m4_t maskedoff0, vuint16m4_t
    maskedoff1, const uint16_t *base, vuint32m8_t bindex, size_t
    vl);
void vluxseg2ei64_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vbool16_t mask, vuint16m1_t maskedoff0, vuint16m1_t
    maskedoff1, const uint16_t *base, vuint64m4_t bindex, size_t
    vl);
void vluxseg3ei64_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vbool16_t mask, vuint16m1_t maskedoff0,
    vuint16m1_t maskedoff1, vuint16m1_t maskedoff2, const
    uint16_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg4ei64_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vbool16_t mask,
    vuint16m1_t maskedoff0, vuint16m1_t maskedoff1, vuint16m1_t
    maskedoff2, vuint16m1_t maskedoff3, const uint16_t *base,
    vuint64m4_t bindex, size_t vl);
void vluxseg5ei64_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4, vbool16_t
    mask, vuint16m1_t maskedoff0, vuint16m1_t maskedoff1,
    vuint16m1_t maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t
    maskedoff4, const uint16_t *base, vuint64m4_t bindex, size_t
    vl);
void vluxseg6ei64_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vbool16_t mask, vuint16m1_t maskedoff0,
    vuint16m1_t maskedoff1, vuint16m1_t maskedoff2, vuint16m1_t
    maskedoff3, vuint16m1_t maskedoff4, vuint16m1_t maskedoff5,
    const uint16_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg7ei64_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vbool16_t mask,
    vuint16m1_t maskedoff0, vuint16m1_t maskedoff1, vuint16m1_t
    maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t maskedoff4,
    vuint16m1_t maskedoff5, vuint16m1_t maskedoff6, const
    uint16_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg8ei64_v_u16m1_m (vuint16m1_t *v0, vuint16m1_t *v1,
    vuint16m1_t *v2, vuint16m1_t *v3, vuint16m1_t *v4,
    vuint16m1_t *v5, vuint16m1_t *v6, vuint16m1_t *v7, vbool16_t
    mask, vuint16m1_t maskedoff0, vuint16m1_t maskedoff1,
    vuint16m1_t maskedoff2, vuint16m1_t maskedoff3, vuint16m1_t
    maskedoff4, vuint16m1_t maskedoff5, vuint16m1_t maskedoff6,
    vuint16m1_t maskedoff7, const uint16_t *base, vuint64m4_t
    bindex, size_t vl);
void vluxseg2ei64_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
    vbool8_t mask, vuint16m2_t maskedoff0, vuint16m2_t
```

```
        maskedoff1, const uint16_t *base, vuint64m8_t bindex, size_t
        vl);
void vluxseg3ei64_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
        vuint16m2_t *v2, vbool8_t mask, vuint16m2_t maskedoff0,
        vuint16m2_t maskedoff1, vuint16m2_t maskedoff2, const
        uint16_t *base, vuint64m8_t bindex, size_t vl);
void vluxseg4ei64_v_u16m2_m (vuint16m2_t *v0, vuint16m2_t *v1,
        vuint16m2_t *v2, vuint16m2_t *v3, vbool8_t mask, vuint16m2_t
        maskedoff0, vuint16m2_t maskedoff1, vuint16m2_t maskedoff2,
        vuint16m2_t maskedoff3, const uint16_t *base, vuint64m8_t
        bindex, size_t vl);
void vluxseg2ei8_v_u32m4_m (vuint32m4_t *v0, vuint32m4_t *v1,
        vbool8_t mask, vuint32m4_t maskedoff0, vuint32m4_t
        maskedoff1, const uint32_t *base, vuint8m1_t bindex, size_t
        vl);
void vluxseg2ei16_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
        vbool16_t mask, vuint32m2_t maskedoff0, vuint32m2_t
        maskedoff1, const uint32_t *base, vuint16m1_t bindex, size_t
        vl);
void vluxseg3ei16_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
        vuint32m2_t *v2, vbool16_t mask, vuint32m2_t maskedoff0,
        vuint32m2_t maskedoff1, vuint32m2_t maskedoff2, const
        uint32_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg4ei16_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
        vuint32m2_t *v2, vuint32m2_t *v3, vbool16_t mask,
        vuint32m2_t maskedoff0, vuint32m2_t maskedoff1, vuint32m2_t
        maskedoff2, vuint32m2_t maskedoff3, const uint32_t *base,
        vuint16m1_t bindex, size_t vl);
void vluxseg2ei16_v_u32m4_m (vuint32m4_t *v0, vuint32m4_t *v1,
        vbool8_t mask, vuint32m4_t maskedoff0, vuint32m4_t
        maskedoff1, const uint32_t *base, vuint16m2_t bindex, size_t
        vl);
void vluxseg2ei32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
        vbool32_t mask, vuint32m1_t maskedoff0, vuint32m1_t
        maskedoff1, const uint32_t *base, vuint32m1_t bindex, size_t
        vl);
void vluxseg3ei32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
        vuint32m1_t *v2, vbool32_t mask, vuint32m1_t maskedoff0,
        vuint32m1_t maskedoff1, vuint32m1_t maskedoff2, const
        uint32_t *base, vuint32m1_t bindex, size_t vl);
void vluxseg4ei32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
        vuint32m1_t *v2, vuint32m1_t *v3, vbool32_t mask,
        vuint32m1_t maskedoff0, vuint32m1_t maskedoff1, vuint32m1_t
        maskedoff2, vuint32m1_t maskedoff3, const uint32_t *base,
        vuint32m1_t bindex, size_t vl);
```

```
void vluxseg5ei32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4, vbool32_t
    mask, vuint32m1_t maskedoff0, vuint32m1_t maskedoff1,
    vuint32m1_t maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t
    maskedoff4, const uint32_t *base, vuint32m1_t bindex, size_t
    vl);
void vluxseg6ei32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vbool32_t mask, vuint32m1_t maskedoff0,
    vuint32m1_t maskedoff1, vuint32m1_t maskedoff2, vuint32m1_t
    maskedoff3, vuint32m1_t maskedoff4, vuint32m1_t maskedoff5,
    const uint32_t *base, vuint32m1_t bindex, size_t vl);
void vluxseg7ei32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, vbool32_t mask,
    vuint32m1_t maskedoff0, vuint32m1_t maskedoff1, vuint32m1_t
    maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t maskedoff4,
    vuint32m1_t maskedoff5, vuint32m1_t maskedoff6, const
    uint32_t *base, vuint32m1_t bindex, size_t vl);
void vluxseg8ei32_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
    vuint32m1_t *v5, vuint32m1_t *v6, vuint32m1_t *v7, vbool32_t
    mask, vuint32m1_t maskedoff0, vuint32m1_t maskedoff1,
    vuint32m1_t maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t
    maskedoff4, vuint32m1_t maskedoff5, vuint32m1_t maskedoff6,
    vuint32m1_t maskedoff7, const uint32_t *base, vuint32m1_t
    bindex, size_t vl);
void vluxseg2ei32_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
    vbool16_t mask, vuint32m2_t maskedoff0, vuint32m2_t
    maskedoff1, const uint32_t *base, vuint32m2_t bindex, size_t
    vl);
void vluxseg3ei32_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, vbool16_t mask, vuint32m2_t maskedoff0,
    vuint32m2_t maskedoff1, vuint32m2_t maskedoff2, const
    uint32_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg4ei32_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, vuint32m2_t *v3, vbool16_t mask,
    vuint32m2_t maskedoff0, vuint32m2_t maskedoff1, vuint32m2_t
    maskedoff2, vuint32m2_t maskedoff3, const uint32_t *base,
    vuint32m2_t bindex, size_t vl);
void vluxseg2ei32_v_u32m4_m (vuint32m4_t *v0, vuint32m4_t *v1,
    vbool8_t mask, vuint32m4_t maskedoff0, vuint32m4_t
    maskedoff1, const uint32_t *base, vuint32m4_t bindex, size_t
    vl);
void vluxseg2ei64_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
    vbool32_t mask, vuint32m1_t maskedoff0, vuint32m1_t
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      maskedoff1, const uint32_t *base, vuint64m2_t bindex, size_t
      vl);
void vluxseg3ei64_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
      vuint32m1_t *v2, vbool32_t mask, vuint32m1_t maskedoff0,
      vuint32m1_t maskedoff1, vuint32m1_t maskedoff2, const
      uint32_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg4ei64_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
      vuint32m1_t *v2, vuint32m1_t *v3, vbool32_t mask,
      vuint32m1_t maskedoff0, vuint32m1_t maskedoff1, vuint32m1_t
      maskedoff2, vuint32m1_t maskedoff3, const uint32_t *base,
      vuint64m2_t bindex, size_t vl);
void vluxseg5ei64_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
      vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4, vbool32_t
      mask, vuint32m1_t maskedoff0, vuint32m1_t maskedoff1,
      vuint32m1_t maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t
      maskedoff4, const uint32_t *base, vuint64m2_t bindex, size_t
      vl);
void vluxseg6ei64_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
      vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
      vuint32m1_t *v5, vbool32_t mask, vuint32m1_t maskedoff0,
      vuint32m1_t maskedoff1, vuint32m1_t maskedoff2, vuint32m1_t
      maskedoff3, vuint32m1_t maskedoff4, vuint32m1_t maskedoff5,
      const uint32_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg7ei64_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
      vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
      vuint32m1_t *v5, vuint32m1_t *v6, vbool32_t mask,
      vuint32m1_t maskedoff0, vuint32m1_t maskedoff1, vuint32m1_t
      maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t maskedoff4,
      vuint32m1_t maskedoff5, vuint32m1_t maskedoff6, const
      uint32_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg8ei64_v_u32m1_m (vuint32m1_t *v0, vuint32m1_t *v1,
      vuint32m1_t *v2, vuint32m1_t *v3, vuint32m1_t *v4,
      vuint32m1_t *v5, vuint32m1_t *v6, vuint32m1_t *v7, vbool32_t
      mask, vuint32m1_t maskedoff0, vuint32m1_t maskedoff1,
      vuint32m1_t maskedoff2, vuint32m1_t maskedoff3, vuint32m1_t
      maskedoff4, vuint32m1_t maskedoff5, vuint32m1_t maskedoff6,
      vuint32m1_t maskedoff7, const uint32_t *base, vuint64m2_t
      bindex, size_t vl);
void vluxseg2ei64_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
      vbool16_t mask, vuint32m2_t maskedoff0, vuint32m2_t
      maskedoff1, const uint32_t *base, vuint64m4_t bindex, size_t
      vl);
void vluxseg3ei64_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
      vuint32m2_t *v2, vbool16_t mask, vuint32m2_t maskedoff0,
      vuint32m2_t maskedoff1, vuint32m2_t maskedoff2, const
      uint32_t *base, vuint64m4_t bindex, size_t vl);
```

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void vluxseg4ei64_v_u32m2_m (vuint32m2_t *v0, vuint32m2_t *v1,
    vuint32m2_t *v2, vuint32m2_t *v3, vbool16_t mask,
    vuint32m2_t maskedoff0, vuint32m2_t maskedoff1, vuint32m2_t
    maskedoff2, vuint32m2_t maskedoff3, const uint32_t *base,
    vuint64m4_t bindex, size_t vl);
void vluxseg2ei64_v_u32m4_m (vuint32m4_t *v0, vuint32m4_t *v1,
    vbool8_t mask, vuint32m4_t maskedoff0, vuint32m4_t
    maskedoff1, const uint32_t *base, vuint64m8_t bindex, size_t
    vl);
void vluxseg2ei16_v_u64m4_m (vuint64m4_t *v0, vuint64m4_t *v1,
    vbool16_t mask, vuint64m4_t maskedoff0, vuint64m4_t
    maskedoff1, const uint64_t *base, vuint16m1_t bindex, size_t
    vl);
void vluxseg2ei32_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
    vbool32_t mask, vuint64m2_t maskedoff0, vuint64m2_t
    maskedoff1, const uint64_t *base, vuint32m1_t bindex, size_t
    vl);
void vluxseg3ei32_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, vbool32_t mask, vuint64m2_t maskedoff0,
    vuint64m2_t maskedoff1, vuint64m2_t maskedoff2, const
    uint64_t *base, vuint32m1_t bindex, size_t vl);
void vluxseg4ei32_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
    vuint64m2_t *v2, vuint64m2_t *v3, vbool32_t mask,
    vuint64m2_t maskedoff0, vuint64m2_t maskedoff1, vuint64m2_t
    maskedoff2, vuint64m2_t maskedoff3, const uint64_t *base,
    vuint32m1_t bindex, size_t vl);
void vluxseg2ei32_v_u64m4_m (vuint64m4_t *v0, vuint64m4_t *v1,
    vbool16_t mask, vuint64m4_t maskedoff0, vuint64m4_t
    maskedoff1, const uint64_t *base, vuint32m2_t bindex, size_t
    vl);
void vluxseg2ei64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vbool64_t mask, vuint64m1_t maskedoff0, vuint64m1_t
    maskedoff1, const uint64_t *base, vuint64m1_t bindex, size_t
    vl);
void vluxseg3ei64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vbool64_t mask, vuint64m1_t maskedoff0,
    vuint64m1_t maskedoff1, vuint64m1_t maskedoff2, const
    uint64_t *base, vuint64m1_t bindex, size_t vl);
void vluxseg4ei64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vbool64_t mask,
    vuint64m1_t maskedoff0, vuint64m1_t maskedoff1, vuint64m1_t
    maskedoff2, vuint64m1_t maskedoff3, const uint64_t *base,
    vuint64m1_t bindex, size_t vl);
void vluxseg5ei64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
    vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4, vbool64_t
    mask, vuint64m1_t maskedoff0, vuint64m1_t maskedoff1,
```

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                vuint64m1_t maskedoff2, vuint64m1_t maskedoff3, vuint64m1_t
                maskedoff4, const uint64_t *base, vuint64m1_t bindex, size_t
                vl);
void vluxseg6ei64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
                vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
                vuint64m1_t *v5, vbool64_t mask, vuint64m1_t maskedoff0,
                vuint64m1_t maskedoff1, vuint64m1_t maskedoff2, vuint64m1_t
                maskedoff3, vuint64m1_t maskedoff4, vuint64m1_t maskedoff5,
                const uint64_t *base, vuint64m1_t bindex, size_t vl);
void vluxseg7ei64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
                vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
                vuint64m1_t *v5, vuint64m1_t *v6, vbool64_t mask,
                vuint64m1_t maskedoff0, vuint64m1_t maskedoff1, vuint64m1_t
                maskedoff2, vuint64m1_t maskedoff3, vuint64m1_t maskedoff4,
                vuint64m1_t maskedoff5, vuint64m1_t maskedoff6, const
                uint64_t *base, vuint64m1_t bindex, size_t vl);
void vluxseg8ei64_v_u64m1_m (vuint64m1_t *v0, vuint64m1_t *v1,
                vuint64m1_t *v2, vuint64m1_t *v3, vuint64m1_t *v4,
                vuint64m1_t *v5, vuint64m1_t *v6, vuint64m1_t *v7, vbool64_t
                mask, vuint64m1_t maskedoff0, vuint64m1_t maskedoff1,
                vuint64m1_t maskedoff2, vuint64m1_t maskedoff3, vuint64m1_t
                maskedoff4, vuint64m1_t maskedoff5, vuint64m1_t maskedoff6,
                vuint64m1_t maskedoff7, const uint64_t *base, vuint64m1_t
                bindex, size_t vl);
void vluxseg2ei64_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
                vbool32_t mask, vuint64m2_t maskedoff0, vuint64m2_t
                maskedoff1, const uint64_t *base, vuint64m2_t bindex, size_t
                vl);
void vluxseg3ei64_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
                vuint64m2_t *v2, vbool32_t mask, vuint64m2_t maskedoff0,
                vuint64m2_t maskedoff1, vuint64m2_t maskedoff2, const
                uint64_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg4ei64_v_u64m2_m (vuint64m2_t *v0, vuint64m2_t *v1,
                vuint64m2_t *v2, vuint64m2_t *v3, vbool32_t mask,
                vuint64m2_t maskedoff0, vuint64m2_t maskedoff1, vuint64m2_t
                maskedoff2, vuint64m2_t maskedoff3, const uint64_t *base,
                vuint64m2_t bindex, size_t vl);
void vluxseg2ei64_v_u64m4_m (vuint64m4_t *v0, vuint64m4_t *v1,
                vbool16_t mask, vuint64m4_t maskedoff0, vuint64m4_t
                maskedoff1, const uint64_t *base, vuint64m4_t bindex, size_t
                vl);
void vluxseg2ei8_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
                vbool8_t mask, vfloat16m2_t maskedoff0, vfloat16m2_t
                maskedoff1, const float16_t *base, vuint8m1_t bindex, size_t
                vl);
```

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void vluxseg3ei8_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vbool8_t mask, vfloat16m2_t maskedoff0,
    vfloat16m2_t maskedoff1, vfloat16m2_t maskedoff2, const
    float16_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg4ei8_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, vbool8_t mask,
    vfloat16m2_t maskedoff0, vfloat16m2_t maskedoff1,
    vfloat16m2_t maskedoff2, vfloat16m2_t maskedoff3, const
    float16_t *base, vuint8m1_t bindex, size_t vl);
void vluxseg2ei8_v_f16m4_m (vfloat16m4_t *v0, vfloat16m4_t *v1,
    vbool4_t mask, vfloat16m4_t maskedoff0, vfloat16m4_t
    maskedoff1, const float16_t *base, vuint8m2_t bindex, size_t
    vl);
void vluxseg2ei16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, const float16_t *base, vuint16m1_t bindex,
    size_t vl);
void vluxseg3ei16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vbool16_t mask, vfloat16m1_t maskedoff0,
    vfloat16m1_t maskedoff1, vfloat16m1_t maskedoff2, const
    float16_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg4ei16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vbool16_t mask,
    vfloat16m1_t maskedoff0, vfloat16m1_t maskedoff1,
    vfloat16m1_t maskedoff2, vfloat16m1_t maskedoff3, const
    float16_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg5ei16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, vfloat16m1_t maskedoff2, vfloat16m1_t
    maskedoff3, vfloat16m1_t maskedoff4, const float16_t *base,
    vuint16m1_t bindex, size_t vl);
void vluxseg6ei16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vbool16_t mask, vfloat16m1_t maskedoff0,
    vfloat16m1_t maskedoff1, vfloat16m1_t maskedoff2,
    vfloat16m1_t maskedoff3, vfloat16m1_t maskedoff4,
    vfloat16m1_t maskedoff5, const float16_t *base, vuint16m1_t
    bindex, size_t vl);
void vluxseg7ei16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vbool16_t mask,
    vfloat16m1_t maskedoff0, vfloat16m1_t maskedoff1,
    vfloat16m1_t maskedoff2, vfloat16m1_t maskedoff3,
    vfloat16m1_t maskedoff4, vfloat16m1_t maskedoff5,
    vfloat16m1_t maskedoff6, const float16_t *base, vuint16m1_t
```

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    bindex, size_t vl);
void vluxseg8ei16_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vfloat16m1_t *v7,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, vfloat16m1_t maskedoff2, vfloat16m1_t
    maskedoff3, vfloat16m1_t maskedoff4, vfloat16m1_t
    maskedoff5, vfloat16m1_t maskedoff6, vfloat16m1_t
    maskedoff7, const float16_t *base, vuint16m1_t bindex,
    size_t vl);
void vluxseg2ei16_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vbool8_t mask, vfloat16m2_t maskedoff0, vfloat16m2_t
    maskedoff1, const float16_t *base, vuint16m2_t bindex,
    size_t vl);
void vluxseg3ei16_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vbool8_t mask, vfloat16m2_t maskedoff0,
    vfloat16m2_t maskedoff1, vfloat16m2_t maskedoff2, const
    float16_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg4ei16_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, vbool8_t mask,
    vfloat16m2_t maskedoff0, vfloat16m2_t maskedoff1,
    vfloat16m2_t maskedoff2, vfloat16m2_t maskedoff3, const
    float16_t *base, vuint16m2_t bindex, size_t vl);
void vluxseg2ei16_v_f16m4_m (vfloat16m4_t *v0, vfloat16m4_t *v1,
    vbool4_t mask, vfloat16m4_t maskedoff0, vfloat16m4_t
    maskedoff1, const float16_t *base, vuint16m4_t bindex,
    size_t vl);
void vluxseg2ei32_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, const float16_t *base, vuint32m2_t bindex,
    size_t vl);
void vluxseg3ei32_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vbool16_t mask, vfloat16m1_t maskedoff0,
    vfloat16m1_t maskedoff1, vfloat16m1_t maskedoff2, const
    float16_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg4ei32_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vbool16_t mask,
    vfloat16m1_t maskedoff0, vfloat16m1_t maskedoff1,
    vfloat16m1_t maskedoff2, vfloat16m1_t maskedoff3, const
    float16_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg5ei32_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, vfloat16m1_t maskedoff2, vfloat16m1_t
    maskedoff3, vfloat16m1_t maskedoff4, const float16_t *base,
    vuint32m2_t bindex, size_t vl);
```

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void vluxseg6ei32_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vbool16_t mask, vfloat16m1_t maskedoff0,
    vfloat16m1_t maskedoff1, vfloat16m1_t maskedoff2,
    vfloat16m1_t maskedoff3, vfloat16m1_t maskedoff4,
    vfloat16m1_t maskedoff5, const float16_t *base, vuint32m2_t
    bindex, size_t vl);
void vluxseg7ei32_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vbool16_t mask,
    vfloat16m1_t maskedoff0, vfloat16m1_t maskedoff1,
    vfloat16m1_t maskedoff2, vfloat16m1_t maskedoff3,
    vfloat16m1_t maskedoff4, vfloat16m1_t maskedoff5,
    vfloat16m1_t maskedoff6, const float16_t *base, vuint32m2_t
    bindex, size_t vl);
void vluxseg8ei32_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vfloat16m1_t *v7,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, vfloat16m1_t maskedoff2, vfloat16m1_t
    maskedoff3, vfloat16m1_t maskedoff4, vfloat16m1_t
    maskedoff5, vfloat16m1_t maskedoff6, vfloat16m1_t
    maskedoff7, const float16_t *base, vuint32m2_t bindex,
    size_t vl);
void vluxseg2ei32_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vbool8_t mask, vfloat16m2_t maskedoff0, vfloat16m2_t
    maskedoff1, const float16_t *base, vuint32m4_t bindex,
    size_t vl);
void vluxseg3ei32_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vbool8_t mask, vfloat16m2_t maskedoff0,
    vfloat16m2_t maskedoff1, vfloat16m2_t maskedoff2, const
    float16_t *base, vuint32m4_t bindex, size_t vl);
void vluxseg4ei32_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, vbool8_t mask,
    vfloat16m2_t maskedoff0, vfloat16m2_t maskedoff1,
    vfloat16m2_t maskedoff2, vfloat16m2_t maskedoff3, const
    float16_t *base, vuint32m4_t bindex, size_t vl);
void vluxseg2ei32_v_f16m4_m (vfloat16m4_t *v0, vfloat16m4_t *v1,
    vbool4_t mask, vfloat16m4_t maskedoff0, vfloat16m4_t
    maskedoff1, const float16_t *base, vuint32m8_t bindex,
    size_t vl);
void vluxseg2ei64_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, const float16_t *base, vuint64m4_t bindex,
    size_t vl);
```

```
void vluxseg3ei64_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vbool16_t mask, vfloat16m1_t maskedoff0,
    vfloat16m1_t maskedoff1, vfloat16m1_t maskedoff2, const
    float16_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg4ei64_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vbool16_t mask,
    vfloat16m1_t maskedoff0, vfloat16m1_t maskedoff1,
    vfloat16m1_t maskedoff2, vfloat16m1_t maskedoff3, const
    float16_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg5ei64_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, vfloat16m1_t maskedoff2, vfloat16m1_t
    maskedoff3, vfloat16m1_t maskedoff4, const float16_t *base,
    vuint64m4_t bindex, size_t vl);
void vluxseg6ei64_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vbool16_t mask, vfloat16m1_t maskedoff0,
    vfloat16m1_t maskedoff1, vfloat16m1_t maskedoff2,
    vfloat16m1_t maskedoff3, vfloat16m1_t maskedoff4,
    vfloat16m1_t maskedoff5, const float16_t *base, vuint64m4_t
    bindex, size_t vl);
void vluxseg7ei64_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vbool16_t mask,
    vfloat16m1_t maskedoff0, vfloat16m1_t maskedoff1,
    vfloat16m1_t maskedoff2, vfloat16m1_t maskedoff3,
    vfloat16m1_t maskedoff4, vfloat16m1_t maskedoff5,
    vfloat16m1_t maskedoff6, const float16_t *base, vuint64m4_t
    bindex, size_t vl);
void vluxseg8ei64_v_f16m1_m (vfloat16m1_t *v0, vfloat16m1_t *v1,
    vfloat16m1_t *v2, vfloat16m1_t *v3, vfloat16m1_t *v4,
    vfloat16m1_t *v5, vfloat16m1_t *v6, vfloat16m1_t *v7,
    vbool16_t mask, vfloat16m1_t maskedoff0, vfloat16m1_t
    maskedoff1, vfloat16m1_t maskedoff2, vfloat16m1_t
    maskedoff3, vfloat16m1_t maskedoff4, vfloat16m1_t
    maskedoff5, vfloat16m1_t maskedoff6, vfloat16m1_t
    maskedoff7, const float16_t *base, vuint64m4_t bindex,
    size_t vl);
void vluxseg2ei64_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vbool8_t mask, vfloat16m2_t maskedoff0, vfloat16m2_t
    maskedoff1, const float16_t *base, vuint64m8_t bindex,
    size_t vl);
void vluxseg3ei64_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vbool8_t mask, vfloat16m2_t maskedoff0,
    vfloat16m2_t maskedoff1, vfloat16m2_t maskedoff2, const
```

```
    float16_t *base, vuint64m8_t bindex, size_t vl);
void vluxseg4ei64_v_f16m2_m (vfloat16m2_t *v0, vfloat16m2_t *v1,
    vfloat16m2_t *v2, vfloat16m2_t *v3, vbool8_t mask,
    vfloat16m2_t maskedoff0, vfloat16m2_t maskedoff1,
    vfloat16m2_t maskedoff2, vfloat16m2_t maskedoff3, const
    float16_t *base, vuint64m8_t bindex, size_t vl);
void vluxseg2ei8_v_f32m4_m (vfloat32m4_t *v0, vfloat32m4_t *v1,
    vbool8_t mask, vfloat32m4_t maskedoff0, vfloat32m4_t
    maskedoff1, const float32_t *base, vuint8m1_t bindex, size_t
    vl);
void vluxseg2ei16_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vbool16_t mask, vfloat32m2_t maskedoff0, vfloat32m2_t
    maskedoff1, const float32_t *base, vuint16m1_t bindex,
    size_t vl);
void vluxseg3ei16_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vbool16_t mask, vfloat32m2_t maskedoff0,
    vfloat32m2_t maskedoff1, vfloat32m2_t maskedoff2, const
    float32_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg4ei16_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vfloat32m2_t *v3, vbool16_t mask,
    vfloat32m2_t maskedoff0, vfloat32m2_t maskedoff1,
    vfloat32m2_t maskedoff2, vfloat32m2_t maskedoff3, const
    float32_t *base, vuint16m1_t bindex, size_t vl);
void vluxseg2ei16_v_f32m4_m (vfloat32m4_t *v0, vfloat32m4_t *v1,
    vbool8_t mask, vfloat32m4_t maskedoff0, vfloat32m4_t
    maskedoff1, const float32_t *base, vuint16m2_t bindex,
    size_t vl);
void vluxseg2ei32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
    maskedoff1, const float32_t *base, vuint32m1_t bindex,
    size_t vl);
void vluxseg3ei32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vbool32_t mask, vfloat32m1_t maskedoff0,
    vfloat32m1_t maskedoff1, vfloat32m1_t maskedoff2, const
    float32_t *base, vuint32m1_t bindex, size_t vl);
void vluxseg4ei32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vbool32_t mask,
    vfloat32m1_t maskedoff0, vfloat32m1_t maskedoff1,
    vfloat32m1_t maskedoff2, vfloat32m1_t maskedoff3, const
    float32_t *base, vuint32m1_t bindex, size_t vl);
void vluxseg5ei32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
    maskedoff1, vfloat32m1_t maskedoff2, vfloat32m1_t
    maskedoff3, vfloat32m1_t maskedoff4, const float32_t *base,
    vuint32m1_t bindex, size_t vl);
```

```
void vluxseg6ei32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vbool32_t mask, vfloat32m1_t maskedoff0,
    vfloat32m1_t maskedoff1, vfloat32m1_t maskedoff2,
    vfloat32m1_t maskedoff3, vfloat32m1_t maskedoff4,
    vfloat32m1_t maskedoff5, const float32_t *base, vuint32m1_t
    bindex, size_t vl);
void vluxseg7ei32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, vbool32_t mask,
    vfloat32m1_t maskedoff0, vfloat32m1_t maskedoff1,
    vfloat32m1_t maskedoff2, vfloat32m1_t maskedoff3,
    vfloat32m1_t maskedoff4, vfloat32m1_t maskedoff5,
    vfloat32m1_t maskedoff6, const float32_t *base, vuint32m1_t
    bindex, size_t vl);
void vluxseg8ei32_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, vfloat32m1_t *v7,
    vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
    maskedoff1, vfloat32m1_t maskedoff2, vfloat32m1_t
    maskedoff3, vfloat32m1_t maskedoff4, vfloat32m1_t
    maskedoff5, vfloat32m1_t maskedoff6, vfloat32m1_t
    maskedoff7, const float32_t *base, vuint32m1_t bindex,
    size_t vl);
void vluxseg2ei32_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vbool16_t mask, vfloat32m2_t maskedoff0, vfloat32m2_t
    maskedoff1, const float32_t *base, vuint32m2_t bindex,
    size_t vl);
void vluxseg3ei32_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vbool16_t mask, vfloat32m2_t maskedoff0,
    vfloat32m2_t maskedoff1, vfloat32m2_t maskedoff2, const
    float32_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg4ei32_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vfloat32m2_t *v3, vbool16_t mask,
    vfloat32m2_t maskedoff0, vfloat32m2_t maskedoff1,
    vfloat32m2_t maskedoff2, vfloat32m2_t maskedoff3, const
    float32_t *base, vuint32m2_t bindex, size_t vl);
void vluxseg2ei32_v_f32m4_m (vfloat32m4_t *v0, vfloat32m4_t *v1,
    vbool8_t mask, vfloat32m4_t maskedoff0, vfloat32m4_t
    maskedoff1, const float32_t *base, vuint32m4_t bindex,
    size_t vl);
void vluxseg2ei64_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
    maskedoff1, const float32_t *base, vuint64m2_t bindex,
    size_t vl);
```

```
void vluxseg3ei64_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vbool32_t mask, vfloat32m1_t maskedoff0,
    vfloat32m1_t maskedoff1, vfloat32m1_t maskedoff2, const
    float32_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg4ei64_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vbool32_t mask,
    vfloat32m1_t maskedoff0, vfloat32m1_t maskedoff1,
    vfloat32m1_t maskedoff2, vfloat32m1_t maskedoff3, const
    float32_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg5ei64_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
    maskedoff1, vfloat32m1_t maskedoff2, vfloat32m1_t
    maskedoff3, vfloat32m1_t maskedoff4, const float32_t *base,
    vuint64m2_t bindex, size_t vl);
void vluxseg6ei64_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vbool32_t mask, vfloat32m1_t maskedoff0,
    vfloat32m1_t maskedoff1, vfloat32m1_t maskedoff2,
    vfloat32m1_t maskedoff3, vfloat32m1_t maskedoff4,
    vfloat32m1_t maskedoff5, const float32_t *base, vuint64m2_t
    bindex, size_t vl);
void vluxseg7ei64_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, vbool32_t mask,
    vfloat32m1_t maskedoff0, vfloat32m1_t maskedoff1,
    vfloat32m1_t maskedoff2, vfloat32m1_t maskedoff3,
    vfloat32m1_t maskedoff4, vfloat32m1_t maskedoff5,
    vfloat32m1_t maskedoff6, const float32_t *base, vuint64m2_t
    bindex, size_t vl);
void vluxseg8ei64_v_f32m1_m (vfloat32m1_t *v0, vfloat32m1_t *v1,
    vfloat32m1_t *v2, vfloat32m1_t *v3, vfloat32m1_t *v4,
    vfloat32m1_t *v5, vfloat32m1_t *v6, vfloat32m1_t *v7,
    vbool32_t mask, vfloat32m1_t maskedoff0, vfloat32m1_t
    maskedoff1, vfloat32m1_t maskedoff2, vfloat32m1_t
    maskedoff3, vfloat32m1_t maskedoff4, vfloat32m1_t
    maskedoff5, vfloat32m1_t maskedoff6, vfloat32m1_t
    maskedoff7, const float32_t *base, vuint64m2_t bindex,
    size_t vl);
void vluxseg2ei64_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vbool16_t mask, vfloat32m2_t maskedoff0, vfloat32m2_t
    maskedoff1, const float32_t *base, vuint64m4_t bindex,
    size_t vl);
void vluxseg3ei64_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vbool16_t mask, vfloat32m2_t maskedoff0,
    vfloat32m2_t maskedoff1, vfloat32m2_t maskedoff2, const
```

```
    float32_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg4ei64_v_f32m2_m (vfloat32m2_t *v0, vfloat32m2_t *v1,
    vfloat32m2_t *v2, vfloat32m2_t *v3, vbool16_t mask,
    vfloat32m2_t maskedoff0, vfloat32m2_t maskedoff1,
    vfloat32m2_t maskedoff2, vfloat32m2_t maskedoff3, const
    float32_t *base, vuint64m4_t bindex, size_t vl);
void vluxseg2ei64_v_f32m4_m (vfloat32m4_t *v0, vfloat32m4_t *v1,
    vbool8_t mask, vfloat32m4_t maskedoff0, vfloat32m4_t
    maskedoff1, const float32_t *base, vuint64m8_t bindex,
    size_t vl);
void vluxseg2ei16_v_f64m4_m (vfloat64m4_t *v0, vfloat64m4_t *v1,
    vbool16_t mask, vfloat64m4_t maskedoff0, vfloat64m4_t
    maskedoff1, const float64_t *base, vuint16m1_t bindex,
    size_t vl);
void vluxseg2ei32_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vbool32_t mask, vfloat64m2_t maskedoff0, vfloat64m2_t
    maskedoff1, const float64_t *base, vuint32m1_t bindex,
    size_t vl);
void vluxseg3ei32_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vbool32_t mask, vfloat64m2_t maskedoff0,
    vfloat64m2_t maskedoff1, vfloat64m2_t maskedoff2, const
    float64_t *base, vuint32m1_t bindex, size_t vl);
void vluxseg4ei32_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vfloat64m2_t *v3, vbool32_t mask,
    vfloat64m2_t maskedoff0, vfloat64m2_t maskedoff1,
    vfloat64m2_t maskedoff2, vfloat64m2_t maskedoff3, const
    float64_t *base, vuint32m1_t bindex, size_t vl);
void vluxseg2ei32_v_f64m4_m (vfloat64m4_t *v0, vfloat64m4_t *v1,
    vbool16_t mask, vfloat64m4_t maskedoff0, vfloat64m4_t
    maskedoff1, const float64_t *base, vuint32m2_t bindex,
    size_t vl);
void vluxseg2ei64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vbool64_t mask, vfloat64m1_t maskedoff0, vfloat64m1_t
    maskedoff1, const float64_t *base, vuint64m1_t bindex,
    size_t vl);
void vluxseg3ei64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vbool64_t mask, vfloat64m1_t maskedoff0,
    vfloat64m1_t maskedoff1, vfloat64m1_t maskedoff2, const
    float64_t *base, vuint64m1_t bindex, size_t vl);
void vluxseg4ei64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vbool64_t mask,
    vfloat64m1_t maskedoff0, vfloat64m1_t maskedoff1,
    vfloat64m1_t maskedoff2, vfloat64m1_t maskedoff3, const
    float64_t *base, vuint64m1_t bindex, size_t vl);
void vluxseg5ei64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
```

```
    vbool64_t mask, vfloat64m1_t maskedoff0, vfloat64m1_t
    maskedoff1, vfloat64m1_t maskedoff2, vfloat64m1_t
    maskedoff3, vfloat64m1_t maskedoff4, const float64_t *base,
    vuint64m1_t bindex, size_t vl);
void vluxseg6ei64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, vbool64_t mask, vfloat64m1_t maskedoff0,
    vfloat64m1_t maskedoff1, vfloat64m1_t maskedoff2,
    vfloat64m1_t maskedoff3, vfloat64m1_t maskedoff4,
    vfloat64m1_t maskedoff5, const float64_t *base, vuint64m1_t
    bindex, size_t vl);
void vluxseg7ei64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, vfloat64m1_t *v6, vbool64_t mask,
    vfloat64m1_t maskedoff0, vfloat64m1_t maskedoff1,
    vfloat64m1_t maskedoff2, vfloat64m1_t maskedoff3,
    vfloat64m1_t maskedoff4, vfloat64m1_t maskedoff5,
    vfloat64m1_t maskedoff6, const float64_t *base, vuint64m1_t
    bindex, size_t vl);
void vluxseg8ei64_v_f64m1_m (vfloat64m1_t *v0, vfloat64m1_t *v1,
    vfloat64m1_t *v2, vfloat64m1_t *v3, vfloat64m1_t *v4,
    vfloat64m1_t *v5, vfloat64m1_t *v6, vfloat64m1_t *v7,
    vbool64_t mask, vfloat64m1_t maskedoff0, vfloat64m1_t
    maskedoff1, vfloat64m1_t maskedoff2, vfloat64m1_t
    maskedoff3, vfloat64m1_t maskedoff4, vfloat64m1_t
    maskedoff5, vfloat64m1_t maskedoff6, vfloat64m1_t
    maskedoff7, const float64_t *base, vuint64m1_t bindex,
    size_t vl);
void vluxseg2ei64_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vbool32_t mask, vfloat64m2_t maskedoff0, vfloat64m2_t
    maskedoff1, const float64_t *base, vuint64m2_t bindex,
    size_t vl);
void vluxseg3ei64_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vbool32_t mask, vfloat64m2_t maskedoff0,
    vfloat64m2_t maskedoff1, vfloat64m2_t maskedoff2, const
    float64_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg4ei64_v_f64m2_m (vfloat64m2_t *v0, vfloat64m2_t *v1,
    vfloat64m2_t *v2, vfloat64m2_t *v3, vbool32_t mask,
    vfloat64m2_t maskedoff0, vfloat64m2_t maskedoff1,
    vfloat64m2_t maskedoff2, vfloat64m2_t maskedoff3, const
    float64_t *base, vuint64m2_t bindex, size_t vl);
void vluxseg2ei64_v_f64m4_m (vfloat64m4_t *v0, vfloat64m4_t *v1,
    vbool16_t mask, vfloat64m4_t maskedoff0, vfloat64m4_t
    maskedoff1, const float64_t *base, vuint64m4_t bindex,
    size_t vl);
```

Vector Indexed Segment Store Functions:

Prototypes:

```
void vsoxseg2ei8_v_i8m1 (int8_t *base, vuint8m1_t bindex,
    vint8m1_t v0, vint8m1_t v1, size_t vl);
void vsoxseg3ei8_v_i8m1 (int8_t *base, vuint8m1_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, size_t vl);
void vsoxseg4ei8_v_i8m1 (int8_t *base, vuint8m1_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    size_t vl);
void vsoxseg5ei8_v_i8m1 (int8_t *base, vuint8m1_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, size_t vl);
void vsoxseg6ei8_v_i8m1 (int8_t *base, vuint8m1_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, size_t vl);
void vsoxseg7ei8_v_i8m1 (int8_t *base, vuint8m1_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, size_t vl);
void vsoxseg8ei8_v_i8m1 (int8_t *base, vuint8m1_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, vint8m1_t v7,
    size_t vl);
void vsoxseg2ei8_v_i8m2 (int8_t *base, vuint8m2_t bindex,
    vint8m2_t v0, vint8m2_t v1, size_t vl);
void vsoxseg3ei8_v_i8m2 (int8_t *base, vuint8m2_t bindex,
    vint8m2_t v0, vint8m2_t v1, vint8m2_t v2, size_t vl);
void vsoxseg4ei8_v_i8m2 (int8_t *base, vuint8m2_t bindex,
    vint8m2_t v0, vint8m2_t v1, vint8m2_t v2, vint8m2_t v3,
    size_t vl);
void vsoxseg2ei8_v_i8m4 (int8_t *base, vuint8m4_t bindex,
    vint8m4_t v0, vint8m4_t v1, size_t vl);
void vsoxseg2ei16_v_i8m1 (int8_t *base, vuint16m2_t bindex,
    vint8m1_t v0, vint8m1_t v1, size_t vl);
void vsoxseg3ei16_v_i8m1 (int8_t *base, vuint16m2_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, size_t vl);
void vsoxseg4ei16_v_i8m1 (int8_t *base, vuint16m2_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    size_t vl);
void vsoxseg5ei16_v_i8m1 (int8_t *base, vuint16m2_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, size_t vl);
void vsoxseg6ei16_v_i8m1 (int8_t *base, vuint16m2_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, size_t vl);
```

```c
void vsoxseg7ei16_v_i8m1 (int8_t *base, vuint16m2_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, size_t vl);
void vsoxseg8ei16_v_i8m1 (int8_t *base, vuint16m2_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, vint8m1_t v7,
    size_t vl);
void vsoxseg2ei16_v_i8m2 (int8_t *base, vuint16m4_t bindex,
    vint8m2_t v0, vint8m2_t v1, size_t vl);
void vsoxseg3ei16_v_i8m2 (int8_t *base, vuint16m4_t bindex,
    vint8m2_t v0, vint8m2_t v1, vint8m2_t v2, size_t vl);
void vsoxseg4ei16_v_i8m2 (int8_t *base, vuint16m4_t bindex,
    vint8m2_t v0, vint8m2_t v1, vint8m2_t v2, vint8m2_t v3,
    size_t vl);
void vsoxseg2ei16_v_i8m4 (int8_t *base, vuint16m8_t bindex,
    vint8m4_t v0, vint8m4_t v1, size_t vl);
void vsoxseg2ei32_v_i8m1 (int8_t *base, vuint32m4_t bindex,
    vint8m1_t v0, vint8m1_t v1, size_t vl);
void vsoxseg3ei32_v_i8m1 (int8_t *base, vuint32m4_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, size_t vl);
void vsoxseg4ei32_v_i8m1 (int8_t *base, vuint32m4_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    size_t vl);
void vsoxseg5ei32_v_i8m1 (int8_t *base, vuint32m4_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, size_t vl);
void vsoxseg6ei32_v_i8m1 (int8_t *base, vuint32m4_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, size_t vl);
void vsoxseg7ei32_v_i8m1 (int8_t *base, vuint32m4_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, size_t vl);
void vsoxseg8ei32_v_i8m1 (int8_t *base, vuint32m4_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, vint8m1_t v7,
    size_t vl);
void vsoxseg2ei32_v_i8m2 (int8_t *base, vuint32m8_t bindex,
    vint8m2_t v0, vint8m2_t v1, size_t vl);
void vsoxseg3ei32_v_i8m2 (int8_t *base, vuint32m8_t bindex,
    vint8m2_t v0, vint8m2_t v1, vint8m2_t v2, size_t vl);
void vsoxseg4ei32_v_i8m2 (int8_t *base, vuint32m8_t bindex,
    vint8m2_t v0, vint8m2_t v1, vint8m2_t v2, vint8m2_t v3,
    size_t vl);
void vsoxseg2ei64_v_i8m1 (int8_t *base, vuint64m8_t bindex,
    vint8m1_t v0, vint8m1_t v1, size_t vl);
```

```
void vsoxseg3ei64_v_i8m1 (int8_t *base, vuint64m8_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, size_t vl);
void vsoxseg4ei64_v_i8m1 (int8_t *base, vuint64m8_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    size_t vl);
void vsoxseg5ei64_v_i8m1 (int8_t *base, vuint64m8_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, size_t vl);
void vsoxseg6ei64_v_i8m1 (int8_t *base, vuint64m8_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, size_t vl);
void vsoxseg7ei64_v_i8m1 (int8_t *base, vuint64m8_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, size_t vl);
void vsoxseg8ei64_v_i8m1 (int8_t *base, vuint64m8_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, vint8m1_t v7,
    size_t vl);
void vsoxseg2ei8_v_i16m2 (int16_t *base, vuint8m1_t bindex,
    vint16m2_t v0, vint16m2_t v1, size_t vl);
void vsoxseg3ei8_v_i16m2 (int16_t *base, vuint8m1_t bindex,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, size_t vl);
void vsoxseg4ei8_v_i16m2 (int16_t *base, vuint8m1_t bindex,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, vint16m2_t v3,
    size_t vl);
void vsoxseg2ei8_v_i16m4 (int16_t *base, vuint8m2_t bindex,
    vint16m4_t v0, vint16m4_t v1, size_t vl);
void vsoxseg2ei16_v_i16m1 (int16_t *base, vuint16m1_t bindex,
    vint16m1_t v0, vint16m1_t v1, size_t vl);
void vsoxseg3ei16_v_i16m1 (int16_t *base, vuint16m1_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, size_t vl);
void vsoxseg4ei16_v_i16m1 (int16_t *base, vuint16m1_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    size_t vl);
void vsoxseg5ei16_v_i16m1 (int16_t *base, vuint16m1_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, size_t vl);
void vsoxseg6ei16_v_i16m1 (int16_t *base, vuint16m1_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, size_t vl);
void vsoxseg7ei16_v_i16m1 (int16_t *base, vuint16m1_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, vint16m1_t v6, size_t vl);
void vsoxseg8ei16_v_i16m1 (int16_t *base, vuint16m1_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, vint16m1_t v6, vint16m1_t v7,
```

```
    size_t vl);
void vsoxseg2ei16_v_i16m2 (int16_t *base, vuint16m2_t bindex,
    vint16m2_t v0, vint16m2_t v1, size_t vl);
void vsoxseg3ei16_v_i16m2 (int16_t *base, vuint16m2_t bindex,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, size_t vl);
void vsoxseg4ei16_v_i16m2 (int16_t *base, vuint16m2_t bindex,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, vint16m2_t v3,
    size_t vl);
void vsoxseg2ei16_v_i16m4 (int16_t *base, vuint16m4_t bindex,
    vint16m4_t v0, vint16m4_t v1, size_t vl);
void vsoxseg2ei32_v_i16m1 (int16_t *base, vuint32m2_t bindex,
    vint16m1_t v0, vint16m1_t v1, size_t vl);
void vsoxseg3ei32_v_i16m1 (int16_t *base, vuint32m2_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, size_t vl);
void vsoxseg4ei32_v_i16m1 (int16_t *base, vuint32m2_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    size_t vl);
void vsoxseg5ei32_v_i16m1 (int16_t *base, vuint32m2_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, size_t vl);
void vsoxseg6ei32_v_i16m1 (int16_t *base, vuint32m2_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, size_t vl);
void vsoxseg7ei32_v_i16m1 (int16_t *base, vuint32m2_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, vint16m1_t v6, size_t vl);
void vsoxseg8ei32_v_i16m1 (int16_t *base, vuint32m2_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, vint16m1_t v6, vint16m1_t v7,
    size_t vl);
void vsoxseg2ei32_v_i16m2 (int16_t *base, vuint32m4_t bindex,
    vint16m2_t v0, vint16m2_t v1, size_t vl);
void vsoxseg3ei32_v_i16m2 (int16_t *base, vuint32m4_t bindex,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, size_t vl);
void vsoxseg4ei32_v_i16m2 (int16_t *base, vuint32m4_t bindex,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, vint16m2_t v3,
    size_t vl);
void vsoxseg2ei32_v_i16m4 (int16_t *base, vuint32m8_t bindex,
    vint16m4_t v0, vint16m4_t v1, size_t vl);
void vsoxseg2ei64_v_i16m1 (int16_t *base, vuint64m4_t bindex,
    vint16m1_t v0, vint16m1_t v1, size_t vl);
void vsoxseg3ei64_v_i16m1 (int16_t *base, vuint64m4_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, size_t vl);
void vsoxseg4ei64_v_i16m1 (int16_t *base, vuint64m4_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    size_t vl);
```

```
void vsoxseg5ei64_v_i16m1 (int16_t *base, vuint64m4_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, size_t vl);
void vsoxseg6ei64_v_i16m1 (int16_t *base, vuint64m4_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, size_t vl);
void vsoxseg7ei64_v_i16m1 (int16_t *base, vuint64m4_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, vint16m1_t v6, size_t vl);
void vsoxseg8ei64_v_i16m1 (int16_t *base, vuint64m4_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, vint16m1_t v6, vint16m1_t v7,
    size_t vl);
void vsoxseg2ei64_v_i16m2 (int16_t *base, vuint64m8_t bindex,
    vint16m2_t v0, vint16m2_t v1, size_t vl);
void vsoxseg3ei64_v_i16m2 (int16_t *base, vuint64m8_t bindex,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, size_t vl);
void vsoxseg4ei64_v_i16m2 (int16_t *base, vuint64m8_t bindex,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, vint16m2_t v3,
    size_t vl);
void vsoxseg2ei8_v_i32m4 (int32_t *base, vuint8m1_t bindex,
    vint32m4_t v0, vint32m4_t v1, size_t vl);
void vsoxseg2ei16_v_i32m2 (int32_t *base, vuint16m1_t bindex,
    vint32m2_t v0, vint32m2_t v1, size_t vl);
void vsoxseg3ei16_v_i32m2 (int32_t *base, vuint16m1_t bindex,
    vint32m2_t v0, vint32m2_t v1, vint32m2_t v2, size_t vl);
void vsoxseg4ei16_v_i32m2 (int32_t *base, vuint16m1_t bindex,
    vint32m2_t v0, vint32m2_t v1, vint32m2_t v2, vint32m2_t v3,
    size_t vl);
void vsoxseg2ei16_v_i32m4 (int32_t *base, vuint16m2_t bindex,
    vint32m4_t v0, vint32m4_t v1, size_t vl);
void vsoxseg2ei32_v_i32m1 (int32_t *base, vuint32m1_t bindex,
    vint32m1_t v0, vint32m1_t v1, size_t vl);
void vsoxseg3ei32_v_i32m1 (int32_t *base, vuint32m1_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, size_t vl);
void vsoxseg4ei32_v_i32m1 (int32_t *base, vuint32m1_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    size_t vl);
void vsoxseg5ei32_v_i32m1 (int32_t *base, vuint32m1_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, size_t vl);
void vsoxseg6ei32_v_i32m1 (int32_t *base, vuint32m1_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, vint32m1_t v5, size_t vl);
void vsoxseg7ei32_v_i32m1 (int32_t *base, vuint32m1_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
```

```
    vint32m1_t v4, vint32m1_t v5, vint32m1_t v6, size_t vl);
void vsoxseg8ei32_v_i32m1 (int32_t *base, vuint32m1_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, vint32m1_t v5, vint32m1_t v6, vint32m1_t v7,
    size_t vl);
void vsoxseg2ei32_v_i32m2 (int32_t *base, vuint32m2_t bindex,
    vint32m2_t v0, vint32m2_t v1, size_t vl);
void vsoxseg3ei32_v_i32m2 (int32_t *base, vuint32m2_t bindex,
    vint32m2_t v0, vint32m2_t v1, vint32m2_t v2, size_t vl);
void vsoxseg4ei32_v_i32m2 (int32_t *base, vuint32m2_t bindex,
    vint32m2_t v0, vint32m2_t v1, vint32m2_t v2, vint32m2_t v3,
    size_t vl);
void vsoxseg2ei32_v_i32m4 (int32_t *base, vuint32m4_t bindex,
    vint32m4_t v0, vint32m4_t v1, size_t vl);
void vsoxseg2ei64_v_i32m1 (int32_t *base, vuint64m2_t bindex,
    vint32m1_t v0, vint32m1_t v1, size_t vl);
void vsoxseg3ei64_v_i32m1 (int32_t *base, vuint64m2_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, size_t vl);
void vsoxseg4ei64_v_i32m1 (int32_t *base, vuint64m2_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    size_t vl);
void vsoxseg5ei64_v_i32m1 (int32_t *base, vuint64m2_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, size_t vl);
void vsoxseg6ei64_v_i32m1 (int32_t *base, vuint64m2_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, vint32m1_t v5, size_t vl);
void vsoxseg7ei64_v_i32m1 (int32_t *base, vuint64m2_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, vint32m1_t v5, vint32m1_t v6, size_t vl);
void vsoxseg8ei64_v_i32m1 (int32_t *base, vuint64m2_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, vint32m1_t v5, vint32m1_t v6, vint32m1_t v7,
    size_t vl);
void vsoxseg2ei64_v_i32m2 (int32_t *base, vuint64m4_t bindex,
    vint32m2_t v0, vint32m2_t v1, size_t vl);
void vsoxseg3ei64_v_i32m2 (int32_t *base, vuint64m4_t bindex,
    vint32m2_t v0, vint32m2_t v1, vint32m2_t v2, size_t vl);
void vsoxseg4ei64_v_i32m2 (int32_t *base, vuint64m4_t bindex,
    vint32m2_t v0, vint32m2_t v1, vint32m2_t v2, vint32m2_t v3,
    size_t vl);
void vsoxseg2ei64_v_i32m4 (int32_t *base, vuint64m8_t bindex,
    vint32m4_t v0, vint32m4_t v1, size_t vl);
void vsoxseg2ei16_v_i64m4 (int64_t *base, vuint16m1_t bindex,
    vint64m4_t v0, vint64m4_t v1, size_t vl);
```

```
void vsoxseg2ei32_v_i64m2 (int64_t *base, vuint32m1_t bindex,
    vint64m2_t v0, vint64m2_t v1, size_t vl);
void vsoxseg3ei32_v_i64m2 (int64_t *base, vuint32m1_t bindex,
    vint64m2_t v0, vint64m2_t v1, vint64m2_t v2, size_t vl);
void vsoxseg4ei32_v_i64m2 (int64_t *base, vuint32m1_t bindex,
    vint64m2_t v0, vint64m2_t v1, vint64m2_t v2, vint64m2_t v3,
    size_t vl);
void vsoxseg2ei32_v_i64m4 (int64_t *base, vuint32m2_t bindex,
    vint64m4_t v0, vint64m4_t v1, size_t vl);
void vsoxseg2ei64_v_i64m1 (int64_t *base, vuint64m1_t bindex,
    vint64m1_t v0, vint64m1_t v1, size_t vl);
void vsoxseg3ei64_v_i64m1 (int64_t *base, vuint64m1_t bindex,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, size_t vl);
void vsoxseg4ei64_v_i64m1 (int64_t *base, vuint64m1_t bindex,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    size_t vl);
void vsoxseg5ei64_v_i64m1 (int64_t *base, vuint64m1_t bindex,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    vint64m1_t v4, size_t vl);
void vsoxseg6ei64_v_i64m1 (int64_t *base, vuint64m1_t bindex,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    vint64m1_t v4, vint64m1_t v5, size_t vl);
void vsoxseg7ei64_v_i64m1 (int64_t *base, vuint64m1_t bindex,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    vint64m1_t v4, vint64m1_t v5, vint64m1_t v6, size_t vl);
void vsoxseg8ei64_v_i64m1 (int64_t *base, vuint64m1_t bindex,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    vint64m1_t v4, vint64m1_t v5, vint64m1_t v6, vint64m1_t v7,
    size_t vl);
void vsoxseg2ei64_v_i64m2 (int64_t *base, vuint64m2_t bindex,
    vint64m2_t v0, vint64m2_t v1, size_t vl);
void vsoxseg3ei64_v_i64m2 (int64_t *base, vuint64m2_t bindex,
    vint64m2_t v0, vint64m2_t v1, vint64m2_t v2, size_t vl);
void vsoxseg4ei64_v_i64m2 (int64_t *base, vuint64m2_t bindex,
    vint64m2_t v0, vint64m2_t v1, vint64m2_t v2, vint64m2_t v3,
    size_t vl);
void vsoxseg2ei64_v_i64m4 (int64_t *base, vuint64m4_t bindex,
    vint64m4_t v0, vint64m4_t v1, size_t vl);
void vsoxseg2ei8_v_u8m1 (uint8_t *base, vuint8m1_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, size_t vl);
void vsoxseg3ei8_v_u8m1 (uint8_t *base, vuint8m1_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, size_t vl);
void vsoxseg4ei8_v_u8m1 (uint8_t *base, vuint8m1_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    size_t vl);
```

```
void vsoxseg5ei8_v_u8m1 (uint8_t *base, vuint8m1_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, size_t vl);
void vsoxseg6ei8_v_u8m1 (uint8_t *base, vuint8m1_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, size_t vl);
void vsoxseg7ei8_v_u8m1 (uint8_t *base, vuint8m1_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6, size_t vl);
void vsoxseg8ei8_v_u8m1 (uint8_t *base, vuint8m1_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6, vuint8m1_t v7,
    size_t vl);
void vsoxseg2ei8_v_u8m2 (uint8_t *base, vuint8m2_t bindex,
    vuint8m2_t v0, vuint8m2_t v1, size_t vl);
void vsoxseg3ei8_v_u8m2 (uint8_t *base, vuint8m2_t bindex,
    vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t v2, size_t vl);
void vsoxseg4ei8_v_u8m2 (uint8_t *base, vuint8m2_t bindex,
    vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t v2, vuint8m2_t v3,
    size_t vl);
void vsoxseg2ei8_v_u8m4 (uint8_t *base, vuint8m4_t bindex,
    vuint8m4_t v0, vuint8m4_t v1, size_t vl);
void vsoxseg2ei16_v_u8m1 (uint8_t *base, vuint16m2_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, size_t vl);
void vsoxseg3ei16_v_u8m1 (uint8_t *base, vuint16m2_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, size_t vl);
void vsoxseg4ei16_v_u8m1 (uint8_t *base, vuint16m2_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    size_t vl);
void vsoxseg5ei16_v_u8m1 (uint8_t *base, vuint16m2_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, size_t vl);
void vsoxseg6ei16_v_u8m1 (uint8_t *base, vuint16m2_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, size_t vl);
void vsoxseg7ei16_v_u8m1 (uint8_t *base, vuint16m2_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6, size_t vl);
void vsoxseg8ei16_v_u8m1 (uint8_t *base, vuint16m2_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6, vuint8m1_t v7,
    size_t vl);
void vsoxseg2ei16_v_u8m2 (uint8_t *base, vuint16m4_t bindex,
    vuint8m2_t v0, vuint8m2_t v1, size_t vl);
void vsoxseg3ei16_v_u8m2 (uint8_t *base, vuint16m4_t bindex,
    vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t v2, size_t vl);
```

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void vsoxseg4ei16_v_u8m2 (uint8_t *base, vuint16m4_t bindex,
    vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t v2, vuint8m2_t v3,
    size_t vl);
void vsoxseg2ei16_v_u8m4 (uint8_t *base, vuint16m8_t bindex,
    vuint8m4_t v0, vuint8m4_t v1, size_t vl);
void vsoxseg2ei32_v_u8m1 (uint8_t *base, vuint32m4_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, size_t vl);
void vsoxseg3ei32_v_u8m1 (uint8_t *base, vuint32m4_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, size_t vl);
void vsoxseg4ei32_v_u8m1 (uint8_t *base, vuint32m4_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    size_t vl);
void vsoxseg5ei32_v_u8m1 (uint8_t *base, vuint32m4_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, size_t vl);
void vsoxseg6ei32_v_u8m1 (uint8_t *base, vuint32m4_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, size_t vl);
void vsoxseg7ei32_v_u8m1 (uint8_t *base, vuint32m4_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6, size_t vl);
void vsoxseg8ei32_v_u8m1 (uint8_t *base, vuint32m4_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6, vuint8m1_t v7,
    size_t vl);
void vsoxseg2ei32_v_u8m2 (uint8_t *base, vuint32m8_t bindex,
    vuint8m2_t v0, vuint8m2_t v1, size_t vl);
void vsoxseg3ei32_v_u8m2 (uint8_t *base, vuint32m8_t bindex,
    vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t v2, size_t vl);
void vsoxseg4ei32_v_u8m2 (uint8_t *base, vuint32m8_t bindex,
    vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t v2, vuint8m2_t v3,
    size_t vl);
void vsoxseg2ei64_v_u8m1 (uint8_t *base, vuint64m8_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, size_t vl);
void vsoxseg3ei64_v_u8m1 (uint8_t *base, vuint64m8_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, size_t vl);
void vsoxseg4ei64_v_u8m1 (uint8_t *base, vuint64m8_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    size_t vl);
void vsoxseg5ei64_v_u8m1 (uint8_t *base, vuint64m8_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, size_t vl);
void vsoxseg6ei64_v_u8m1 (uint8_t *base, vuint64m8_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, size_t vl);
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void vsoxseg7ei64_v_u8m1 (uint8_t *base, vuint64m8_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6, size_t vl);
void vsoxseg8ei64_v_u8m1 (uint8_t *base, vuint64m8_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6, vuint8m1_t v7,
    size_t vl);
void vsoxseg2ei8_v_u16m2 (uint16_t *base, vuint8m1_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, size_t vl);
void vsoxseg3ei8_v_u16m2 (uint16_t *base, vuint8m1_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, size_t vl);
void vsoxseg4ei8_v_u16m2 (uint16_t *base, vuint8m1_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, vuint16m2_t
    v3, size_t vl);
void vsoxseg2ei8_v_u16m4 (uint16_t *base, vuint8m2_t bindex,
    vuint16m4_t v0, vuint16m4_t v1, size_t vl);
void vsoxseg2ei16_v_u16m1 (uint16_t *base, vuint16m1_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, size_t vl);
void vsoxseg3ei16_v_u16m1 (uint16_t *base, vuint16m1_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, size_t vl);
void vsoxseg4ei16_v_u16m1 (uint16_t *base, vuint16m1_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, size_t vl);
void vsoxseg5ei16_v_u16m1 (uint16_t *base, vuint16m1_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, size_t vl);
void vsoxseg6ei16_v_u16m1 (uint16_t *base, vuint16m1_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, size_t vl);
void vsoxseg7ei16_v_u16m1 (uint16_t *base, vuint16m1_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, vuint16m1_t v6, size_t
    vl);
void vsoxseg8ei16_v_u16m1 (uint16_t *base, vuint16m1_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, vuint16m1_t v6,
    vuint16m1_t v7, size_t vl);
void vsoxseg2ei16_v_u16m2 (uint16_t *base, vuint16m2_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, size_t vl);
void vsoxseg3ei16_v_u16m2 (uint16_t *base, vuint16m2_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, size_t vl);
void vsoxseg4ei16_v_u16m2 (uint16_t *base, vuint16m2_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, vuint16m2_t
    v3, size_t vl);
void vsoxseg2ei16_v_u16m4 (uint16_t *base, vuint16m4_t bindex,
    vuint16m4_t v0, vuint16m4_t v1, size_t vl);
```

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void vsoxseg2ei32_v_u16m1 (uint16_t *base, vuint32m2_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, size_t vl);
void vsoxseg3ei32_v_u16m1 (uint16_t *base, vuint32m2_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, size_t vl);
void vsoxseg4ei32_v_u16m1 (uint16_t *base, vuint32m2_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, size_t vl);
void vsoxseg5ei32_v_u16m1 (uint16_t *base, vuint32m2_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, size_t vl);
void vsoxseg6ei32_v_u16m1 (uint16_t *base, vuint32m2_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, size_t vl);
void vsoxseg7ei32_v_u16m1 (uint16_t *base, vuint32m2_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, vuint16m1_t v6, size_t
    vl);
void vsoxseg8ei32_v_u16m1 (uint16_t *base, vuint32m2_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, vuint16m1_t v6,
    vuint16m1_t v7, size_t vl);
void vsoxseg2ei32_v_u16m2 (uint16_t *base, vuint32m4_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, size_t vl);
void vsoxseg3ei32_v_u16m2 (uint16_t *base, vuint32m4_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, size_t vl);
void vsoxseg4ei32_v_u16m2 (uint16_t *base, vuint32m4_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, vuint16m2_t
    v3, size_t vl);
void vsoxseg2ei32_v_u16m4 (uint16_t *base, vuint32m8_t bindex,
    vuint16m4_t v0, vuint16m4_t v1, size_t vl);
void vsoxseg2ei64_v_u16m1 (uint16_t *base, vuint64m4_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, size_t vl);
void vsoxseg3ei64_v_u16m1 (uint16_t *base, vuint64m4_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, size_t vl);
void vsoxseg4ei64_v_u16m1 (uint16_t *base, vuint64m4_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, size_t vl);
void vsoxseg5ei64_v_u16m1 (uint16_t *base, vuint64m4_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, size_t vl);
void vsoxseg6ei64_v_u16m1 (uint16_t *base, vuint64m4_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, size_t vl);
void vsoxseg7ei64_v_u16m1 (uint16_t *base, vuint64m4_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, vuint16m1_t v6, size_t
```

```
    vl);
void vsoxseg8ei64_v_u16m1 (uint16_t *base, vuint64m4_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, vuint16m1_t v6,
    vuint16m1_t v7, size_t vl);
void vsoxseg2ei64_v_u16m2 (uint16_t *base, vuint64m8_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, size_t vl);
void vsoxseg3ei64_v_u16m2 (uint16_t *base, vuint64m8_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, size_t vl);
void vsoxseg4ei64_v_u16m2 (uint16_t *base, vuint64m8_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, vuint16m2_t
    v3, size_t vl);
void vsoxseg2ei8_v_u32m4 (uint32_t *base, vuint8m1_t bindex,
    vuint32m4_t v0, vuint32m4_t v1, size_t vl);
void vsoxseg2ei16_v_u32m2 (uint32_t *base, vuint16m1_t bindex,
    vuint32m2_t v0, vuint32m2_t v1, size_t vl);
void vsoxseg3ei16_v_u32m2 (uint32_t *base, vuint16m1_t bindex,
    vuint32m2_t v0, vuint32m2_t v1, vuint32m2_t v2, size_t vl);
void vsoxseg4ei16_v_u32m2 (uint32_t *base, vuint16m1_t bindex,
    vuint32m2_t v0, vuint32m2_t v1, vuint32m2_t v2, vuint32m2_t
    v3, size_t vl);
void vsoxseg2ei16_v_u32m4 (uint32_t *base, vuint16m2_t bindex,
    vuint32m4_t v0, vuint32m4_t v1, size_t vl);
void vsoxseg2ei32_v_u32m1 (uint32_t *base, vuint32m1_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, size_t vl);
void vsoxseg3ei32_v_u32m1 (uint32_t *base, vuint32m1_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, size_t vl);
void vsoxseg4ei32_v_u32m1 (uint32_t *base, vuint32m1_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, size_t vl);
void vsoxseg5ei32_v_u32m1 (uint32_t *base, vuint32m1_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, size_t vl);
void vsoxseg6ei32_v_u32m1 (uint32_t *base, vuint32m1_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, vuint32m1_t v5, size_t vl);
void vsoxseg7ei32_v_u32m1 (uint32_t *base, vuint32m1_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, vuint32m1_t v5, vuint32m1_t v6, size_t
    vl);
void vsoxseg8ei32_v_u32m1 (uint32_t *base, vuint32m1_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, vuint32m1_t v5, vuint32m1_t v6,
    vuint32m1_t v7, size_t vl);
void vsoxseg2ei32_v_u32m2 (uint32_t *base, vuint32m2_t bindex,
    vuint32m2_t v0, vuint32m2_t v1, size_t vl);
```

```
void vsoxseg3ei32_v_u32m2 (uint32_t *base, vuint32m2_t bindex,
    vuint32m2_t v0, vuint32m2_t v1, vuint32m2_t v2, size_t vl);
void vsoxseg4ei32_v_u32m2 (uint32_t *base, vuint32m2_t bindex,
    vuint32m2_t v0, vuint32m2_t v1, vuint32m2_t v2, vuint32m2_t
    v3, size_t vl);
void vsoxseg2ei32_v_u32m4 (uint32_t *base, vuint32m4_t bindex,
    vuint32m4_t v0, vuint32m4_t v1, size_t vl);
void vsoxseg2ei64_v_u32m1 (uint32_t *base, vuint64m2_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, size_t vl);
void vsoxseg3ei64_v_u32m1 (uint32_t *base, vuint64m2_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, size_t vl);
void vsoxseg4ei64_v_u32m1 (uint32_t *base, vuint64m2_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, size_t vl);
void vsoxseg5ei64_v_u32m1 (uint32_t *base, vuint64m2_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, size_t vl);
void vsoxseg6ei64_v_u32m1 (uint32_t *base, vuint64m2_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, vuint32m1_t v5, size_t vl);
void vsoxseg7ei64_v_u32m1 (uint32_t *base, vuint64m2_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, vuint32m1_t v5, vuint32m1_t v6, size_t
    vl);
void vsoxseg8ei64_v_u32m1 (uint32_t *base, vuint64m2_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, vuint32m1_t v5, vuint32m1_t v6,
    vuint32m1_t v7, size_t vl);
void vsoxseg2ei64_v_u32m2 (uint32_t *base, vuint64m4_t bindex,
    vuint32m2_t v0, vuint32m2_t v1, size_t vl);
void vsoxseg3ei64_v_u32m2 (uint32_t *base, vuint64m4_t bindex,
    vuint32m2_t v0, vuint32m2_t v1, vuint32m2_t v2, size_t vl);
void vsoxseg4ei64_v_u32m2 (uint32_t *base, vuint64m4_t bindex,
    vuint32m2_t v0, vuint32m2_t v1, vuint32m2_t v2, vuint32m2_t
    v3, size_t vl);
void vsoxseg2ei64_v_u32m4 (uint32_t *base, vuint64m8_t bindex,
    vuint32m4_t v0, vuint32m4_t v1, size_t vl);
void vsoxseg2ei16_v_u64m4 (uint64_t *base, vuint16m1_t bindex,
    vuint64m4_t v0, vuint64m4_t v1, size_t vl);
void vsoxseg2ei32_v_u64m2 (uint64_t *base, vuint32m1_t bindex,
    vuint64m2_t v0, vuint64m2_t v1, size_t vl);
void vsoxseg3ei32_v_u64m2 (uint64_t *base, vuint32m1_t bindex,
    vuint64m2_t v0, vuint64m2_t v1, vuint64m2_t v2, size_t vl);
void vsoxseg4ei32_v_u64m2 (uint64_t *base, vuint32m1_t bindex,
    vuint64m2_t v0, vuint64m2_t v1, vuint64m2_t v2, vuint64m2_t
    v3, size_t vl);
```

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void vsoxseg2ei32_v_u64m4 (uint64_t *base, vuint32m2_t bindex,
    vuint64m4_t v0, vuint64m4_t v1, size_t vl);
void vsoxseg2ei64_v_u64m1 (uint64_t *base, vuint64m1_t bindex,
    vuint64m1_t v0, vuint64m1_t v1, size_t vl);
void vsoxseg3ei64_v_u64m1 (uint64_t *base, vuint64m1_t bindex,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, size_t vl);
void vsoxseg4ei64_v_u64m1 (uint64_t *base, vuint64m1_t bindex,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, size_t vl);
void vsoxseg5ei64_v_u64m1 (uint64_t *base, vuint64m1_t bindex,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, vuint64m1_t v4, size_t vl);
void vsoxseg6ei64_v_u64m1 (uint64_t *base, vuint64m1_t bindex,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, vuint64m1_t v4, vuint64m1_t v5, size_t vl);
void vsoxseg7ei64_v_u64m1 (uint64_t *base, vuint64m1_t bindex,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, vuint64m1_t v4, vuint64m1_t v5, vuint64m1_t v6, size_t
    vl);
void vsoxseg8ei64_v_u64m1 (uint64_t *base, vuint64m1_t bindex,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, vuint64m1_t v4, vuint64m1_t v5, vuint64m1_t v6,
    vuint64m1_t v7, size_t vl);
void vsoxseg2ei64_v_u64m2 (uint64_t *base, vuint64m2_t bindex,
    vuint64m2_t v0, vuint64m2_t v1, size_t vl);
void vsoxseg3ei64_v_u64m2 (uint64_t *base, vuint64m2_t bindex,
    vuint64m2_t v0, vuint64m2_t v1, vuint64m2_t v2, size_t vl);
void vsoxseg4ei64_v_u64m2 (uint64_t *base, vuint64m2_t bindex,
    vuint64m2_t v0, vuint64m2_t v1, vuint64m2_t v2, vuint64m2_t
    v3, size_t vl);
void vsoxseg2ei64_v_u64m4 (uint64_t *base, vuint64m4_t bindex,
    vuint64m4_t v0, vuint64m4_t v1, size_t vl);
void vsoxseg2ei8_v_f16m2 (float16_t *base, vuint8m1_t bindex,
    vfloat16m2_t v0, vfloat16m2_t v1, size_t vl);
void vsoxseg3ei8_v_f16m2 (float16_t *base, vuint8m1_t bindex,
    vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2, size_t
    vl);
void vsoxseg4ei8_v_f16m2 (float16_t *base, vuint8m1_t bindex,
    vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2,
    vfloat16m2_t v3, size_t vl);
void vsoxseg2ei8_v_f16m4 (float16_t *base, vuint8m2_t bindex,
    vfloat16m4_t v0, vfloat16m4_t v1, size_t vl);
void vsoxseg2ei16_v_f16m1 (float16_t *base, vuint16m1_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, size_t vl);
void vsoxseg3ei16_v_f16m1 (float16_t *base, vuint16m1_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2, size_t
```

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        vl);
void vsoxseg4ei16_v_f16m1 (float16_t *base, vuint16m1_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, size_t vl);
void vsoxseg5ei16_v_f16m1 (float16_t *base, vuint16m1_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, size_t vl);
void vsoxseg6ei16_v_f16m1 (float16_t *base, vuint16m1_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5, size_t
    vl);
void vsoxseg7ei16_v_f16m1 (float16_t *base, vuint16m1_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5,
    vfloat16m1_t v6, size_t vl);
void vsoxseg8ei16_v_f16m1 (float16_t *base, vuint16m1_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5,
    vfloat16m1_t v6, vfloat16m1_t v7, size_t vl);
void vsoxseg2ei16_v_f16m2 (float16_t *base, vuint16m2_t bindex,
    vfloat16m2_t v0, vfloat16m2_t v1, size_t vl);
void vsoxseg3ei16_v_f16m2 (float16_t *base, vuint16m2_t bindex,
    vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2, size_t
    vl);
void vsoxseg4ei16_v_f16m2 (float16_t *base, vuint16m2_t bindex,
    vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2,
    vfloat16m2_t v3, size_t vl);
void vsoxseg2ei16_v_f16m4 (float16_t *base, vuint16m4_t bindex,
    vfloat16m4_t v0, vfloat16m4_t v1, size_t vl);
void vsoxseg2ei32_v_f16m1 (float16_t *base, vuint32m2_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, size_t vl);
void vsoxseg3ei32_v_f16m1 (float16_t *base, vuint32m2_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2, size_t
    vl);
void vsoxseg4ei32_v_f16m1 (float16_t *base, vuint32m2_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, size_t vl);
void vsoxseg5ei32_v_f16m1 (float16_t *base, vuint32m2_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, size_t vl);
void vsoxseg6ei32_v_f16m1 (float16_t *base, vuint32m2_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5, size_t
    vl);
void vsoxseg7ei32_v_f16m1 (float16_t *base, vuint32m2_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
```

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                vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5,
                vfloat16m1_t v6, size_t vl);
void vsoxseg8ei32_v_f16m1 (float16_t *base, vuint32m2_t bindex,
                vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
                vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5,
                vfloat16m1_t v6, vfloat16m1_t v7, size_t vl);
void vsoxseg2ei32_v_f16m2 (float16_t *base, vuint32m4_t bindex,
                vfloat16m2_t v0, vfloat16m2_t v1, size_t vl);
void vsoxseg3ei32_v_f16m2 (float16_t *base, vuint32m4_t bindex,
                vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2, size_t
                vl);
void vsoxseg4ei32_v_f16m2 (float16_t *base, vuint32m4_t bindex,
                vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2,
                vfloat16m2_t v3, size_t vl);
void vsoxseg2ei32_v_f16m4 (float16_t *base, vuint32m8_t bindex,
                vfloat16m4_t v0, vfloat16m4_t v1, size_t vl);
void vsoxseg2ei64_v_f16m1 (float16_t *base, vuint64m4_t bindex,
                vfloat16m1_t v0, vfloat16m1_t v1, size_t vl);
void vsoxseg3ei64_v_f16m1 (float16_t *base, vuint64m4_t bindex,
                vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2, size_t
                vl);
void vsoxseg4ei64_v_f16m1 (float16_t *base, vuint64m4_t bindex,
                vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
                vfloat16m1_t v3, size_t vl);
void vsoxseg5ei64_v_f16m1 (float16_t *base, vuint64m4_t bindex,
                vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
                vfloat16m1_t v3, vfloat16m1_t v4, size_t vl);
void vsoxseg6ei64_v_f16m1 (float16_t *base, vuint64m4_t bindex,
                vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
                vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5, size_t
                vl);
void vsoxseg7ei64_v_f16m1 (float16_t *base, vuint64m4_t bindex,
                vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
                vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5,
                vfloat16m1_t v6, size_t vl);
void vsoxseg8ei64_v_f16m1 (float16_t *base, vuint64m4_t bindex,
                vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
                vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5,
                vfloat16m1_t v6, vfloat16m1_t v7, size_t vl);
void vsoxseg2ei64_v_f16m2 (float16_t *base, vuint64m8_t bindex,
                vfloat16m2_t v0, vfloat16m2_t v1, size_t vl);
void vsoxseg3ei64_v_f16m2 (float16_t *base, vuint64m8_t bindex,
                vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2, size_t
                vl);
void vsoxseg4ei64_v_f16m2 (float16_t *base, vuint64m8_t bindex,
                vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2,
```

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                vfloat16m2_t v3, size_t vl);
void vsoxseg2ei8_v_f32m4 (float32_t *base, vuint8m1_t bindex,
    vfloat32m4_t v0, vfloat32m4_t v1, size_t vl);
void vsoxseg2ei16_v_f32m2 (float32_t *base, vuint16m1_t bindex,
    vfloat32m2_t v0, vfloat32m2_t v1, size_t vl);
void vsoxseg3ei16_v_f32m2 (float32_t *base, vuint16m1_t bindex,
    vfloat32m2_t v0, vfloat32m2_t v1, vfloat32m2_t v2, size_t
    vl);
void vsoxseg4ei16_v_f32m2 (float32_t *base, vuint16m1_t bindex,
    vfloat32m2_t v0, vfloat32m2_t v1, vfloat32m2_t v2,
    vfloat32m2_t v3, size_t vl);
void vsoxseg2ei16_v_f32m4 (float32_t *base, vuint16m2_t bindex,
    vfloat32m4_t v0, vfloat32m4_t v1, size_t vl);
void vsoxseg2ei32_v_f32m1 (float32_t *base, vuint32m1_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, size_t vl);
void vsoxseg3ei32_v_f32m1 (float32_t *base, vuint32m1_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2, size_t
    vl);
void vsoxseg4ei32_v_f32m1 (float32_t *base, vuint32m1_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, size_t vl);
void vsoxseg5ei32_v_f32m1 (float32_t *base, vuint32m1_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, size_t vl);
void vsoxseg6ei32_v_f32m1 (float32_t *base, vuint32m1_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, vfloat32m1_t v5, size_t
    vl);
void vsoxseg7ei32_v_f32m1 (float32_t *base, vuint32m1_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, vfloat32m1_t v5,
    vfloat32m1_t v6, size_t vl);
void vsoxseg8ei32_v_f32m1 (float32_t *base, vuint32m1_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, vfloat32m1_t v5,
    vfloat32m1_t v6, vfloat32m1_t v7, size_t vl);
void vsoxseg2ei32_v_f32m2 (float32_t *base, vuint32m2_t bindex,
    vfloat32m2_t v0, vfloat32m2_t v1, size_t vl);
void vsoxseg3ei32_v_f32m2 (float32_t *base, vuint32m2_t bindex,
    vfloat32m2_t v0, vfloat32m2_t v1, vfloat32m2_t v2, size_t
    vl);
void vsoxseg4ei32_v_f32m2 (float32_t *base, vuint32m2_t bindex,
    vfloat32m2_t v0, vfloat32m2_t v1, vfloat32m2_t v2,
    vfloat32m2_t v3, size_t vl);
void vsoxseg2ei32_v_f32m4 (float32_t *base, vuint32m4_t bindex,
    vfloat32m4_t v0, vfloat32m4_t v1, size_t vl);
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void vsoxseg2ei64_v_f32m1 (float32_t *base, vuint64m2_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, size_t vl);
void vsoxseg3ei64_v_f32m1 (float32_t *base, vuint64m2_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2, size_t
    vl);
void vsoxseg4ei64_v_f32m1 (float32_t *base, vuint64m2_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, size_t vl);
void vsoxseg5ei64_v_f32m1 (float32_t *base, vuint64m2_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, size_t vl);
void vsoxseg6ei64_v_f32m1 (float32_t *base, vuint64m2_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, vfloat32m1_t v5, size_t
    vl);
void vsoxseg7ei64_v_f32m1 (float32_t *base, vuint64m2_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, vfloat32m1_t v5,
    vfloat32m1_t v6, size_t vl);
void vsoxseg8ei64_v_f32m1 (float32_t *base, vuint64m2_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, vfloat32m1_t v5,
    vfloat32m1_t v6, vfloat32m1_t v7, size_t vl);
void vsoxseg2ei64_v_f32m2 (float32_t *base, vuint64m4_t bindex,
    vfloat32m2_t v0, vfloat32m2_t v1, size_t vl);
void vsoxseg3ei64_v_f32m2 (float32_t *base, vuint64m4_t bindex,
    vfloat32m2_t v0, vfloat32m2_t v1, vfloat32m2_t v2, size_t
    vl);
void vsoxseg4ei64_v_f32m2 (float32_t *base, vuint64m4_t bindex,
    vfloat32m2_t v0, vfloat32m2_t v1, vfloat32m2_t v2,
    vfloat32m2_t v3, size_t vl);
void vsoxseg2ei64_v_f32m4 (float32_t *base, vuint64m8_t bindex,
    vfloat32m4_t v0, vfloat32m4_t v1, size_t vl);
void vsoxseg2ei16_v_f64m4 (float64_t *base, vuint16m1_t bindex,
    vfloat64m4_t v0, vfloat64m4_t v1, size_t vl);
void vsoxseg2ei32_v_f64m2 (float64_t *base, vuint32m1_t bindex,
    vfloat64m2_t v0, vfloat64m2_t v1, size_t vl);
void vsoxseg3ei32_v_f64m2 (float64_t *base, vuint32m1_t bindex,
    vfloat64m2_t v0, vfloat64m2_t v1, vfloat64m2_t v2, size_t
    vl);
void vsoxseg4ei32_v_f64m2 (float64_t *base, vuint32m1_t bindex,
    vfloat64m2_t v0, vfloat64m2_t v1, vfloat64m2_t v2,
    vfloat64m2_t v3, size_t vl);
void vsoxseg2ei32_v_f64m4 (float64_t *base, vuint32m2_t bindex,
    vfloat64m4_t v0, vfloat64m4_t v1, size_t vl);
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367

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void vsoxseg2ei64_v_f64m1 (float64_t *base, vuint64m1_t bindex,
    vfloat64m1_t v0, vfloat64m1_t v1, size_t vl);
void vsoxseg3ei64_v_f64m1 (float64_t *base, vuint64m1_t bindex,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2, size_t
    vl);
void vsoxseg4ei64_v_f64m1 (float64_t *base, vuint64m1_t bindex,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
    vfloat64m1_t v3, size_t vl);
void vsoxseg5ei64_v_f64m1 (float64_t *base, vuint64m1_t bindex,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
    vfloat64m1_t v3, vfloat64m1_t v4, size_t vl);
void vsoxseg6ei64_v_f64m1 (float64_t *base, vuint64m1_t bindex,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
    vfloat64m1_t v3, vfloat64m1_t v4, vfloat64m1_t v5, size_t
    vl);
void vsoxseg7ei64_v_f64m1 (float64_t *base, vuint64m1_t bindex,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
    vfloat64m1_t v3, vfloat64m1_t v4, vfloat64m1_t v5,
    vfloat64m1_t v6, size_t vl);
void vsoxseg8ei64_v_f64m1 (float64_t *base, vuint64m1_t bindex,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
    vfloat64m1_t v3, vfloat64m1_t v4, vfloat64m1_t v5,
    vfloat64m1_t v6, vfloat64m1_t v7, size_t vl);
void vsoxseg2ei64_v_f64m2 (float64_t *base, vuint64m2_t bindex,
    vfloat64m2_t v0, vfloat64m2_t v1, size_t vl);
void vsoxseg3ei64_v_f64m2 (float64_t *base, vuint64m2_t bindex,
    vfloat64m2_t v0, vfloat64m2_t v1, vfloat64m2_t v2, size_t
    vl);
void vsoxseg4ei64_v_f64m2 (float64_t *base, vuint64m2_t bindex,
    vfloat64m2_t v0, vfloat64m2_t v1, vfloat64m2_t v2,
    vfloat64m2_t v3, size_t vl);
void vsoxseg2ei64_v_f64m4 (float64_t *base, vuint64m4_t bindex,
    vfloat64m4_t v0, vfloat64m4_t v1, size_t vl);
void vsuxseg2ei8_v_i8m1 (int8_t *base, vuint8m1_t bindex,
    vint8m1_t v0, vint8m1_t v1, size_t vl);
void vsuxseg3ei8_v_i8m1 (int8_t *base, vuint8m1_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, size_t vl);
void vsuxseg4ei8_v_i8m1 (int8_t *base, vuint8m1_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    size_t vl);
void vsuxseg5ei8_v_i8m1 (int8_t *base, vuint8m1_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, size_t vl);
void vsuxseg6ei8_v_i8m1 (int8_t *base, vuint8m1_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, size_t vl);
```

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void vsuxseg7ei8_v_i8m1 (int8_t *base, vuint8m1_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, size_t vl);
void vsuxseg8ei8_v_i8m1 (int8_t *base, vuint8m1_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, vint8m1_t v7,
    size_t vl);
void vsuxseg2ei8_v_i8m2 (int8_t *base, vuint8m2_t bindex,
    vint8m2_t v0, vint8m2_t v1, size_t vl);
void vsuxseg3ei8_v_i8m2 (int8_t *base, vuint8m2_t bindex,
    vint8m2_t v0, vint8m2_t v1, vint8m2_t v2, size_t vl);
void vsuxseg4ei8_v_i8m2 (int8_t *base, vuint8m2_t bindex,
    vint8m2_t v0, vint8m2_t v1, vint8m2_t v2, vint8m2_t v3,
    size_t vl);
void vsuxseg2ei8_v_i8m4 (int8_t *base, vuint8m4_t bindex,
    vint8m4_t v0, vint8m4_t v1, size_t vl);
void vsuxseg2ei16_v_i8m1 (int8_t *base, vuint16m2_t bindex,
    vint8m1_t v0, vint8m1_t v1, size_t vl);
void vsuxseg3ei16_v_i8m1 (int8_t *base, vuint16m2_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, size_t vl);
void vsuxseg4ei16_v_i8m1 (int8_t *base, vuint16m2_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    size_t vl);
void vsuxseg5ei16_v_i8m1 (int8_t *base, vuint16m2_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, size_t vl);
void vsuxseg6ei16_v_i8m1 (int8_t *base, vuint16m2_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, size_t vl);
void vsuxseg7ei16_v_i8m1 (int8_t *base, vuint16m2_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, size_t vl);
void vsuxseg8ei16_v_i8m1 (int8_t *base, vuint16m2_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, vint8m1_t v7,
    size_t vl);
void vsuxseg2ei16_v_i8m2 (int8_t *base, vuint16m4_t bindex,
    vint8m2_t v0, vint8m2_t v1, size_t vl);
void vsuxseg3ei16_v_i8m2 (int8_t *base, vuint16m4_t bindex,
    vint8m2_t v0, vint8m2_t v1, vint8m2_t v2, size_t vl);
void vsuxseg4ei16_v_i8m2 (int8_t *base, vuint16m4_t bindex,
    vint8m2_t v0, vint8m2_t v1, vint8m2_t v2, vint8m2_t v3,
    size_t vl);
void vsuxseg2ei16_v_i8m4 (int8_t *base, vuint16m8_t bindex,
    vint8m4_t v0, vint8m4_t v1, size_t vl);
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void vsuxseg2ei32_v_i8m1 (int8_t *base, vuint32m4_t bindex,
    vint8m1_t v0, vint8m1_t v1, size_t vl);
void vsuxseg3ei32_v_i8m1 (int8_t *base, vuint32m4_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, size_t vl);
void vsuxseg4ei32_v_i8m1 (int8_t *base, vuint32m4_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    size_t vl);
void vsuxseg5ei32_v_i8m1 (int8_t *base, vuint32m4_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, size_t vl);
void vsuxseg6ei32_v_i8m1 (int8_t *base, vuint32m4_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, size_t vl);
void vsuxseg7ei32_v_i8m1 (int8_t *base, vuint32m4_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, size_t vl);
void vsuxseg8ei32_v_i8m1 (int8_t *base, vuint32m4_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, vint8m1_t v7,
    size_t vl);
void vsuxseg2ei32_v_i8m2 (int8_t *base, vuint32m8_t bindex,
    vint8m2_t v0, vint8m2_t v1, size_t vl);
void vsuxseg3ei32_v_i8m2 (int8_t *base, vuint32m8_t bindex,
    vint8m2_t v0, vint8m2_t v1, vint8m2_t v2, size_t vl);
void vsuxseg4ei32_v_i8m2 (int8_t *base, vuint32m8_t bindex,
    vint8m2_t v0, vint8m2_t v1, vint8m2_t v2, vint8m2_t v3,
    size_t vl);
void vsuxseg2ei64_v_i8m1 (int8_t *base, vuint64m8_t bindex,
    vint8m1_t v0, vint8m1_t v1, size_t vl);
void vsuxseg3ei64_v_i8m1 (int8_t *base, vuint64m8_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, size_t vl);
void vsuxseg4ei64_v_i8m1 (int8_t *base, vuint64m8_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    size_t vl);
void vsuxseg5ei64_v_i8m1 (int8_t *base, vuint64m8_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, size_t vl);
void vsuxseg6ei64_v_i8m1 (int8_t *base, vuint64m8_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, size_t vl);
void vsuxseg7ei64_v_i8m1 (int8_t *base, vuint64m8_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, size_t vl);
void vsuxseg8ei64_v_i8m1 (int8_t *base, vuint64m8_t bindex,
    vint8m1_t v0, vint8m1_t v1, vint8m1_t v2, vint8m1_t v3,
    vint8m1_t v4, vint8m1_t v5, vint8m1_t v6, vint8m1_t v7,
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    size_t vl);
void vsuxseg2ei8_v_i16m2 (int16_t *base, vuint8m1_t bindex,
    vint16m2_t v0, vint16m2_t v1, size_t vl);
void vsuxseg3ei8_v_i16m2 (int16_t *base, vuint8m1_t bindex,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, size_t vl);
void vsuxseg4ei8_v_i16m2 (int16_t *base, vuint8m1_t bindex,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, vint16m2_t v3,
    size_t vl);
void vsuxseg2ei8_v_i16m4 (int16_t *base, vuint8m2_t bindex,
    vint16m4_t v0, vint16m4_t v1, size_t vl);
void vsuxseg2ei16_v_i16m1 (int16_t *base, vuint16m1_t bindex,
    vint16m1_t v0, vint16m1_t v1, size_t vl);
void vsuxseg3ei16_v_i16m1 (int16_t *base, vuint16m1_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, size_t vl);
void vsuxseg4ei16_v_i16m1 (int16_t *base, vuint16m1_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    size_t vl);
void vsuxseg5ei16_v_i16m1 (int16_t *base, vuint16m1_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, size_t vl);
void vsuxseg6ei16_v_i16m1 (int16_t *base, vuint16m1_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, size_t vl);
void vsuxseg7ei16_v_i16m1 (int16_t *base, vuint16m1_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, vint16m1_t v6, size_t vl);
void vsuxseg8ei16_v_i16m1 (int16_t *base, vuint16m1_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, vint16m1_t v6, vint16m1_t v7,
    size_t vl);
void vsuxseg2ei16_v_i16m2 (int16_t *base, vuint16m2_t bindex,
    vint16m2_t v0, vint16m2_t v1, size_t vl);
void vsuxseg3ei16_v_i16m2 (int16_t *base, vuint16m2_t bindex,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, size_t vl);
void vsuxseg4ei16_v_i16m2 (int16_t *base, vuint16m2_t bindex,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, vint16m2_t v3,
    size_t vl);
void vsuxseg2ei16_v_i16m4 (int16_t *base, vuint16m4_t bindex,
    vint16m4_t v0, vint16m4_t v1, size_t vl);
void vsuxseg2ei32_v_i16m1 (int16_t *base, vuint32m2_t bindex,
    vint16m1_t v0, vint16m1_t v1, size_t vl);
void vsuxseg3ei32_v_i16m1 (int16_t *base, vuint32m2_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, size_t vl);
void vsuxseg4ei32_v_i16m1 (int16_t *base, vuint32m2_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    size_t vl);
```

```
void vsuxseg5ei32_v_i16m1 (int16_t *base, vuint32m2_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, size_t vl);
void vsuxseg6ei32_v_i16m1 (int16_t *base, vuint32m2_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, size_t vl);
void vsuxseg7ei32_v_i16m1 (int16_t *base, vuint32m2_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, vint16m1_t v6, size_t vl);
void vsuxseg8ei32_v_i16m1 (int16_t *base, vuint32m2_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, vint16m1_t v6, vint16m1_t v7,
    size_t vl);
void vsuxseg2ei32_v_i16m2 (int16_t *base, vuint32m4_t bindex,
    vint16m2_t v0, vint16m2_t v1, size_t vl);
void vsuxseg3ei32_v_i16m2 (int16_t *base, vuint32m4_t bindex,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, size_t vl);
void vsuxseg4ei32_v_i16m2 (int16_t *base, vuint32m4_t bindex,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, vint16m2_t v3,
    size_t vl);
void vsuxseg2ei32_v_i16m4 (int16_t *base, vuint32m8_t bindex,
    vint16m4_t v0, vint16m4_t v1, size_t vl);
void vsuxseg2ei64_v_i16m1 (int16_t *base, vuint64m4_t bindex,
    vint16m1_t v0, vint16m1_t v1, size_t vl);
void vsuxseg3ei64_v_i16m1 (int16_t *base, vuint64m4_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, size_t vl);
void vsuxseg4ei64_v_i16m1 (int16_t *base, vuint64m4_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    size_t vl);
void vsuxseg5ei64_v_i16m1 (int16_t *base, vuint64m4_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, size_t vl);
void vsuxseg6ei64_v_i16m1 (int16_t *base, vuint64m4_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, size_t vl);
void vsuxseg7ei64_v_i16m1 (int16_t *base, vuint64m4_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, vint16m1_t v6, size_t vl);
void vsuxseg8ei64_v_i16m1 (int16_t *base, vuint64m4_t bindex,
    vint16m1_t v0, vint16m1_t v1, vint16m1_t v2, vint16m1_t v3,
    vint16m1_t v4, vint16m1_t v5, vint16m1_t v6, vint16m1_t v7,
    size_t vl);
void vsuxseg2ei64_v_i16m2 (int16_t *base, vuint64m8_t bindex,
    vint16m2_t v0, vint16m2_t v1, size_t vl);
void vsuxseg3ei64_v_i16m2 (int16_t *base, vuint64m8_t bindex,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, size_t vl);
```

```
void vsuxseg4ei64_v_i16m2 (int16_t *base, vuint64m8_t bindex,
    vint16m2_t v0, vint16m2_t v1, vint16m2_t v2, vint16m2_t v3,
    size_t vl);
void vsuxseg2ei8_v_i32m4 (int32_t *base, vuint8m1_t bindex,
    vint32m4_t v0, vint32m4_t v1, size_t vl);
void vsuxseg2ei16_v_i32m2 (int32_t *base, vuint16m1_t bindex,
    vint32m2_t v0, vint32m2_t v1, size_t vl);
void vsuxseg3ei16_v_i32m2 (int32_t *base, vuint16m1_t bindex,
    vint32m2_t v0, vint32m2_t v1, vint32m2_t v2, size_t vl);
void vsuxseg4ei16_v_i32m2 (int32_t *base, vuint16m1_t bindex,
    vint32m2_t v0, vint32m2_t v1, vint32m2_t v2, vint32m2_t v3,
    size_t vl);
void vsuxseg2ei16_v_i32m4 (int32_t *base, vuint16m2_t bindex,
    vint32m4_t v0, vint32m4_t v1, size_t vl);
void vsuxseg2ei32_v_i32m1 (int32_t *base, vuint32m1_t bindex,
    vint32m1_t v0, vint32m1_t v1, size_t vl);
void vsuxseg3ei32_v_i32m1 (int32_t *base, vuint32m1_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, size_t vl);
void vsuxseg4ei32_v_i32m1 (int32_t *base, vuint32m1_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    size_t vl);
void vsuxseg5ei32_v_i32m1 (int32_t *base, vuint32m1_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, size_t vl);
void vsuxseg6ei32_v_i32m1 (int32_t *base, vuint32m1_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, vint32m1_t v5, size_t vl);
void vsuxseg7ei32_v_i32m1 (int32_t *base, vuint32m1_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, vint32m1_t v5, vint32m1_t v6, size_t vl);
void vsuxseg8ei32_v_i32m1 (int32_t *base, vuint32m1_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, vint32m1_t v5, vint32m1_t v6, vint32m1_t v7,
    size_t vl);
void vsuxseg2ei32_v_i32m2 (int32_t *base, vuint32m2_t bindex,
    vint32m2_t v0, vint32m2_t v1, size_t vl);
void vsuxseg3ei32_v_i32m2 (int32_t *base, vuint32m2_t bindex,
    vint32m2_t v0, vint32m2_t v1, vint32m2_t v2, size_t vl);
void vsuxseg4ei32_v_i32m2 (int32_t *base, vuint32m2_t bindex,
    vint32m2_t v0, vint32m2_t v1, vint32m2_t v2, vint32m2_t v3,
    size_t vl);
void vsuxseg2ei32_v_i32m4 (int32_t *base, vuint32m4_t bindex,
    vint32m4_t v0, vint32m4_t v1, size_t vl);
void vsuxseg2ei64_v_i32m1 (int32_t *base, vuint64m2_t bindex,
    vint32m1_t v0, vint32m1_t v1, size_t vl);
```

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void vsuxseg3ei64_v_i32m1 (int32_t *base, vuint64m2_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, size_t vl);
void vsuxseg4ei64_v_i32m1 (int32_t *base, vuint64m2_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    size_t vl);
void vsuxseg5ei64_v_i32m1 (int32_t *base, vuint64m2_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, size_t vl);
void vsuxseg6ei64_v_i32m1 (int32_t *base, vuint64m2_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, vint32m1_t v5, size_t vl);
void vsuxseg7ei64_v_i32m1 (int32_t *base, vuint64m2_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, vint32m1_t v5, vint32m1_t v6, size_t vl);
void vsuxseg8ei64_v_i32m1 (int32_t *base, vuint64m2_t bindex,
    vint32m1_t v0, vint32m1_t v1, vint32m1_t v2, vint32m1_t v3,
    vint32m1_t v4, vint32m1_t v5, vint32m1_t v6, vint32m1_t v7,
    size_t vl);
void vsuxseg2ei64_v_i32m2 (int32_t *base, vuint64m4_t bindex,
    vint32m2_t v0, vint32m2_t v1, size_t vl);
void vsuxseg3ei64_v_i32m2 (int32_t *base, vuint64m4_t bindex,
    vint32m2_t v0, vint32m2_t v1, vint32m2_t v2, size_t vl);
void vsuxseg4ei64_v_i32m2 (int32_t *base, vuint64m4_t bindex,
    vint32m2_t v0, vint32m2_t v1, vint32m2_t v2, vint32m2_t v3,
    size_t vl);
void vsuxseg2ei64_v_i32m4 (int32_t *base, vuint64m8_t bindex,
    vint32m4_t v0, vint32m4_t v1, size_t vl);
void vsuxseg2ei16_v_i64m4 (int64_t *base, vuint16m1_t bindex,
    vint64m4_t v0, vint64m4_t v1, size_t vl);
void vsuxseg2ei32_v_i64m2 (int64_t *base, vuint32m1_t bindex,
    vint64m2_t v0, vint64m2_t v1, size_t vl);
void vsuxseg3ei32_v_i64m2 (int64_t *base, vuint32m1_t bindex,
    vint64m2_t v0, vint64m2_t v1, vint64m2_t v2, size_t vl);
void vsuxseg4ei32_v_i64m2 (int64_t *base, vuint32m1_t bindex,
    vint64m2_t v0, vint64m2_t v1, vint64m2_t v2, vint64m2_t v3,
    size_t vl);
void vsuxseg2ei32_v_i64m4 (int64_t *base, vuint32m2_t bindex,
    vint64m4_t v0, vint64m4_t v1, size_t vl);
void vsuxseg2ei64_v_i64m1 (int64_t *base, vuint64m1_t bindex,
    vint64m1_t v0, vint64m1_t v1, size_t vl);
void vsuxseg3ei64_v_i64m1 (int64_t *base, vuint64m1_t bindex,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, size_t vl);
void vsuxseg4ei64_v_i64m1 (int64_t *base, vuint64m1_t bindex,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    size_t vl);
```

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void vsuxseg5ei64_v_i64m1 (int64_t *base, vuint64m1_t bindex,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    vint64m1_t v4, size_t vl);
void vsuxseg6ei64_v_i64m1 (int64_t *base, vuint64m1_t bindex,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    vint64m1_t v4, vint64m1_t v5, size_t vl);
void vsuxseg7ei64_v_i64m1 (int64_t *base, vuint64m1_t bindex,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    vint64m1_t v4, vint64m1_t v5, vint64m1_t v6, size_t vl);
void vsuxseg8ei64_v_i64m1 (int64_t *base, vuint64m1_t bindex,
    vint64m1_t v0, vint64m1_t v1, vint64m1_t v2, vint64m1_t v3,
    vint64m1_t v4, vint64m1_t v5, vint64m1_t v6, vint64m1_t v7,
    size_t vl);
void vsuxseg2ei64_v_i64m2 (int64_t *base, vuint64m2_t bindex,
    vint64m2_t v0, vint64m2_t v1, size_t vl);
void vsuxseg3ei64_v_i64m2 (int64_t *base, vuint64m2_t bindex,
    vint64m2_t v0, vint64m2_t v1, vint64m2_t v2, size_t vl);
void vsuxseg4ei64_v_i64m2 (int64_t *base, vuint64m2_t bindex,
    vint64m2_t v0, vint64m2_t v1, vint64m2_t v2, vint64m2_t v3,
    size_t vl);
void vsuxseg2ei64_v_i64m4 (int64_t *base, vuint64m4_t bindex,
    vint64m4_t v0, vint64m4_t v1, size_t vl);
void vsuxseg2ei8_v_u8m1 (uint8_t *base, vuint8m1_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, size_t vl);
void vsuxseg3ei8_v_u8m1 (uint8_t *base, vuint8m1_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, size_t vl);
void vsuxseg4ei8_v_u8m1 (uint8_t *base, vuint8m1_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    size_t vl);
void vsuxseg5ei8_v_u8m1 (uint8_t *base, vuint8m1_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, size_t vl);
void vsuxseg6ei8_v_u8m1 (uint8_t *base, vuint8m1_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, size_t vl);
void vsuxseg7ei8_v_u8m1 (uint8_t *base, vuint8m1_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6, size_t vl);
void vsuxseg8ei8_v_u8m1 (uint8_t *base, vuint8m1_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6, vuint8m1_t v7,
    size_t vl);
void vsuxseg2ei8_v_u8m2 (uint8_t *base, vuint8m2_t bindex,
    vuint8m2_t v0, vuint8m2_t v1, size_t vl);
void vsuxseg3ei8_v_u8m2 (uint8_t *base, vuint8m2_t bindex,
    vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t v2, size_t vl);
```

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void vsuxseg4ei8_v_u8m2 (uint8_t *base, vuint8m2_t bindex,
    vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t v2, vuint8m2_t v3,
    size_t vl);
void vsuxseg2ei8_v_u8m4 (uint8_t *base, vuint8m4_t bindex,
    vuint8m4_t v0, vuint8m4_t v1, size_t vl);
void vsuxseg2ei16_v_u8m1 (uint8_t *base, vuint16m2_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, size_t vl);
void vsuxseg3ei16_v_u8m1 (uint8_t *base, vuint16m2_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, size_t vl);
void vsuxseg4ei16_v_u8m1 (uint8_t *base, vuint16m2_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    size_t vl);
void vsuxseg5ei16_v_u8m1 (uint8_t *base, vuint16m2_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, size_t vl);
void vsuxseg6ei16_v_u8m1 (uint8_t *base, vuint16m2_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, size_t vl);
void vsuxseg7ei16_v_u8m1 (uint8_t *base, vuint16m2_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6, size_t vl);
void vsuxseg8ei16_v_u8m1 (uint8_t *base, vuint16m2_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6, vuint8m1_t v7,
    size_t vl);
void vsuxseg2ei16_v_u8m2 (uint8_t *base, vuint16m4_t bindex,
    vuint8m2_t v0, vuint8m2_t v1, size_t vl);
void vsuxseg3ei16_v_u8m2 (uint8_t *base, vuint16m4_t bindex,
    vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t v2, size_t vl);
void vsuxseg4ei16_v_u8m2 (uint8_t *base, vuint16m4_t bindex,
    vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t v2, vuint8m2_t v3,
    size_t vl);
void vsuxseg2ei16_v_u8m4 (uint8_t *base, vuint16m8_t bindex,
    vuint8m4_t v0, vuint8m4_t v1, size_t vl);
void vsuxseg2ei32_v_u8m1 (uint8_t *base, vuint32m4_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, size_t vl);
void vsuxseg3ei32_v_u8m1 (uint8_t *base, vuint32m4_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, size_t vl);
void vsuxseg4ei32_v_u8m1 (uint8_t *base, vuint32m4_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    size_t vl);
void vsuxseg5ei32_v_u8m1 (uint8_t *base, vuint32m4_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, size_t vl);
void vsuxseg6ei32_v_u8m1 (uint8_t *base, vuint32m4_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
```

```
                  vuint8m1_t v4, vuint8m1_t v5, size_t vl);
void vsuxseg7ei32_v_u8m1 (uint8_t *base, vuint32m4_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6, size_t vl);
void vsuxseg8ei32_v_u8m1 (uint8_t *base, vuint32m4_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6, vuint8m1_t v7,
    size_t vl);
void vsuxseg2ei32_v_u8m2 (uint8_t *base, vuint32m8_t bindex,
    vuint8m2_t v0, vuint8m2_t v1, size_t vl);
void vsuxseg3ei32_v_u8m2 (uint8_t *base, vuint32m8_t bindex,
    vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t v2, size_t vl);
void vsuxseg4ei32_v_u8m2 (uint8_t *base, vuint32m8_t bindex,
    vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t v2, vuint8m2_t v3,
    size_t vl);
void vsuxseg2ei64_v_u8m1 (uint8_t *base, vuint64m8_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, size_t vl);
void vsuxseg3ei64_v_u8m1 (uint8_t *base, vuint64m8_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, size_t vl);
void vsuxseg4ei64_v_u8m1 (uint8_t *base, vuint64m8_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    size_t vl);
void vsuxseg5ei64_v_u8m1 (uint8_t *base, vuint64m8_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, size_t vl);
void vsuxseg6ei64_v_u8m1 (uint8_t *base, vuint64m8_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, size_t vl);
void vsuxseg7ei64_v_u8m1 (uint8_t *base, vuint64m8_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6, size_t vl);
void vsuxseg8ei64_v_u8m1 (uint8_t *base, vuint64m8_t bindex,
    vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t v2, vuint8m1_t v3,
    vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t v6, vuint8m1_t v7,
    size_t vl);
void vsuxseg2ei8_v_u16m2 (uint16_t *base, vuint8m1_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, size_t vl);
void vsuxseg3ei8_v_u16m2 (uint16_t *base, vuint8m1_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, size_t vl);
void vsuxseg4ei8_v_u16m2 (uint16_t *base, vuint8m1_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, vuint16m2_t
    v3, size_t vl);
void vsuxseg2ei8_v_u16m4 (uint16_t *base, vuint8m2_t bindex,
    vuint16m4_t v0, vuint16m4_t v1, size_t vl);
void vsuxseg2ei16_v_u16m1 (uint16_t *base, vuint16m1_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, size_t vl);
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377

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void vsuxseg3ei16_v_u16m1 (uint16_t *base, vuint16m1_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, size_t vl);
void vsuxseg4ei16_v_u16m1 (uint16_t *base, vuint16m1_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, size_t vl);
void vsuxseg5ei16_v_u16m1 (uint16_t *base, vuint16m1_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, size_t vl);
void vsuxseg6ei16_v_u16m1 (uint16_t *base, vuint16m1_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, size_t vl);
void vsuxseg7ei16_v_u16m1 (uint16_t *base, vuint16m1_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, vuint16m1_t v6, size_t
    vl);
void vsuxseg8ei16_v_u16m1 (uint16_t *base, vuint16m1_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, vuint16m1_t v6,
    vuint16m1_t v7, size_t vl);
void vsuxseg2ei16_v_u16m2 (uint16_t *base, vuint16m2_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, size_t vl);
void vsuxseg3ei16_v_u16m2 (uint16_t *base, vuint16m2_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, size_t vl);
void vsuxseg4ei16_v_u16m2 (uint16_t *base, vuint16m2_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, vuint16m2_t
    v3, size_t vl);
void vsuxseg2ei16_v_u16m4 (uint16_t *base, vuint16m4_t bindex,
    vuint16m4_t v0, vuint16m4_t v1, size_t vl);
void vsuxseg2ei32_v_u16m1 (uint16_t *base, vuint32m2_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, size_t vl);
void vsuxseg3ei32_v_u16m1 (uint16_t *base, vuint32m2_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, size_t vl);
void vsuxseg4ei32_v_u16m1 (uint16_t *base, vuint32m2_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, size_t vl);
void vsuxseg5ei32_v_u16m1 (uint16_t *base, vuint32m2_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, size_t vl);
void vsuxseg6ei32_v_u16m1 (uint16_t *base, vuint32m2_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, size_t vl);
void vsuxseg7ei32_v_u16m1 (uint16_t *base, vuint32m2_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, vuint16m1_t v6, size_t
    vl);
```

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void vsuxseg8ei32_v_u16m1 (uint16_t *base, vuint32m2_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, vuint16m1_t v6,
    vuint16m1_t v7, size_t vl);
void vsuxseg2ei32_v_u16m2 (uint16_t *base, vuint32m4_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, size_t vl);
void vsuxseg3ei32_v_u16m2 (uint16_t *base, vuint32m4_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, size_t vl);
void vsuxseg4ei32_v_u16m2 (uint16_t *base, vuint32m4_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, vuint16m2_t
    v3, size_t vl);
void vsuxseg2ei32_v_u16m4 (uint16_t *base, vuint32m8_t bindex,
    vuint16m4_t v0, vuint16m4_t v1, size_t vl);
void vsuxseg2ei64_v_u16m1 (uint16_t *base, vuint64m4_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, size_t vl);
void vsuxseg3ei64_v_u16m1 (uint16_t *base, vuint64m4_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, size_t vl);
void vsuxseg4ei64_v_u16m1 (uint16_t *base, vuint64m4_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, size_t vl);
void vsuxseg5ei64_v_u16m1 (uint16_t *base, vuint64m4_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, size_t vl);
void vsuxseg6ei64_v_u16m1 (uint16_t *base, vuint64m4_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, size_t vl);
void vsuxseg7ei64_v_u16m1 (uint16_t *base, vuint64m4_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, vuint16m1_t v6, size_t
    vl);
void vsuxseg8ei64_v_u16m1 (uint16_t *base, vuint64m4_t bindex,
    vuint16m1_t v0, vuint16m1_t v1, vuint16m1_t v2, vuint16m1_t
    v3, vuint16m1_t v4, vuint16m1_t v5, vuint16m1_t v6,
    vuint16m1_t v7, size_t vl);
void vsuxseg2ei64_v_u16m2 (uint16_t *base, vuint64m8_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, size_t vl);
void vsuxseg3ei64_v_u16m2 (uint16_t *base, vuint64m8_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, size_t vl);
void vsuxseg4ei64_v_u16m2 (uint16_t *base, vuint64m8_t bindex,
    vuint16m2_t v0, vuint16m2_t v1, vuint16m2_t v2, vuint16m2_t
    v3, size_t vl);
void vsuxseg2ei8_v_u32m4 (uint32_t *base, vuint8m1_t bindex,
    vuint32m4_t v0, vuint32m4_t v1, size_t vl);
void vsuxseg2ei16_v_u32m2 (uint32_t *base, vuint16m1_t bindex,
    vuint32m2_t v0, vuint32m2_t v1, size_t vl);
```

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void vsuxseg3ei16_v_u32m2 (uint32_t *base, vuint16m1_t bindex,
    vuint32m2_t v0, vuint32m2_t v1, vuint32m2_t v2, size_t vl);
void vsuxseg4ei16_v_u32m2 (uint32_t *base, vuint16m1_t bindex,
    vuint32m2_t v0, vuint32m2_t v1, vuint32m2_t v2, vuint32m2_t
    v3, size_t vl);
void vsuxseg2ei16_v_u32m4 (uint32_t *base, vuint16m2_t bindex,
    vuint32m4_t v0, vuint32m4_t v1, size_t vl);
void vsuxseg2ei32_v_u32m1 (uint32_t *base, vuint32m1_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, size_t vl);
void vsuxseg3ei32_v_u32m1 (uint32_t *base, vuint32m1_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, size_t vl);
void vsuxseg4ei32_v_u32m1 (uint32_t *base, vuint32m1_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, size_t vl);
void vsuxseg5ei32_v_u32m1 (uint32_t *base, vuint32m1_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, size_t vl);
void vsuxseg6ei32_v_u32m1 (uint32_t *base, vuint32m1_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, vuint32m1_t v5, size_t vl);
void vsuxseg7ei32_v_u32m1 (uint32_t *base, vuint32m1_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, vuint32m1_t v5, vuint32m1_t v6, size_t
    vl);
void vsuxseg8ei32_v_u32m1 (uint32_t *base, vuint32m1_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, vuint32m1_t v5, vuint32m1_t v6,
    vuint32m1_t v7, size_t vl);
void vsuxseg2ei32_v_u32m2 (uint32_t *base, vuint32m2_t bindex,
    vuint32m2_t v0, vuint32m2_t v1, size_t vl);
void vsuxseg3ei32_v_u32m2 (uint32_t *base, vuint32m2_t bindex,
    vuint32m2_t v0, vuint32m2_t v1, vuint32m2_t v2, size_t vl);
void vsuxseg4ei32_v_u32m2 (uint32_t *base, vuint32m2_t bindex,
    vuint32m2_t v0, vuint32m2_t v1, vuint32m2_t v2, vuint32m2_t
    v3, size_t vl);
void vsuxseg2ei32_v_u32m4 (uint32_t *base, vuint32m4_t bindex,
    vuint32m4_t v0, vuint32m4_t v1, size_t vl);
void vsuxseg2ei64_v_u32m1 (uint32_t *base, vuint64m2_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, size_t vl);
void vsuxseg3ei64_v_u32m1 (uint32_t *base, vuint64m2_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, size_t vl);
void vsuxseg4ei64_v_u32m1 (uint32_t *base, vuint64m2_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, size_t vl);
void vsuxseg5ei64_v_u32m1 (uint32_t *base, vuint64m2_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
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    v3, vuint32m1_t v4, size_t vl);
void vsuxseg6ei64_v_u32m1 (uint32_t *base, vuint64m2_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, vuint32m1_t v5, size_t vl);
void vsuxseg7ei64_v_u32m1 (uint32_t *base, vuint64m2_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, vuint32m1_t v5, vuint32m1_t v6, size_t
    vl);
void vsuxseg8ei64_v_u32m1 (uint32_t *base, vuint64m2_t bindex,
    vuint32m1_t v0, vuint32m1_t v1, vuint32m1_t v2, vuint32m1_t
    v3, vuint32m1_t v4, vuint32m1_t v5, vuint32m1_t v6,
    vuint32m1_t v7, size_t vl);
void vsuxseg2ei64_v_u32m2 (uint32_t *base, vuint64m4_t bindex,
    vuint32m2_t v0, vuint32m2_t v1, size_t vl);
void vsuxseg3ei64_v_u32m2 (uint32_t *base, vuint64m4_t bindex,
    vuint32m2_t v0, vuint32m2_t v1, vuint32m2_t v2, size_t vl);
void vsuxseg4ei64_v_u32m2 (uint32_t *base, vuint64m4_t bindex,
    vuint32m2_t v0, vuint32m2_t v1, vuint32m2_t v2, vuint32m2_t
    v3, size_t vl);
void vsuxseg2ei64_v_u32m4 (uint32_t *base, vuint64m8_t bindex,
    vuint32m4_t v0, vuint32m4_t v1, size_t vl);
void vsuxseg2ei16_v_u64m4 (uint64_t *base, vuint16m1_t bindex,
    vuint64m4_t v0, vuint64m4_t v1, size_t vl);
void vsuxseg2ei32_v_u64m2 (uint64_t *base, vuint32m1_t bindex,
    vuint64m2_t v0, vuint64m2_t v1, size_t vl);
void vsuxseg3ei32_v_u64m2 (uint64_t *base, vuint32m1_t bindex,
    vuint64m2_t v0, vuint64m2_t v1, vuint64m2_t v2, size_t vl);
void vsuxseg4ei32_v_u64m2 (uint64_t *base, vuint32m1_t bindex,
    vuint64m2_t v0, vuint64m2_t v1, vuint64m2_t v2, vuint64m2_t
    v3, size_t vl);
void vsuxseg2ei32_v_u64m4 (uint64_t *base, vuint32m2_t bindex,
    vuint64m4_t v0, vuint64m4_t v1, size_t vl);
void vsuxseg2ei64_v_u64m1 (uint64_t *base, vuint64m1_t bindex,
    vuint64m1_t v0, vuint64m1_t v1, size_t vl);
void vsuxseg3ei64_v_u64m1 (uint64_t *base, vuint64m1_t bindex,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, size_t vl);
void vsuxseg4ei64_v_u64m1 (uint64_t *base, vuint64m1_t bindex,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, size_t vl);
void vsuxseg5ei64_v_u64m1 (uint64_t *base, vuint64m1_t bindex,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, vuint64m1_t v4, size_t vl);
void vsuxseg6ei64_v_u64m1 (uint64_t *base, vuint64m1_t bindex,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, vuint64m1_t v4, vuint64m1_t v5, size_t vl);
```

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void vsuxseg7ei64_v_u64m1 (uint64_t *base, vuint64m1_t bindex,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, vuint64m1_t v4, vuint64m1_t v5, vuint64m1_t v6, size_t
    vl);
void vsuxseg8ei64_v_u64m1 (uint64_t *base, vuint64m1_t bindex,
    vuint64m1_t v0, vuint64m1_t v1, vuint64m1_t v2, vuint64m1_t
    v3, vuint64m1_t v4, vuint64m1_t v5, vuint64m1_t v6,
    vuint64m1_t v7, size_t vl);
void vsuxseg2ei64_v_u64m2 (uint64_t *base, vuint64m2_t bindex,
    vuint64m2_t v0, vuint64m2_t v1, size_t vl);
void vsuxseg3ei64_v_u64m2 (uint64_t *base, vuint64m2_t bindex,
    vuint64m2_t v0, vuint64m2_t v1, vuint64m2_t v2, size_t vl);
void vsuxseg4ei64_v_u64m2 (uint64_t *base, vuint64m2_t bindex,
    vuint64m2_t v0, vuint64m2_t v1, vuint64m2_t v2, vuint64m2_t
    v3, size_t vl);
void vsuxseg2ei64_v_u64m4 (uint64_t *base, vuint64m4_t bindex,
    vuint64m4_t v0, vuint64m4_t v1, size_t vl);
void vsuxseg2ei8_v_f16m2 (float16_t *base, vuint8m1_t bindex,
    vfloat16m2_t v0, vfloat16m2_t v1, size_t vl);
void vsuxseg3ei8_v_f16m2 (float16_t *base, vuint8m1_t bindex,
    vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2, size_t
    vl);
void vsuxseg4ei8_v_f16m2 (float16_t *base, vuint8m1_t bindex,
    vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2,
    vfloat16m2_t v3, size_t vl);
void vsuxseg2ei8_v_f16m4 (float16_t *base, vuint8m2_t bindex,
    vfloat16m4_t v0, vfloat16m4_t v1, size_t vl);
void vsuxseg2ei16_v_f16m1 (float16_t *base, vuint16m1_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, size_t vl);
void vsuxseg3ei16_v_f16m1 (float16_t *base, vuint16m1_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2, size_t
    vl);
void vsuxseg4ei16_v_f16m1 (float16_t *base, vuint16m1_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, size_t vl);
void vsuxseg5ei16_v_f16m1 (float16_t *base, vuint16m1_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, size_t vl);
void vsuxseg6ei16_v_f16m1 (float16_t *base, vuint16m1_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5, size_t
    vl);
void vsuxseg7ei16_v_f16m1 (float16_t *base, vuint16m1_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5,
    vfloat16m1_t v6, size_t vl);
```

```
void vsuxseg8ei16_v_f16m1 (float16_t *base, vuint16m1_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5,
    vfloat16m1_t v6, vfloat16m1_t v7, size_t vl);
void vsuxseg2ei16_v_f16m2 (float16_t *base, vuint16m2_t bindex,
    vfloat16m2_t v0, vfloat16m2_t v1, size_t vl);
void vsuxseg3ei16_v_f16m2 (float16_t *base, vuint16m2_t bindex,
    vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2, size_t
    vl);
void vsuxseg4ei16_v_f16m2 (float16_t *base, vuint16m2_t bindex,
    vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2,
    vfloat16m2_t v3, size_t vl);
void vsuxseg2ei16_v_f16m4 (float16_t *base, vuint16m4_t bindex,
    vfloat16m4_t v0, vfloat16m4_t v1, size_t vl);
void vsuxseg2ei32_v_f16m1 (float16_t *base, vuint32m2_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, size_t vl);
void vsuxseg3ei32_v_f16m1 (float16_t *base, vuint32m2_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2, size_t
    vl);
void vsuxseg4ei32_v_f16m1 (float16_t *base, vuint32m2_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, size_t vl);
void vsuxseg5ei32_v_f16m1 (float16_t *base, vuint32m2_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, size_t vl);
void vsuxseg6ei32_v_f16m1 (float16_t *base, vuint32m2_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5, size_t
    vl);
void vsuxseg7ei32_v_f16m1 (float16_t *base, vuint32m2_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5,
    vfloat16m1_t v6, size_t vl);
void vsuxseg8ei32_v_f16m1 (float16_t *base, vuint32m2_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5,
    vfloat16m1_t v6, vfloat16m1_t v7, size_t vl);
void vsuxseg2ei32_v_f16m2 (float16_t *base, vuint32m4_t bindex,
    vfloat16m2_t v0, vfloat16m2_t v1, size_t vl);
void vsuxseg3ei32_v_f16m2 (float16_t *base, vuint32m4_t bindex,
    vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2, size_t
    vl);
void vsuxseg4ei32_v_f16m2 (float16_t *base, vuint32m4_t bindex,
    vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2,
    vfloat16m2_t v3, size_t vl);
```

```
void vsuxseg2ei32_v_f16m4 (float16_t *base, vuint32m8_t bindex,
    vfloat16m4_t v0, vfloat16m4_t v1, size_t vl);
void vsuxseg2ei64_v_f16m1 (float16_t *base, vuint64m4_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, size_t vl);
void vsuxseg3ei64_v_f16m1 (float16_t *base, vuint64m4_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2, size_t
    vl);
void vsuxseg4ei64_v_f16m1 (float16_t *base, vuint64m4_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, size_t vl);
void vsuxseg5ei64_v_f16m1 (float16_t *base, vuint64m4_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, size_t vl);
void vsuxseg6ei64_v_f16m1 (float16_t *base, vuint64m4_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5, size_t
    vl);
void vsuxseg7ei64_v_f16m1 (float16_t *base, vuint64m4_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5,
    vfloat16m1_t v6, size_t vl);
void vsuxseg8ei64_v_f16m1 (float16_t *base, vuint64m4_t bindex,
    vfloat16m1_t v0, vfloat16m1_t v1, vfloat16m1_t v2,
    vfloat16m1_t v3, vfloat16m1_t v4, vfloat16m1_t v5,
    vfloat16m1_t v6, vfloat16m1_t v7, size_t vl);
void vsuxseg2ei64_v_f16m2 (float16_t *base, vuint64m8_t bindex,
    vfloat16m2_t v0, vfloat16m2_t v1, size_t vl);
void vsuxseg3ei64_v_f16m2 (float16_t *base, vuint64m8_t bindex,
    vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2, size_t
    vl);
void vsuxseg4ei64_v_f16m2 (float16_t *base, vuint64m8_t bindex,
    vfloat16m2_t v0, vfloat16m2_t v1, vfloat16m2_t v2,
    vfloat16m2_t v3, size_t vl);
void vsuxseg2ei8_v_f32m4 (float32_t *base, vuint8m1_t bindex,
    vfloat32m4_t v0, vfloat32m4_t v1, size_t vl);
void vsuxseg2ei16_v_f32m2 (float32_t *base, vuint16m1_t bindex,
    vfloat32m2_t v0, vfloat32m2_t v1, size_t vl);
void vsuxseg3ei16_v_f32m2 (float32_t *base, vuint16m1_t bindex,
    vfloat32m2_t v0, vfloat32m2_t v1, vfloat32m2_t v2, size_t
    vl);
void vsuxseg4ei16_v_f32m2 (float32_t *base, vuint16m1_t bindex,
    vfloat32m2_t v0, vfloat32m2_t v1, vfloat32m2_t v2,
    vfloat32m2_t v3, size_t vl);
void vsuxseg2ei16_v_f32m4 (float32_t *base, vuint16m2_t bindex,
    vfloat32m4_t v0, vfloat32m4_t v1, size_t vl);
```

```c
void vsuxseg2ei32_v_f32m1 (float32_t *base, vuint32m1_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, size_t vl);
void vsuxseg3ei32_v_f32m1 (float32_t *base, vuint32m1_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2, size_t
    vl);
void vsuxseg4ei32_v_f32m1 (float32_t *base, vuint32m1_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, size_t vl);
void vsuxseg5ei32_v_f32m1 (float32_t *base, vuint32m1_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, size_t vl);
void vsuxseg6ei32_v_f32m1 (float32_t *base, vuint32m1_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, vfloat32m1_t v5, size_t
    vl);
void vsuxseg7ei32_v_f32m1 (float32_t *base, vuint32m1_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, vfloat32m1_t v5,
    vfloat32m1_t v6, size_t vl);
void vsuxseg8ei32_v_f32m1 (float32_t *base, vuint32m1_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, vfloat32m1_t v5,
    vfloat32m1_t v6, vfloat32m1_t v7, size_t vl);
void vsuxseg2ei32_v_f32m2 (float32_t *base, vuint32m2_t bindex,
    vfloat32m2_t v0, vfloat32m2_t v1, size_t vl);
void vsuxseg3ei32_v_f32m2 (float32_t *base, vuint32m2_t bindex,
    vfloat32m2_t v0, vfloat32m2_t v1, vfloat32m2_t v2, size_t
    vl);
void vsuxseg4ei32_v_f32m2 (float32_t *base, vuint32m2_t bindex,
    vfloat32m2_t v0, vfloat32m2_t v1, vfloat32m2_t v2,
    vfloat32m2_t v3, size_t vl);
void vsuxseg2ei32_v_f32m4 (float32_t *base, vuint32m4_t bindex,
    vfloat32m4_t v0, vfloat32m4_t v1, size_t vl);
void vsuxseg2ei64_v_f32m1 (float32_t *base, vuint64m2_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, size_t vl);
void vsuxseg3ei64_v_f32m1 (float32_t *base, vuint64m2_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2, size_t
    vl);
void vsuxseg4ei64_v_f32m1 (float32_t *base, vuint64m2_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, size_t vl);
void vsuxseg5ei64_v_f32m1 (float32_t *base, vuint64m2_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
    vfloat32m1_t v3, vfloat32m1_t v4, size_t vl);
void vsuxseg6ei64_v_f32m1 (float32_t *base, vuint64m2_t bindex,
    vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
```

```
            vfloat32m1_t v3, vfloat32m1_t v4, vfloat32m1_t v5, size_t
            vl);
void vsuxseg7ei64_v_f32m1 (float32_t *base, vuint64m2_t bindex,
            vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
            vfloat32m1_t v3, vfloat32m1_t v4, vfloat32m1_t v5,
            vfloat32m1_t v6, size_t vl);
void vsuxseg8ei64_v_f32m1 (float32_t *base, vuint64m2_t bindex,
            vfloat32m1_t v0, vfloat32m1_t v1, vfloat32m1_t v2,
            vfloat32m1_t v3, vfloat32m1_t v4, vfloat32m1_t v5,
            vfloat32m1_t v6, vfloat32m1_t v7, size_t vl);
void vsuxseg2ei64_v_f32m2 (float32_t *base, vuint64m4_t bindex,
            vfloat32m2_t v0, vfloat32m2_t v1, size_t vl);
void vsuxseg3ei64_v_f32m2 (float32_t *base, vuint64m4_t bindex,
            vfloat32m2_t v0, vfloat32m2_t v1, vfloat32m2_t v2, size_t
            vl);
void vsuxseg4ei64_v_f32m2 (float32_t *base, vuint64m4_t bindex,
            vfloat32m2_t v0, vfloat32m2_t v1, vfloat32m2_t v2,
            vfloat32m2_t v3, size_t vl);
void vsuxseg2ei64_v_f32m4 (float32_t *base, vuint64m8_t bindex,
            vfloat32m4_t v0, vfloat32m4_t v1, size_t vl);
void vsuxseg2ei16_v_f64m4 (float64_t *base, vuint16m1_t bindex,
            vfloat64m4_t v0, vfloat64m4_t v1, size_t vl);
void vsuxseg2ei32_v_f64m2 (float64_t *base, vuint32m1_t bindex,
            vfloat64m2_t v0, vfloat64m2_t v1, size_t vl);
void vsuxseg3ei32_v_f64m2 (float64_t *base, vuint32m1_t bindex,
            vfloat64m2_t v0, vfloat64m2_t v1, vfloat64m2_t v2, size_t
            vl);
void vsuxseg4ei32_v_f64m2 (float64_t *base, vuint32m1_t bindex,
            vfloat64m2_t v0, vfloat64m2_t v1, vfloat64m2_t v2,
            vfloat64m2_t v3, size_t vl);
void vsuxseg2ei32_v_f64m4 (float64_t *base, vuint32m2_t bindex,
            vfloat64m4_t v0, vfloat64m4_t v1, size_t vl);
void vsuxseg2ei64_v_f64m1 (float64_t *base, vuint64m1_t bindex,
            vfloat64m1_t v0, vfloat64m1_t v1, size_t vl);
void vsuxseg3ei64_v_f64m1 (float64_t *base, vuint64m1_t bindex,
            vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2, size_t
            vl);
void vsuxseg4ei64_v_f64m1 (float64_t *base, vuint64m1_t bindex,
            vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
            vfloat64m1_t v3, size_t vl);
void vsuxseg5ei64_v_f64m1 (float64_t *base, vuint64m1_t bindex,
            vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
            vfloat64m1_t v3, vfloat64m1_t v4, size_t vl);
void vsuxseg6ei64_v_f64m1 (float64_t *base, vuint64m1_t bindex,
            vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
            vfloat64m1_t v3, vfloat64m1_t v4, vfloat64m1_t v5, size_t
```

```
    vl);
void vsuxseg7ei64_v_f64m1 (float64_t *base, vuint64m1_t bindex,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
    vfloat64m1_t v3, vfloat64m1_t v4, vfloat64m1_t v5,
    vfloat64m1_t v6, size_t vl);
void vsuxseg8ei64_v_f64m1 (float64_t *base, vuint64m1_t bindex,
    vfloat64m1_t v0, vfloat64m1_t v1, vfloat64m1_t v2,
    vfloat64m1_t v3, vfloat64m1_t v4, vfloat64m1_t v5,
    vfloat64m1_t v6, vfloat64m1_t v7, size_t vl);
void vsuxseg2ei64_v_f64m2 (float64_t *base, vuint64m2_t bindex,
    vfloat64m2_t v0, vfloat64m2_t v1, size_t vl);
void vsuxseg3ei64_v_f64m2 (float64_t *base, vuint64m2_t bindex,
    vfloat64m2_t v0, vfloat64m2_t v1, vfloat64m2_t v2, size_t
    vl);
void vsuxseg4ei64_v_f64m2 (float64_t *base, vuint64m2_t bindex,
    vfloat64m2_t v0, vfloat64m2_t v1, vfloat64m2_t v2,
    vfloat64m2_t v3, size_t vl);
void vsuxseg2ei64_v_f64m4 (float64_t *base, vuint64m4_t bindex,
    vfloat64m4_t v0, vfloat64m4_t v1, size_t vl);
// masked functions
void vsoxseg2ei8_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint8m1_t bindex, vint8m1_t v0, vint8m1_t v1, size_t vl);
void vsoxseg3ei8_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint8m1_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t v2,
    size_t vl);
void vsoxseg4ei8_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint8m1_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t v2,
    vint8m1_t v3, size_t vl);
void vsoxseg5ei8_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint8m1_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t v2,
    vint8m1_t v3, vint8m1_t v4, size_t vl);
void vsoxseg6ei8_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint8m1_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t v2,
    vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, size_t vl);
void vsoxseg7ei8_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint8m1_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t v2,
    vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, vint8m1_t v6,
    size_t vl);
void vsoxseg8ei8_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint8m1_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t v2,
    vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, vint8m1_t v6,
    vint8m1_t v7, size_t vl);
void vsoxseg2ei8_v_i8m2_m (vbool4_t mask, int8_t *base,
    vuint8m2_t bindex, vint8m2_t v0, vint8m2_t v1, size_t vl);
void vsoxseg3ei8_v_i8m2_m (vbool4_t mask, int8_t *base,
    vuint8m2_t bindex, vint8m2_t v0, vint8m2_t v1, vint8m2_t v2,
```

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    size_t vl);
void vsoxseg4ei8_v_i8m2_m (vbool4_t mask, int8_t *base,
    vuint8m2_t bindex, vint8m2_t v0, vint8m2_t v1, vint8m2_t v2,
    vint8m2_t v3, size_t vl);
void vsoxseg2ei8_v_i8m4_m (vbool2_t mask, int8_t *base,
    vuint8m4_t bindex, vint8m4_t v0, vint8m4_t v1, size_t vl);
void vsoxseg2ei16_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint16m2_t bindex, vint8m1_t v0, vint8m1_t v1, size_t vl);
void vsoxseg3ei16_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint16m2_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, size_t vl);
void vsoxseg4ei16_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint16m2_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, size_t vl);
void vsoxseg5ei16_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint16m2_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, size_t vl);
void vsoxseg6ei16_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint16m2_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, size_t vl);
void vsoxseg7ei16_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint16m2_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, vint8m1_t v6,
    size_t vl);
void vsoxseg8ei16_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint16m2_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, vint8m1_t v6,
    vint8m1_t v7, size_t vl);
void vsoxseg2ei16_v_i8m2_m (vbool4_t mask, int8_t *base,
    vuint16m4_t bindex, vint8m2_t v0, vint8m2_t v1, size_t vl);
void vsoxseg3ei16_v_i8m2_m (vbool4_t mask, int8_t *base,
    vuint16m4_t bindex, vint8m2_t v0, vint8m2_t v1, vint8m2_t
    v2, size_t vl);
void vsoxseg4ei16_v_i8m2_m (vbool4_t mask, int8_t *base,
    vuint16m4_t bindex, vint8m2_t v0, vint8m2_t v1, vint8m2_t
    v2, vint8m2_t v3, size_t vl);
void vsoxseg2ei16_v_i8m4_m (vbool2_t mask, int8_t *base,
    vuint16m8_t bindex, vint8m4_t v0, vint8m4_t v1, size_t vl);
void vsoxseg2ei32_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint32m4_t bindex, vint8m1_t v0, vint8m1_t v1, size_t vl);
void vsoxseg3ei32_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint32m4_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, size_t vl);
void vsoxseg4ei32_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint32m4_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, size_t vl);
```

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void vsoxseg5ei32_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint32m4_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, size_t vl);
void vsoxseg6ei32_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint32m4_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, size_t vl);
void vsoxseg7ei32_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint32m4_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, vint8m1_t v6,
    size_t vl);
void vsoxseg8ei32_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint32m4_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, vint8m1_t v6,
    vint8m1_t v7, size_t vl);
void vsoxseg2ei32_v_i8m2_m (vbool4_t mask, int8_t *base,
    vuint32m8_t bindex, vint8m2_t v0, vint8m2_t v1, size_t vl);
void vsoxseg3ei32_v_i8m2_m (vbool4_t mask, int8_t *base,
    vuint32m8_t bindex, vint8m2_t v0, vint8m2_t v1, vint8m2_t
    v2, size_t vl);
void vsoxseg4ei32_v_i8m2_m (vbool4_t mask, int8_t *base,
    vuint32m8_t bindex, vint8m2_t v0, vint8m2_t v1, vint8m2_t
    v2, vint8m2_t v3, size_t vl);
void vsoxseg2ei64_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint64m8_t bindex, vint8m1_t v0, vint8m1_t v1, size_t vl);
void vsoxseg3ei64_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint64m8_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, size_t vl);
void vsoxseg4ei64_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint64m8_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, size_t vl);
void vsoxseg5ei64_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint64m8_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, size_t vl);
void vsoxseg6ei64_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint64m8_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, size_t vl);
void vsoxseg7ei64_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint64m8_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, vint8m1_t v6,
    size_t vl);
void vsoxseg8ei64_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint64m8_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, vint8m1_t v6,
    vint8m1_t v7, size_t vl);
void vsoxseg2ei8_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint8m1_t bindex, vint16m2_t v0, vint16m2_t v1, size_t vl);
```

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void vsoxseg3ei8_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint8m1_t bindex, vint16m2_t v0, vint16m2_t v1, vint16m2_t
    v2, size_t vl);
void vsoxseg4ei8_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint8m1_t bindex, vint16m2_t v0, vint16m2_t v1, vint16m2_t
    v2, vint16m2_t v3, size_t vl);
void vsoxseg2ei8_v_i16m4_m (vbool4_t mask, int16_t *base,
    vuint8m2_t bindex, vint16m4_t v0, vint16m4_t v1, size_t vl);
void vsoxseg2ei16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint16m1_t bindex, vint16m1_t v0, vint16m1_t v1, size_t vl);
void vsoxseg3ei16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint16m1_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, size_t vl);
void vsoxseg4ei16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint16m1_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, size_t vl);
void vsoxseg5ei16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint16m1_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, size_t vl);
void vsoxseg6ei16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint16m1_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, size_t vl);
void vsoxseg7ei16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint16m1_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, vint16m1_t
    v6, size_t vl);
void vsoxseg8ei16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint16m1_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, vint16m1_t
    v6, vint16m1_t v7, size_t vl);
void vsoxseg2ei16_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint16m2_t bindex, vint16m2_t v0, vint16m2_t v1, size_t vl);
void vsoxseg3ei16_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint16m2_t bindex, vint16m2_t v0, vint16m2_t v1, vint16m2_t
    v2, size_t vl);
void vsoxseg4ei16_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint16m2_t bindex, vint16m2_t v0, vint16m2_t v1, vint16m2_t
    v2, vint16m2_t v3, size_t vl);
void vsoxseg2ei16_v_i16m4_m (vbool4_t mask, int16_t *base,
    vuint16m4_t bindex, vint16m4_t v0, vint16m4_t v1, size_t vl);
void vsoxseg2ei32_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint32m2_t bindex, vint16m1_t v0, vint16m1_t v1, size_t vl);
void vsoxseg3ei32_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint32m2_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, size_t vl);
```

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void vsoxseg4ei32_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint32m2_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, size_t vl);
void vsoxseg5ei32_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint32m2_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, size_t vl);
void vsoxseg6ei32_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint32m2_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, size_t vl);
void vsoxseg7ei32_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint32m2_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, vint16m1_t
    v6, size_t vl);
void vsoxseg8ei32_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint32m2_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, vint16m1_t
    v6, vint16m1_t v7, size_t vl);
void vsoxseg2ei32_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint32m4_t bindex, vint16m2_t v0, vint16m2_t v1, size_t vl);
void vsoxseg3ei32_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint32m4_t bindex, vint16m2_t v0, vint16m2_t v1, vint16m2_t
    v2, size_t vl);
void vsoxseg4ei32_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint32m4_t bindex, vint16m2_t v0, vint16m2_t v1, vint16m2_t
    v2, vint16m2_t v3, size_t vl);
void vsoxseg2ei32_v_i16m4_m (vbool4_t mask, int16_t *base,
    vuint32m8_t bindex, vint16m4_t v0, vint16m4_t v1, size_t vl);
void vsoxseg2ei64_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint64m4_t bindex, vint16m1_t v0, vint16m1_t v1, size_t vl);
void vsoxseg3ei64_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint64m4_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, size_t vl);
void vsoxseg4ei64_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint64m4_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, size_t vl);
void vsoxseg5ei64_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint64m4_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, size_t vl);
void vsoxseg6ei64_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint64m4_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, size_t vl);
void vsoxseg7ei64_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint64m4_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, vint16m1_t
    v6, size_t vl);
```

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void vsoxseg8ei64_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint64m4_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, vint16m1_t
    v6, vint16m1_t v7, size_t vl);
void vsoxseg2ei64_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint64m8_t bindex, vint16m2_t v0, vint16m2_t v1, size_t vl);
void vsoxseg3ei64_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint64m8_t bindex, vint16m2_t v0, vint16m2_t v1, vint16m2_t
    v2, size_t vl);
void vsoxseg4ei64_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint64m8_t bindex, vint16m2_t v0, vint16m2_t v1, vint16m2_t
    v2, vint16m2_t v3, size_t vl);
void vsoxseg2ei8_v_i32m4_m (vbool8_t mask, int32_t *base,
    vuint8m1_t bindex, vint32m4_t v0, vint32m4_t v1, size_t vl);
void vsoxseg2ei16_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint16m1_t bindex, vint32m2_t v0, vint32m2_t v1, size_t vl);
void vsoxseg3ei16_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint16m1_t bindex, vint32m2_t v0, vint32m2_t v1, vint32m2_t
    v2, size_t vl);
void vsoxseg4ei16_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint16m1_t bindex, vint32m2_t v0, vint32m2_t v1, vint32m2_t
    v2, vint32m2_t v3, size_t vl);
void vsoxseg2ei16_v_i32m4_m (vbool8_t mask, int32_t *base,
    vuint16m2_t bindex, vint32m4_t v0, vint32m4_t v1, size_t vl);
void vsoxseg2ei32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint32m1_t bindex, vint32m1_t v0, vint32m1_t v1, size_t vl);
void vsoxseg3ei32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint32m1_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, size_t vl);
void vsoxseg4ei32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint32m1_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, size_t vl);
void vsoxseg5ei32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint32m1_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, vint32m1_t v4, size_t vl);
void vsoxseg6ei32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint32m1_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, vint32m1_t v4, vint32m1_t v5, size_t vl);
void vsoxseg7ei32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint32m1_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, vint32m1_t v4, vint32m1_t v5, vint32m1_t
    v6, size_t vl);
void vsoxseg8ei32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint32m1_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, vint32m1_t v4, vint32m1_t v5, vint32m1_t
    v6, vint32m1_t v7, size_t vl);
```

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void vsoxseg2ei32_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint32m2_t bindex, vint32m2_t v0, vint32m2_t v1, size_t vl);
void vsoxseg3ei32_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint32m2_t bindex, vint32m2_t v0, vint32m2_t v1, vint32m2_t
    v2, size_t vl);
void vsoxseg4ei32_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint32m2_t bindex, vint32m2_t v0, vint32m2_t v1, vint32m2_t
    v2, vint32m2_t v3, size_t vl);
void vsoxseg2ei32_v_i32m4_m (vbool8_t mask, int32_t *base,
    vuint32m4_t bindex, vint32m4_t v0, vint32m4_t v1, size_t vl);
void vsoxseg2ei64_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint64m2_t bindex, vint32m1_t v0, vint32m1_t v1, size_t vl);
void vsoxseg3ei64_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint64m2_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, size_t vl);
void vsoxseg4ei64_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint64m2_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, size_t vl);
void vsoxseg5ei64_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint64m2_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, vint32m1_t v4, size_t vl);
void vsoxseg6ei64_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint64m2_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, vint32m1_t v4, vint32m1_t v5, size_t vl);
void vsoxseg7ei64_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint64m2_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, vint32m1_t v4, vint32m1_t v5, vint32m1_t
    v6, size_t vl);
void vsoxseg8ei64_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint64m2_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, vint32m1_t v4, vint32m1_t v5, vint32m1_t
    v6, vint32m1_t v7, size_t vl);
void vsoxseg2ei64_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint64m4_t bindex, vint32m2_t v0, vint32m2_t v1, size_t vl);
void vsoxseg3ei64_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint64m4_t bindex, vint32m2_t v0, vint32m2_t v1, vint32m2_t
    v2, size_t vl);
void vsoxseg4ei64_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint64m4_t bindex, vint32m2_t v0, vint32m2_t v1, vint32m2_t
    v2, vint32m2_t v3, size_t vl);
void vsoxseg2ei64_v_i32m4_m (vbool8_t mask, int32_t *base,
    vuint64m8_t bindex, vint32m4_t v0, vint32m4_t v1, size_t vl);
void vsoxseg2ei16_v_i64m4_m (vbool16_t mask, int64_t *base,
    vuint16m1_t bindex, vint64m4_t v0, vint64m4_t v1, size_t vl);
void vsoxseg2ei32_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint32m1_t bindex, vint64m2_t v0, vint64m2_t v1, size_t vl);
```

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void vsoxseg3ei32_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint32m1_t bindex, vint64m2_t v0, vint64m2_t v1, vint64m2_t
    v2, size_t vl);
void vsoxseg4ei32_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint32m1_t bindex, vint64m2_t v0, vint64m2_t v1, vint64m2_t
    v2, vint64m2_t v3, size_t vl);
void vsoxseg2ei32_v_i64m4_m (vbool16_t mask, int64_t *base,
    vuint32m2_t bindex, vint64m4_t v0, vint64m4_t v1, size_t vl);
void vsoxseg2ei64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint64m1_t bindex, vint64m1_t v0, vint64m1_t v1, size_t vl);
void vsoxseg3ei64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint64m1_t bindex, vint64m1_t v0, vint64m1_t v1, vint64m1_t
    v2, size_t vl);
void vsoxseg4ei64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint64m1_t bindex, vint64m1_t v0, vint64m1_t v1, vint64m1_t
    v2, vint64m1_t v3, size_t vl);
void vsoxseg5ei64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint64m1_t bindex, vint64m1_t v0, vint64m1_t v1, vint64m1_t
    v2, vint64m1_t v3, vint64m1_t v4, size_t vl);
void vsoxseg6ei64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint64m1_t bindex, vint64m1_t v0, vint64m1_t v1, vint64m1_t
    v2, vint64m1_t v3, vint64m1_t v4, vint64m1_t v5, size_t vl);
void vsoxseg7ei64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint64m1_t bindex, vint64m1_t v0, vint64m1_t v1, vint64m1_t
    v2, vint64m1_t v3, vint64m1_t v4, vint64m1_t v5, vint64m1_t
    v6, size_t vl);
void vsoxseg8ei64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint64m1_t bindex, vint64m1_t v0, vint64m1_t v1, vint64m1_t
    v2, vint64m1_t v3, vint64m1_t v4, vint64m1_t v5, vint64m1_t
    v6, vint64m1_t v7, size_t vl);
void vsoxseg2ei64_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint64m2_t bindex, vint64m2_t v0, vint64m2_t v1, size_t vl);
void vsoxseg3ei64_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint64m2_t bindex, vint64m2_t v0, vint64m2_t v1, vint64m2_t
    v2, size_t vl);
void vsoxseg4ei64_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint64m2_t bindex, vint64m2_t v0, vint64m2_t v1, vint64m2_t
    v2, vint64m2_t v3, size_t vl);
void vsoxseg2ei64_v_i64m4_m (vbool16_t mask, int64_t *base,
    vuint64m4_t bindex, vint64m4_t v0, vint64m4_t v1, size_t vl);
void vsoxseg2ei8_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint8m1_t bindex, vuint8m1_t v0, vuint8m1_t v1, size_t vl);
void vsoxseg3ei8_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint8m1_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, size_t vl);
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void vsoxseg4ei8_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint8m1_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, size_t vl);
void vsoxseg5ei8_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint8m1_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, size_t vl);
void vsoxseg6ei8_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint8m1_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, size_t vl);
void vsoxseg7ei8_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint8m1_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t
    v6, size_t vl);
void vsoxseg8ei8_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint8m1_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t
    v6, vuint8m1_t v7, size_t vl);
void vsoxseg2ei8_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint8m2_t bindex, vuint8m2_t v0, vuint8m2_t v1, size_t vl);
void vsoxseg3ei8_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint8m2_t bindex, vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t
    v2, size_t vl);
void vsoxseg4ei8_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint8m2_t bindex, vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t
    v2, vuint8m2_t v3, size_t vl);
void vsoxseg2ei8_v_u8m4_m (vbool2_t mask, uint8_t *base,
    vuint8m4_t bindex, vuint8m4_t v0, vuint8m4_t v1, size_t vl);
void vsoxseg2ei16_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint16m2_t bindex, vuint8m1_t v0, vuint8m1_t v1, size_t vl);
void vsoxseg3ei16_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint16m2_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, size_t vl);
void vsoxseg4ei16_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint16m2_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, size_t vl);
void vsoxseg5ei16_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint16m2_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, size_t vl);
void vsoxseg6ei16_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint16m2_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, size_t vl);
void vsoxseg7ei16_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint16m2_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t
    v6, size_t vl);
```

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void vsoxseg8ei16_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint16m2_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t
    v6, vuint8m1_t v7, size_t vl);
void vsoxseg2ei16_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint16m4_t bindex, vuint8m2_t v0, vuint8m2_t v1, size_t vl);
void vsoxseg3ei16_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint16m4_t bindex, vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t
    v2, size_t vl);
void vsoxseg4ei16_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint16m4_t bindex, vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t
    v2, vuint8m2_t v3, size_t vl);
void vsoxseg2ei16_v_u8m4_m (vbool2_t mask, uint8_t *base,
    vuint16m8_t bindex, vuint8m4_t v0, vuint8m4_t v1, size_t vl);
void vsoxseg2ei32_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint32m4_t bindex, vuint8m1_t v0, vuint8m1_t v1, size_t vl);
void vsoxseg3ei32_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint32m4_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, size_t vl);
void vsoxseg4ei32_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint32m4_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, size_t vl);
void vsoxseg5ei32_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint32m4_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, size_t vl);
void vsoxseg6ei32_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint32m4_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, size_t vl);
void vsoxseg7ei32_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint32m4_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t
    v6, size_t vl);
void vsoxseg8ei32_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint32m4_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t
    v6, vuint8m1_t v7, size_t vl);
void vsoxseg2ei32_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint32m8_t bindex, vuint8m2_t v0, vuint8m2_t v1, size_t vl);
void vsoxseg3ei32_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint32m8_t bindex, vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t
    v2, size_t vl);
void vsoxseg4ei32_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint32m8_t bindex, vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t
    v2, vuint8m2_t v3, size_t vl);
void vsoxseg2ei64_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint64m8_t bindex, vuint8m1_t v0, vuint8m1_t v1, size_t vl);
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void vsoxseg3ei64_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint64m8_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, size_t vl);
void vsoxseg4ei64_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint64m8_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, size_t vl);
void vsoxseg5ei64_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint64m8_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, size_t vl);
void vsoxseg6ei64_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint64m8_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, size_t vl);
void vsoxseg7ei64_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint64m8_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t
    v6, size_t vl);
void vsoxseg8ei64_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint64m8_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t
    v6, vuint8m1_t v7, size_t vl);
void vsoxseg2ei8_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint8m1_t bindex, vuint16m2_t v0, vuint16m2_t v1, size_t
    vl);
void vsoxseg3ei8_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint8m1_t bindex, vuint16m2_t v0, vuint16m2_t v1,
    vuint16m2_t v2, size_t vl);
void vsoxseg4ei8_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint8m1_t bindex, vuint16m2_t v0, vuint16m2_t v1,
    vuint16m2_t v2, vuint16m2_t v3, size_t vl);
void vsoxseg2ei8_v_u16m4_m (vbool4_t mask, uint16_t *base,
    vuint8m2_t bindex, vuint16m4_t v0, vuint16m4_t v1, size_t
    vl);
void vsoxseg2ei16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t bindex, vuint16m1_t v0, vuint16m1_t v1, size_t
    vl);
void vsoxseg3ei16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, size_t vl);
void vsoxseg4ei16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, size_t vl);
void vsoxseg5ei16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, size_t vl);
void vsoxseg6ei16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t bindex, vuint16m1_t v0, vuint16m1_t v1,
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                        vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
    v5, size_t vl);
void vsoxseg7ei16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
    v5, vuint16m1_t v6, size_t vl);
void vsoxseg8ei16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
    v5, vuint16m1_t v6, vuint16m1_t v7, size_t vl);
void vsoxseg2ei16_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint16m2_t bindex, vuint16m2_t v0, vuint16m2_t v1, size_t
    vl);
void vsoxseg3ei16_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint16m2_t bindex, vuint16m2_t v0, vuint16m2_t v1,
    vuint16m2_t v2, size_t vl);
void vsoxseg4ei16_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint16m2_t bindex, vuint16m2_t v0, vuint16m2_t v1,
    vuint16m2_t v2, vuint16m2_t v3, size_t vl);
void vsoxseg2ei16_v_u16m4_m (vbool4_t mask, uint16_t *base,
    vuint16m4_t bindex, vuint16m4_t v0, vuint16m4_t v1, size_t
    vl);
void vsoxseg2ei32_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint32m2_t bindex, vuint16m1_t v0, vuint16m1_t v1, size_t
    vl);
void vsoxseg3ei32_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint32m2_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, size_t vl);
void vsoxseg4ei32_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint32m2_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, size_t vl);
void vsoxseg5ei32_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint32m2_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, size_t vl);
void vsoxseg6ei32_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint32m2_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
    v5, size_t vl);
void vsoxseg7ei32_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint32m2_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
    v5, vuint16m1_t v6, size_t vl);
void vsoxseg8ei32_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint32m2_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
    v5, vuint16m1_t v6, vuint16m1_t v7, size_t vl);
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void vsoxseg2ei32_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint32m4_t bindex, vuint16m2_t v0, vuint16m2_t v1, size_t
    vl);
void vsoxseg3ei32_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint32m4_t bindex, vuint16m2_t v0, vuint16m2_t v1,
    vuint16m2_t v2, size_t vl);
void vsoxseg4ei32_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint32m4_t bindex, vuint16m2_t v0, vuint16m2_t v1,
    vuint16m2_t v2, vuint16m2_t v3, size_t vl);
void vsoxseg2ei32_v_u16m4_m (vbool4_t mask, uint16_t *base,
    vuint32m8_t bindex, vuint16m4_t v0, vuint16m4_t v1, size_t
    vl);
void vsoxseg2ei64_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint64m4_t bindex, vuint16m1_t v0, vuint16m1_t v1, size_t
    vl);
void vsoxseg3ei64_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint64m4_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, size_t vl);
void vsoxseg4ei64_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint64m4_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, size_t vl);
void vsoxseg5ei64_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint64m4_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, size_t vl);
void vsoxseg6ei64_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint64m4_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
    v5, size_t vl);
void vsoxseg7ei64_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint64m4_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
    v5, vuint16m1_t v6, size_t vl);
void vsoxseg8ei64_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint64m4_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
    v5, vuint16m1_t v6, vuint16m1_t v7, size_t vl);
void vsoxseg2ei64_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint64m8_t bindex, vuint16m2_t v0, vuint16m2_t v1, size_t
    vl);
void vsoxseg3ei64_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint64m8_t bindex, vuint16m2_t v0, vuint16m2_t v1,
    vuint16m2_t v2, size_t vl);
void vsoxseg4ei64_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint64m8_t bindex, vuint16m2_t v0, vuint16m2_t v1,
    vuint16m2_t v2, vuint16m2_t v3, size_t vl);
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void vsoxseg2ei8_v_u32m4_m (vbool8_t mask, uint32_t *base,
    vuint8m1_t bindex, vuint32m4_t v0, vuint32m4_t v1, size_t
    vl);
void vsoxseg2ei16_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint16m1_t bindex, vuint32m2_t v0, vuint32m2_t v1, size_t
    vl);
void vsoxseg3ei16_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint16m1_t bindex, vuint32m2_t v0, vuint32m2_t v1,
    vuint32m2_t v2, size_t vl);
void vsoxseg4ei16_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint16m1_t bindex, vuint32m2_t v0, vuint32m2_t v1,
    vuint32m2_t v2, vuint32m2_t v3, size_t vl);
void vsoxseg2ei16_v_u32m4_m (vbool8_t mask, uint32_t *base,
    vuint16m2_t bindex, vuint32m4_t v0, vuint32m4_t v1, size_t
    vl);
void vsoxseg2ei32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t bindex, vuint32m1_t v0, vuint32m1_t v1, size_t
    vl);
void vsoxseg3ei32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t bindex, vuint32m1_t v0, vuint32m1_t v1,
    vuint32m1_t v2, size_t vl);
void vsoxseg4ei32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t bindex, vuint32m1_t v0, vuint32m1_t v1,
    vuint32m1_t v2, vuint32m1_t v3, size_t vl);
void vsoxseg5ei32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t bindex, vuint32m1_t v0, vuint32m1_t v1,
    vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, size_t vl);
void vsoxseg6ei32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t bindex, vuint32m1_t v0, vuint32m1_t v1,
    vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, vuint32m1_t
    v5, size_t vl);
void vsoxseg7ei32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t bindex, vuint32m1_t v0, vuint32m1_t v1,
    vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, vuint32m1_t
    v5, vuint32m1_t v6, size_t vl);
void vsoxseg8ei32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t bindex, vuint32m1_t v0, vuint32m1_t v1,
    vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, vuint32m1_t
    v5, vuint32m1_t v6, vuint32m1_t v7, size_t vl);
void vsoxseg2ei32_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint32m2_t bindex, vuint32m2_t v0, vuint32m2_t v1, size_t
    vl);
void vsoxseg3ei32_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint32m2_t bindex, vuint32m2_t v0, vuint32m2_t v1,
    vuint32m2_t v2, size_t vl);
```

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void vsoxseg4ei32_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint32m2_t bindex, vuint32m2_t v0, vuint32m2_t v1,
    vuint32m2_t v2, vuint32m2_t v3, size_t vl);
void vsoxseg2ei32_v_u32m4_m (vbool8_t mask, uint32_t *base,
    vuint32m4_t bindex, vuint32m4_t v0, vuint32m4_t v1, size_t
    vl);
void vsoxseg2ei64_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint64m2_t bindex, vuint32m1_t v0, vuint32m1_t v1, size_t
    vl);
void vsoxseg3ei64_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint64m2_t bindex, vuint32m1_t v0, vuint32m1_t v1,
    vuint32m1_t v2, size_t vl);
void vsoxseg4ei64_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint64m2_t bindex, vuint32m1_t v0, vuint32m1_t v1,
    vuint32m1_t v2, vuint32m1_t v3, size_t vl);
void vsoxseg5ei64_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint64m2_t bindex, vuint32m1_t v0, vuint32m1_t v1,
    vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, size_t vl);
void vsoxseg6ei64_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint64m2_t bindex, vuint32m1_t v0, vuint32m1_t v1,
    vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, vuint32m1_t
    v5, size_t vl);
void vsoxseg7ei64_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint64m2_t bindex, vuint32m1_t v0, vuint32m1_t v1,
    vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, vuint32m1_t
    v5, vuint32m1_t v6, size_t vl);
void vsoxseg8ei64_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint64m2_t bindex, vuint32m1_t v0, vuint32m1_t v1,
    vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, vuint32m1_t
    v5, vuint32m1_t v6, vuint32m1_t v7, size_t vl);
void vsoxseg2ei64_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint64m4_t bindex, vuint32m2_t v0, vuint32m2_t v1, size_t
    vl);
void vsoxseg3ei64_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint64m4_t bindex, vuint32m2_t v0, vuint32m2_t v1,
    vuint32m2_t v2, size_t vl);
void vsoxseg4ei64_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint64m4_t bindex, vuint32m2_t v0, vuint32m2_t v1,
    vuint32m2_t v2, vuint32m2_t v3, size_t vl);
void vsoxseg2ei64_v_u32m4_m (vbool8_t mask, uint32_t *base,
    vuint64m8_t bindex, vuint32m4_t v0, vuint32m4_t v1, size_t
    vl);
void vsoxseg2ei16_v_u64m4_m (vbool16_t mask, uint64_t *base,
    vuint16m1_t bindex, vuint64m4_t v0, vuint64m4_t v1, size_t
    vl);
```

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void vsoxseg2ei32_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint32m1_t bindex, vuint64m2_t v0, vuint64m2_t v1, size_t
    vl);
void vsoxseg3ei32_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint32m1_t bindex, vuint64m2_t v0, vuint64m2_t v1,
    vuint64m2_t v2, size_t vl);
void vsoxseg4ei32_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint32m1_t bindex, vuint64m2_t v0, vuint64m2_t v1,
    vuint64m2_t v2, vuint64m2_t v3, size_t vl);
void vsoxseg2ei32_v_u64m4_m (vbool16_t mask, uint64_t *base,
    vuint32m2_t bindex, vuint64m4_t v0, vuint64m4_t v1, size_t
    vl);
void vsoxseg2ei64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t bindex, vuint64m1_t v0, vuint64m1_t v1, size_t
    vl);
void vsoxseg3ei64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t bindex, vuint64m1_t v0, vuint64m1_t v1,
    vuint64m1_t v2, size_t vl);
void vsoxseg4ei64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t bindex, vuint64m1_t v0, vuint64m1_t v1,
    vuint64m1_t v2, vuint64m1_t v3, size_t vl);
void vsoxseg5ei64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t bindex, vuint64m1_t v0, vuint64m1_t v1,
    vuint64m1_t v2, vuint64m1_t v3, vuint64m1_t v4, size_t vl);
void vsoxseg6ei64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t bindex, vuint64m1_t v0, vuint64m1_t v1,
    vuint64m1_t v2, vuint64m1_t v3, vuint64m1_t v4, vuint64m1_t
    v5, size_t vl);
void vsoxseg7ei64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t bindex, vuint64m1_t v0, vuint64m1_t v1,
    vuint64m1_t v2, vuint64m1_t v3, vuint64m1_t v4, vuint64m1_t
    v5, vuint64m1_t v6, size_t vl);
void vsoxseg8ei64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t bindex, vuint64m1_t v0, vuint64m1_t v1,
    vuint64m1_t v2, vuint64m1_t v3, vuint64m1_t v4, vuint64m1_t
    v5, vuint64m1_t v6, vuint64m1_t v7, size_t vl);
void vsoxseg2ei64_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint64m2_t bindex, vuint64m2_t v0, vuint64m2_t v1, size_t
    vl);
void vsoxseg3ei64_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint64m2_t bindex, vuint64m2_t v0, vuint64m2_t v1,
    vuint64m2_t v2, size_t vl);
void vsoxseg4ei64_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint64m2_t bindex, vuint64m2_t v0, vuint64m2_t v1,
    vuint64m2_t v2, vuint64m2_t v3, size_t vl);
```

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void vsoxseg2ei64_v_u64m4_m (vbool16_t mask, uint64_t *base,
    vuint64m4_t bindex, vuint64m4_t v0, vuint64m4_t v1, size_t
    vl);
void vsoxseg2ei8_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint8m1_t bindex, vfloat16m2_t v0, vfloat16m2_t v1, size_t
    vl);
void vsoxseg3ei8_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint8m1_t bindex, vfloat16m2_t v0, vfloat16m2_t v1,
    vfloat16m2_t v2, size_t vl);
void vsoxseg4ei8_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint8m1_t bindex, vfloat16m2_t v0, vfloat16m2_t v1,
    vfloat16m2_t v2, vfloat16m2_t v3, size_t vl);
void vsoxseg2ei8_v_f16m4_m (vbool4_t mask, float16_t *base,
    vuint8m2_t bindex, vfloat16m4_t v0, vfloat16m4_t v1, size_t
    vl);
void vsoxseg2ei16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint16m1_t bindex, vfloat16m1_t v0, vfloat16m1_t v1, size_t
    vl);
void vsoxseg3ei16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint16m1_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, size_t vl);
void vsoxseg4ei16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint16m1_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, size_t vl);
void vsoxseg5ei16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint16m1_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4, size_t
    vl);
void vsoxseg6ei16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint16m1_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, size_t vl);
void vsoxseg7ei16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint16m1_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, vfloat16m1_t v6, size_t vl);
void vsoxseg8ei16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint16m1_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, vfloat16m1_t v6, vfloat16m1_t v7, size_t
    vl);
void vsoxseg2ei16_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint16m2_t bindex, vfloat16m2_t v0, vfloat16m2_t v1, size_t
    vl);
void vsoxseg3ei16_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint16m2_t bindex, vfloat16m2_t v0, vfloat16m2_t v1,
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    vfloat16m2_t v2, size_t vl);
void vsoxseg4ei16_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint16m2_t bindex, vfloat16m2_t v0, vfloat16m2_t v1,
    vfloat16m2_t v2, vfloat16m2_t v3, size_t vl);
void vsoxseg2ei16_v_f16m4_m (vbool4_t mask, float16_t *base,
    vuint16m4_t bindex, vfloat16m4_t v0, vfloat16m4_t v1, size_t
    vl);
void vsoxseg2ei32_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint32m2_t bindex, vfloat16m1_t v0, vfloat16m1_t v1, size_t
    vl);
void vsoxseg3ei32_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint32m2_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, size_t vl);
void vsoxseg4ei32_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint32m2_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, size_t vl);
void vsoxseg5ei32_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint32m2_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4, size_t
    vl);
void vsoxseg6ei32_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint32m2_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, size_t vl);
void vsoxseg7ei32_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint32m2_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, vfloat16m1_t v6, size_t vl);
void vsoxseg8ei32_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint32m2_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, vfloat16m1_t v6, vfloat16m1_t v7, size_t
    vl);
void vsoxseg2ei32_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint32m4_t bindex, vfloat16m2_t v0, vfloat16m2_t v1, size_t
    vl);
void vsoxseg3ei32_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint32m4_t bindex, vfloat16m2_t v0, vfloat16m2_t v1,
    vfloat16m2_t v2, size_t vl);
void vsoxseg4ei32_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint32m4_t bindex, vfloat16m2_t v0, vfloat16m2_t v1,
    vfloat16m2_t v2, vfloat16m2_t v3, size_t vl);
void vsoxseg2ei32_v_f16m4_m (vbool4_t mask, float16_t *base,
    vuint32m8_t bindex, vfloat16m4_t v0, vfloat16m4_t v1, size_t
    vl);
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404

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void vsoxseg2ei64_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint64m4_t bindex, vfloat16m1_t v0, vfloat16m1_t v1, size_t
    vl);
void vsoxseg3ei64_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint64m4_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, size_t vl);
void vsoxseg4ei64_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint64m4_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, size_t vl);
void vsoxseg5ei64_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint64m4_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4, size_t
    vl);
void vsoxseg6ei64_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint64m4_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, size_t vl);
void vsoxseg7ei64_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint64m4_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, vfloat16m1_t v6, size_t vl);
void vsoxseg8ei64_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint64m4_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, vfloat16m1_t v6, vfloat16m1_t v7, size_t
    vl);
void vsoxseg2ei64_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint64m8_t bindex, vfloat16m2_t v0, vfloat16m2_t v1, size_t
    vl);
void vsoxseg3ei64_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint64m8_t bindex, vfloat16m2_t v0, vfloat16m2_t v1,
    vfloat16m2_t v2, size_t vl);
void vsoxseg4ei64_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint64m8_t bindex, vfloat16m2_t v0, vfloat16m2_t v1,
    vfloat16m2_t v2, vfloat16m2_t v3, size_t vl);
void vsoxseg2ei8_v_f32m4_m (vbool8_t mask, float32_t *base,
    vuint8m1_t bindex, vfloat32m4_t v0, vfloat32m4_t v1, size_t
    vl);
void vsoxseg2ei16_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint16m1_t bindex, vfloat32m2_t v0, vfloat32m2_t v1, size_t
    vl);
void vsoxseg3ei16_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint16m1_t bindex, vfloat32m2_t v0, vfloat32m2_t v1,
    vfloat32m2_t v2, size_t vl);
void vsoxseg4ei16_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint16m1_t bindex, vfloat32m2_t v0, vfloat32m2_t v1,
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405

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    vfloat32m2_t v2, vfloat32m2_t v3, size_t vl);
void vsoxseg2ei16_v_f32m4_m (vbool8_t mask, float32_t *base,
    vuint16m2_t bindex, vfloat32m4_t v0, vfloat32m4_t v1, size_t
    vl);
void vsoxseg2ei32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint32m1_t bindex, vfloat32m1_t v0, vfloat32m1_t v1, size_t
    vl);
void vsoxseg3ei32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint32m1_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, size_t vl);
void vsoxseg4ei32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint32m1_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, size_t vl);
void vsoxseg5ei32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint32m1_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4, size_t
    vl);
void vsoxseg6ei32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint32m1_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4,
    vfloat32m1_t v5, size_t vl);
void vsoxseg7ei32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint32m1_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4,
    vfloat32m1_t v5, vfloat32m1_t v6, size_t vl);
void vsoxseg8ei32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint32m1_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4,
    vfloat32m1_t v5, vfloat32m1_t v6, vfloat32m1_t v7, size_t
    vl);
void vsoxseg2ei32_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint32m2_t bindex, vfloat32m2_t v0, vfloat32m2_t v1, size_t
    vl);
void vsoxseg3ei32_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint32m2_t bindex, vfloat32m2_t v0, vfloat32m2_t v1,
    vfloat32m2_t v2, size_t vl);
void vsoxseg4ei32_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint32m2_t bindex, vfloat32m2_t v0, vfloat32m2_t v1,
    vfloat32m2_t v2, vfloat32m2_t v3, size_t vl);
void vsoxseg2ei32_v_f32m4_m (vbool8_t mask, float32_t *base,
    vuint32m4_t bindex, vfloat32m4_t v0, vfloat32m4_t v1, size_t
    vl);
void vsoxseg2ei64_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint64m2_t bindex, vfloat32m1_t v0, vfloat32m1_t v1, size_t
    vl);
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void vsoxseg3ei64_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint64m2_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, size_t vl);
void vsoxseg4ei64_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint64m2_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, size_t vl);
void vsoxseg5ei64_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint64m2_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4, size_t
    vl);
void vsoxseg6ei64_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint64m2_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4,
    vfloat32m1_t v5, size_t vl);
void vsoxseg7ei64_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint64m2_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4,
    vfloat32m1_t v5, vfloat32m1_t v6, size_t vl);
void vsoxseg8ei64_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint64m2_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4,
    vfloat32m1_t v5, vfloat32m1_t v6, vfloat32m1_t v7, size_t
    vl);
void vsoxseg2ei64_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint64m4_t bindex, vfloat32m2_t v0, vfloat32m2_t v1, size_t
    vl);
void vsoxseg3ei64_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint64m4_t bindex, vfloat32m2_t v0, vfloat32m2_t v1,
    vfloat32m2_t v2, size_t vl);
void vsoxseg4ei64_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint64m4_t bindex, vfloat32m2_t v0, vfloat32m2_t v1,
    vfloat32m2_t v2, vfloat32m2_t v3, size_t vl);
void vsoxseg2ei64_v_f32m4_m (vbool8_t mask, float32_t *base,
    vuint64m8_t bindex, vfloat32m4_t v0, vfloat32m4_t v1, size_t
    vl);
void vsoxseg2ei16_v_f64m4_m (vbool16_t mask, float64_t *base,
    vuint16m1_t bindex, vfloat64m4_t v0, vfloat64m4_t v1, size_t
    vl);
void vsoxseg2ei32_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint32m1_t bindex, vfloat64m2_t v0, vfloat64m2_t v1, size_t
    vl);
void vsoxseg3ei32_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint32m1_t bindex, vfloat64m2_t v0, vfloat64m2_t v1,
    vfloat64m2_t v2, size_t vl);
void vsoxseg4ei32_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint32m1_t bindex, vfloat64m2_t v0, vfloat64m2_t v1,
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    vfloat64m2_t v2, vfloat64m2_t v3, size_t vl);
void vsoxseg2ei32_v_f64m4_m (vbool16_t mask, float64_t *base,
    vuint32m2_t bindex, vfloat64m4_t v0, vfloat64m4_t v1, size_t
    vl);
void vsoxseg2ei64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint64m1_t bindex, vfloat64m1_t v0, vfloat64m1_t v1, size_t
    vl);
void vsoxseg3ei64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint64m1_t bindex, vfloat64m1_t v0, vfloat64m1_t v1,
    vfloat64m1_t v2, size_t vl);
void vsoxseg4ei64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint64m1_t bindex, vfloat64m1_t v0, vfloat64m1_t v1,
    vfloat64m1_t v2, vfloat64m1_t v3, size_t vl);
void vsoxseg5ei64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint64m1_t bindex, vfloat64m1_t v0, vfloat64m1_t v1,
    vfloat64m1_t v2, vfloat64m1_t v3, vfloat64m1_t v4, size_t
    vl);
void vsoxseg6ei64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint64m1_t bindex, vfloat64m1_t v0, vfloat64m1_t v1,
    vfloat64m1_t v2, vfloat64m1_t v3, vfloat64m1_t v4,
    vfloat64m1_t v5, size_t vl);
void vsoxseg7ei64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint64m1_t bindex, vfloat64m1_t v0, vfloat64m1_t v1,
    vfloat64m1_t v2, vfloat64m1_t v3, vfloat64m1_t v4,
    vfloat64m1_t v5, vfloat64m1_t v6, size_t vl);
void vsoxseg8ei64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint64m1_t bindex, vfloat64m1_t v0, vfloat64m1_t v1,
    vfloat64m1_t v2, vfloat64m1_t v3, vfloat64m1_t v4,
    vfloat64m1_t v5, vfloat64m1_t v6, vfloat64m1_t v7, size_t
    vl);
void vsoxseg2ei64_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint64m2_t bindex, vfloat64m2_t v0, vfloat64m2_t v1, size_t
    vl);
void vsoxseg3ei64_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint64m2_t bindex, vfloat64m2_t v0, vfloat64m2_t v1,
    vfloat64m2_t v2, size_t vl);
void vsoxseg4ei64_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint64m2_t bindex, vfloat64m2_t v0, vfloat64m2_t v1,
    vfloat64m2_t v2, vfloat64m2_t v3, size_t vl);
void vsoxseg2ei64_v_f64m4_m (vbool16_t mask, float64_t *base,
    vuint64m4_t bindex, vfloat64m4_t v0, vfloat64m4_t v1, size_t
    vl);
void vsuxseg2ei8_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint8m1_t bindex, vint8m1_t v0, vint8m1_t v1, size_t vl);
void vsuxseg3ei8_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint8m1_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t v2,
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    size_t vl);
void vsuxseg4ei8_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint8m1_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t v2,
    vint8m1_t v3, size_t vl);
void vsuxseg5ei8_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint8m1_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t v2,
    vint8m1_t v3, vint8m1_t v4, size_t vl);
void vsuxseg6ei8_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint8m1_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t v2,
    vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, size_t vl);
void vsuxseg7ei8_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint8m1_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t v2,
    vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, vint8m1_t v6,
    size_t vl);
void vsuxseg8ei8_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint8m1_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t v2,
    vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, vint8m1_t v6,
    vint8m1_t v7, size_t vl);
void vsuxseg2ei8_v_i8m2_m (vbool4_t mask, int8_t *base,
    vuint8m2_t bindex, vint8m2_t v0, vint8m2_t v1, size_t vl);
void vsuxseg3ei8_v_i8m2_m (vbool4_t mask, int8_t *base,
    vuint8m2_t bindex, vint8m2_t v0, vint8m2_t v1, vint8m2_t v2,
    size_t vl);
void vsuxseg4ei8_v_i8m2_m (vbool4_t mask, int8_t *base,
    vuint8m2_t bindex, vint8m2_t v0, vint8m2_t v1, vint8m2_t v2,
    vint8m2_t v3, size_t vl);
void vsuxseg2ei8_v_i8m4_m (vbool2_t mask, int8_t *base,
    vuint8m4_t bindex, vint8m4_t v0, vint8m4_t v1, size_t vl);
void vsuxseg2ei16_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint16m2_t bindex, vint8m1_t v0, vint8m1_t v1, size_t vl);
void vsuxseg3ei16_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint16m2_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, size_t vl);
void vsuxseg4ei16_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint16m2_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, size_t vl);
void vsuxseg5ei16_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint16m2_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, size_t vl);
void vsuxseg6ei16_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint16m2_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, size_t vl);
void vsuxseg7ei16_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint16m2_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, vint8m1_t v6,
    size_t vl);
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void vsuxseg8ei16_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint16m2_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, vint8m1_t v6,
    vint8m1_t v7, size_t vl);
void vsuxseg2ei16_v_i8m2_m (vbool4_t mask, int8_t *base,
    vuint16m4_t bindex, vint8m2_t v0, vint8m2_t v1, size_t vl);
void vsuxseg3ei16_v_i8m2_m (vbool4_t mask, int8_t *base,
    vuint16m4_t bindex, vint8m2_t v0, vint8m2_t v1, vint8m2_t
    v2, size_t vl);
void vsuxseg4ei16_v_i8m2_m (vbool4_t mask, int8_t *base,
    vuint16m4_t bindex, vint8m2_t v0, vint8m2_t v1, vint8m2_t
    v2, vint8m2_t v3, size_t vl);
void vsuxseg2ei16_v_i8m4_m (vbool2_t mask, int8_t *base,
    vuint16m8_t bindex, vint8m4_t v0, vint8m4_t v1, size_t vl);
void vsuxseg2ei32_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint32m4_t bindex, vint8m1_t v0, vint8m1_t v1, size_t vl);
void vsuxseg3ei32_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint32m4_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, size_t vl);
void vsuxseg4ei32_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint32m4_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, size_t vl);
void vsuxseg5ei32_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint32m4_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, size_t vl);
void vsuxseg6ei32_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint32m4_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, size_t vl);
void vsuxseg7ei32_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint32m4_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, vint8m1_t v6,
    size_t vl);
void vsuxseg8ei32_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint32m4_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, vint8m1_t v6,
    vint8m1_t v7, size_t vl);
void vsuxseg2ei32_v_i8m2_m (vbool4_t mask, int8_t *base,
    vuint32m8_t bindex, vint8m2_t v0, vint8m2_t v1, size_t vl);
void vsuxseg3ei32_v_i8m2_m (vbool4_t mask, int8_t *base,
    vuint32m8_t bindex, vint8m2_t v0, vint8m2_t v1, vint8m2_t
    v2, size_t vl);
void vsuxseg4ei32_v_i8m2_m (vbool4_t mask, int8_t *base,
    vuint32m8_t bindex, vint8m2_t v0, vint8m2_t v1, vint8m2_t
    v2, vint8m2_t v3, size_t vl);
void vsuxseg2ei64_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint64m8_t bindex, vint8m1_t v0, vint8m1_t v1, size_t vl);
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void vsuxseg3ei64_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint64m8_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, size_t vl);
void vsuxseg4ei64_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint64m8_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, size_t vl);
void vsuxseg5ei64_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint64m8_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, size_t vl);
void vsuxseg6ei64_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint64m8_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, size_t vl);
void vsuxseg7ei64_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint64m8_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, vint8m1_t v6,
    size_t vl);
void vsuxseg8ei64_v_i8m1_m (vbool8_t mask, int8_t *base,
    vuint64m8_t bindex, vint8m1_t v0, vint8m1_t v1, vint8m1_t
    v2, vint8m1_t v3, vint8m1_t v4, vint8m1_t v5, vint8m1_t v6,
    vint8m1_t v7, size_t vl);
void vsuxseg2ei8_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint8m1_t bindex, vint16m2_t v0, vint16m2_t v1, size_t vl);
void vsuxseg3ei8_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint8m1_t bindex, vint16m2_t v0, vint16m2_t v1, vint16m2_t
    v2, size_t vl);
void vsuxseg4ei8_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint8m1_t bindex, vint16m2_t v0, vint16m2_t v1, vint16m2_t
    v2, vint16m2_t v3, size_t vl);
void vsuxseg2ei8_v_i16m4_m (vbool4_t mask, int16_t *base,
    vuint8m2_t bindex, vint16m4_t v0, vint16m4_t v1, size_t vl);
void vsuxseg2ei16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint16m1_t bindex, vint16m1_t v0, vint16m1_t v1, size_t vl);
void vsuxseg3ei16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint16m1_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, size_t vl);
void vsuxseg4ei16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint16m1_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, size_t vl);
void vsuxseg5ei16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint16m1_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, size_t vl);
void vsuxseg6ei16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint16m1_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, size_t vl);
void vsuxseg7ei16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint16m1_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
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411

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    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, vint16m1_t
    v6, size_t vl);
void vsuxseg8ei16_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint16m1_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, vint16m1_t
    v6, vint16m1_t v7, size_t vl);
void vsuxseg2ei16_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint16m2_t bindex, vint16m2_t v0, vint16m2_t v1, size_t vl);
void vsuxseg3ei16_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint16m2_t bindex, vint16m2_t v0, vint16m2_t v1, vint16m2_t
    v2, size_t vl);
void vsuxseg4ei16_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint16m2_t bindex, vint16m2_t v0, vint16m2_t v1, vint16m2_t
    v2, vint16m2_t v3, size_t vl);
void vsuxseg2ei16_v_i16m4_m (vbool4_t mask, int16_t *base,
    vuint16m4_t bindex, vint16m4_t v0, vint16m4_t v1, size_t vl);
void vsuxseg2ei32_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint32m2_t bindex, vint16m1_t v0, vint16m1_t v1, size_t vl);
void vsuxseg3ei32_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint32m2_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, size_t vl);
void vsuxseg4ei32_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint32m2_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, size_t vl);
void vsuxseg5ei32_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint32m2_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, size_t vl);
void vsuxseg6ei32_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint32m2_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, size_t vl);
void vsuxseg7ei32_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint32m2_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, vint16m1_t
    v6, size_t vl);
void vsuxseg8ei32_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint32m2_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, vint16m1_t
    v6, vint16m1_t v7, size_t vl);
void vsuxseg2ei32_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint32m4_t bindex, vint16m2_t v0, vint16m2_t v1, size_t vl);
void vsuxseg3ei32_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint32m4_t bindex, vint16m2_t v0, vint16m2_t v1, vint16m2_t
    v2, size_t vl);
void vsuxseg4ei32_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint32m4_t bindex, vint16m2_t v0, vint16m2_t v1, vint16m2_t
    v2, vint16m2_t v3, size_t vl);
```

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void vsuxseg2ei32_v_i16m4_m (vbool4_t mask, int16_t *base,
    vuint32m8_t bindex, vint16m4_t v0, vint16m4_t v1, size_t vl);
void vsuxseg2ei64_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint64m4_t bindex, vint16m1_t v0, vint16m1_t v1, size_t vl);
void vsuxseg3ei64_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint64m4_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, size_t vl);
void vsuxseg4ei64_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint64m4_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, size_t vl);
void vsuxseg5ei64_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint64m4_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, size_t vl);
void vsuxseg6ei64_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint64m4_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, size_t vl);
void vsuxseg7ei64_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint64m4_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, vint16m1_t
    v6, size_t vl);
void vsuxseg8ei64_v_i16m1_m (vbool16_t mask, int16_t *base,
    vuint64m4_t bindex, vint16m1_t v0, vint16m1_t v1, vint16m1_t
    v2, vint16m1_t v3, vint16m1_t v4, vint16m1_t v5, vint16m1_t
    v6, vint16m1_t v7, size_t vl);
void vsuxseg2ei64_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint64m8_t bindex, vint16m2_t v0, vint16m2_t v1, size_t vl);
void vsuxseg3ei64_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint64m8_t bindex, vint16m2_t v0, vint16m2_t v1, vint16m2_t
    v2, size_t vl);
void vsuxseg4ei64_v_i16m2_m (vbool8_t mask, int16_t *base,
    vuint64m8_t bindex, vint16m2_t v0, vint16m2_t v1, vint16m2_t
    v2, vint16m2_t v3, size_t vl);
void vsuxseg2ei8_v_i32m4_m (vbool8_t mask, int32_t *base,
    vuint8m1_t bindex, vint32m4_t v0, vint32m4_t v1, size_t vl);
void vsuxseg2ei16_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint16m1_t bindex, vint32m2_t v0, vint32m2_t v1, size_t vl);
void vsuxseg3ei16_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint16m1_t bindex, vint32m2_t v0, vint32m2_t v1, vint32m2_t
    v2, size_t vl);
void vsuxseg4ei16_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint16m1_t bindex, vint32m2_t v0, vint32m2_t v1, vint32m2_t
    v2, vint32m2_t v3, size_t vl);
void vsuxseg2ei16_v_i32m4_m (vbool8_t mask, int32_t *base,
    vuint16m2_t bindex, vint32m4_t v0, vint32m4_t v1, size_t vl);
void vsuxseg2ei32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint32m1_t bindex, vint32m1_t v0, vint32m1_t v1, size_t vl);
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413

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void vsuxseg3ei32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint32m1_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, size_t vl);
void vsuxseg4ei32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint32m1_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, size_t vl);
void vsuxseg5ei32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint32m1_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, vint32m1_t v4, size_t vl);
void vsuxseg6ei32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint32m1_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, vint32m1_t v4, vint32m1_t v5, size_t vl);
void vsuxseg7ei32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint32m1_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, vint32m1_t v4, vint32m1_t v5, vint32m1_t
    v6, size_t vl);
void vsuxseg8ei32_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint32m1_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, vint32m1_t v4, vint32m1_t v5, vint32m1_t
    v6, vint32m1_t v7, size_t vl);
void vsuxseg2ei32_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint32m2_t bindex, vint32m2_t v0, vint32m2_t v1, size_t vl);
void vsuxseg3ei32_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint32m2_t bindex, vint32m2_t v0, vint32m2_t v1, vint32m2_t
    v2, size_t vl);
void vsuxseg4ei32_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint32m2_t bindex, vint32m2_t v0, vint32m2_t v1, vint32m2_t
    v2, vint32m2_t v3, size_t vl);
void vsuxseg2ei32_v_i32m4_m (vbool8_t mask, int32_t *base,
    vuint32m4_t bindex, vint32m4_t v0, vint32m4_t v1, size_t vl);
void vsuxseg2ei64_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint64m2_t bindex, vint32m1_t v0, vint32m1_t v1, size_t vl);
void vsuxseg3ei64_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint64m2_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, size_t vl);
void vsuxseg4ei64_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint64m2_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, size_t vl);
void vsuxseg5ei64_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint64m2_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, vint32m1_t v4, size_t vl);
void vsuxseg6ei64_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint64m2_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, vint32m1_t v4, vint32m1_t v5, size_t vl);
void vsuxseg7ei64_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint64m2_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
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    v2, vint32m1_t v3, vint32m1_t v4, vint32m1_t v5, vint32m1_t
    v6, size_t vl);
void vsuxseg8ei64_v_i32m1_m (vbool32_t mask, int32_t *base,
    vuint64m2_t bindex, vint32m1_t v0, vint32m1_t v1, vint32m1_t
    v2, vint32m1_t v3, vint32m1_t v4, vint32m1_t v5, vint32m1_t
    v6, vint32m1_t v7, size_t vl);
void vsuxseg2ei64_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint64m4_t bindex, vint32m2_t v0, vint32m2_t v1, size_t vl);
void vsuxseg3ei64_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint64m4_t bindex, vint32m2_t v0, vint32m2_t v1, vint32m2_t
    v2, size_t vl);
void vsuxseg4ei64_v_i32m2_m (vbool16_t mask, int32_t *base,
    vuint64m4_t bindex, vint32m2_t v0, vint32m2_t v1, vint32m2_t
    v2, vint32m2_t v3, size_t vl);
void vsuxseg2ei64_v_i32m4_m (vbool8_t mask, int32_t *base,
    vuint64m8_t bindex, vint32m4_t v0, vint32m4_t v1, size_t vl);
void vsuxseg2ei16_v_i64m4_m (vbool16_t mask, int64_t *base,
    vuint16m1_t bindex, vint64m4_t v0, vint64m4_t v1, size_t vl);
void vsuxseg2ei32_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint32m1_t bindex, vint64m2_t v0, vint64m2_t v1, size_t vl);
void vsuxseg3ei32_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint32m1_t bindex, vint64m2_t v0, vint64m2_t v1, vint64m2_t
    v2, size_t vl);
void vsuxseg4ei32_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint32m1_t bindex, vint64m2_t v0, vint64m2_t v1, vint64m2_t
    v2, vint64m2_t v3, size_t vl);
void vsuxseg2ei32_v_i64m4_m (vbool16_t mask, int64_t *base,
    vuint32m2_t bindex, vint64m4_t v0, vint64m4_t v1, size_t vl);
void vsuxseg2ei64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint64m1_t bindex, vint64m1_t v0, vint64m1_t v1, size_t vl);
void vsuxseg3ei64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint64m1_t bindex, vint64m1_t v0, vint64m1_t v1, vint64m1_t
    v2, size_t vl);
void vsuxseg4ei64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint64m1_t bindex, vint64m1_t v0, vint64m1_t v1, vint64m1_t
    v2, vint64m1_t v3, size_t vl);
void vsuxseg5ei64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint64m1_t bindex, vint64m1_t v0, vint64m1_t v1, vint64m1_t
    v2, vint64m1_t v3, vint64m1_t v4, size_t vl);
void vsuxseg6ei64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint64m1_t bindex, vint64m1_t v0, vint64m1_t v1, vint64m1_t
    v2, vint64m1_t v3, vint64m1_t v4, vint64m1_t v5, size_t vl);
void vsuxseg7ei64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint64m1_t bindex, vint64m1_t v0, vint64m1_t v1, vint64m1_t
    v2, vint64m1_t v3, vint64m1_t v4, vint64m1_t v5, vint64m1_t
    v6, size_t vl);
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void vsuxseg8ei64_v_i64m1_m (vbool64_t mask, int64_t *base,
    vuint64m1_t bindex, vint64m1_t v0, vint64m1_t v1, vint64m1_t
    v2, vint64m1_t v3, vint64m1_t v4, vint64m1_t v5, vint64m1_t
    v6, vint64m1_t v7, size_t vl);
void vsuxseg2ei64_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint64m2_t bindex, vint64m2_t v0, vint64m2_t v1, size_t vl);
void vsuxseg3ei64_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint64m2_t bindex, vint64m2_t v0, vint64m2_t v1, vint64m2_t
    v2, size_t vl);
void vsuxseg4ei64_v_i64m2_m (vbool32_t mask, int64_t *base,
    vuint64m2_t bindex, vint64m2_t v0, vint64m2_t v1, vint64m2_t
    v2, vint64m2_t v3, size_t vl);
void vsuxseg2ei64_v_i64m4_m (vbool16_t mask, int64_t *base,
    vuint64m4_t bindex, vint64m4_t v0, vint64m4_t v1, size_t vl);
void vsuxseg2ei8_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint8m1_t bindex, vuint8m1_t v0, vuint8m1_t v1, size_t vl);
void vsuxseg3ei8_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint8m1_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, size_t vl);
void vsuxseg4ei8_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint8m1_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, size_t vl);
void vsuxseg5ei8_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint8m1_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, size_t vl);
void vsuxseg6ei8_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint8m1_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, size_t vl);
void vsuxseg7ei8_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint8m1_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t
    v6, size_t vl);
void vsuxseg8ei8_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint8m1_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t
    v6, vuint8m1_t v7, size_t vl);
void vsuxseg2ei8_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint8m2_t bindex, vuint8m2_t v0, vuint8m2_t v1, size_t vl);
void vsuxseg3ei8_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint8m2_t bindex, vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t
    v2, size_t vl);
void vsuxseg4ei8_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint8m2_t bindex, vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t
    v2, vuint8m2_t v3, size_t vl);
void vsuxseg2ei8_v_u8m4_m (vbool2_t mask, uint8_t *base,
    vuint8m4_t bindex, vuint8m4_t v0, vuint8m4_t v1, size_t vl);
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416

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void vsuxseg2ei16_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint16m2_t bindex, vuint8m1_t v0, vuint8m1_t v1, size_t vl);
void vsuxseg3ei16_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint16m2_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, size_t vl);
void vsuxseg4ei16_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint16m2_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, size_t vl);
void vsuxseg5ei16_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint16m2_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, size_t vl);
void vsuxseg6ei16_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint16m2_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, size_t vl);
void vsuxseg7ei16_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint16m2_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t
    v6, size_t vl);
void vsuxseg8ei16_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint16m2_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t
    v6, vuint8m1_t v7, size_t vl);
void vsuxseg2ei16_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint16m4_t bindex, vuint8m2_t v0, vuint8m2_t v1, size_t vl);
void vsuxseg3ei16_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint16m4_t bindex, vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t
    v2, size_t vl);
void vsuxseg4ei16_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint16m4_t bindex, vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t
    v2, vuint8m2_t v3, size_t vl);
void vsuxseg2ei16_v_u8m4_m (vbool2_t mask, uint8_t *base,
    vuint16m8_t bindex, vuint8m4_t v0, vuint8m4_t v1, size_t vl);
void vsuxseg2ei32_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint32m4_t bindex, vuint8m1_t v0, vuint8m1_t v1, size_t vl);
void vsuxseg3ei32_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint32m4_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, size_t vl);
void vsuxseg4ei32_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint32m4_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, size_t vl);
void vsuxseg5ei32_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint32m4_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, size_t vl);
void vsuxseg6ei32_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint32m4_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, size_t vl);
```

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void vsuxseg7ei32_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint32m4_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t
    v6, size_t vl);
void vsuxseg8ei32_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint32m4_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t
    v6, vuint8m1_t v7, size_t vl);
void vsuxseg2ei32_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint32m8_t bindex, vuint8m2_t v0, vuint8m2_t v1, size_t vl);
void vsuxseg3ei32_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint32m8_t bindex, vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t
    v2, size_t vl);
void vsuxseg4ei32_v_u8m2_m (vbool4_t mask, uint8_t *base,
    vuint32m8_t bindex, vuint8m2_t v0, vuint8m2_t v1, vuint8m2_t
    v2, vuint8m2_t v3, size_t vl);
void vsuxseg2ei64_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint64m8_t bindex, vuint8m1_t v0, vuint8m1_t v1, size_t vl);
void vsuxseg3ei64_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint64m8_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, size_t vl);
void vsuxseg4ei64_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint64m8_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, size_t vl);
void vsuxseg5ei64_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint64m8_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, size_t vl);
void vsuxseg6ei64_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint64m8_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, size_t vl);
void vsuxseg7ei64_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint64m8_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t
    v6, size_t vl);
void vsuxseg8ei64_v_u8m1_m (vbool8_t mask, uint8_t *base,
    vuint64m8_t bindex, vuint8m1_t v0, vuint8m1_t v1, vuint8m1_t
    v2, vuint8m1_t v3, vuint8m1_t v4, vuint8m1_t v5, vuint8m1_t
    v6, vuint8m1_t v7, size_t vl);
void vsuxseg2ei8_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint8m1_t bindex, vuint16m2_t v0, vuint16m2_t v1, size_t
    vl);
void vsuxseg3ei8_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint8m1_t bindex, vuint16m2_t v0, vuint16m2_t v1,
    vuint16m2_t v2, size_t vl);
void vsuxseg4ei8_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint8m1_t bindex, vuint16m2_t v0, vuint16m2_t v1,
```

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      vuint16m2_t v2, vuint16m2_t v3, size_t vl);
void vsuxseg2ei8_v_u16m4_m (vbool4_t mask, uint16_t *base,
    vuint8m2_t bindex, vuint16m4_t v0, vuint16m4_t v1, size_t
    vl);
void vsuxseg2ei16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t bindex, vuint16m1_t v0, vuint16m1_t v1, size_t
    vl);
void vsuxseg3ei16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, size_t vl);
void vsuxseg4ei16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, size_t vl);
void vsuxseg5ei16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, size_t vl);
void vsuxseg6ei16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
    v5, size_t vl);
void vsuxseg7ei16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
    v5, vuint16m1_t v6, size_t vl);
void vsuxseg8ei16_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint16m1_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
    v5, vuint16m1_t v6, vuint16m1_t v7, size_t vl);
void vsuxseg2ei16_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint16m2_t bindex, vuint16m2_t v0, vuint16m2_t v1, size_t
    vl);
void vsuxseg3ei16_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint16m2_t bindex, vuint16m2_t v0, vuint16m2_t v1,
    vuint16m2_t v2, size_t vl);
void vsuxseg4ei16_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint16m2_t bindex, vuint16m2_t v0, vuint16m2_t v1,
    vuint16m2_t v2, vuint16m2_t v3, size_t vl);
void vsuxseg2ei16_v_u16m4_m (vbool4_t mask, uint16_t *base,
    vuint16m4_t bindex, vuint16m4_t v0, vuint16m4_t v1, size_t
    vl);
void vsuxseg2ei32_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint32m2_t bindex, vuint16m1_t v0, vuint16m1_t v1, size_t
    vl);
void vsuxseg3ei32_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint32m2_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, size_t vl);
```

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void vsuxseg4ei32_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint32m2_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, size_t vl);
void vsuxseg5ei32_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint32m2_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, size_t vl);
void vsuxseg6ei32_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint32m2_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
    v5, size_t vl);
void vsuxseg7ei32_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint32m2_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
    v5, vuint16m1_t v6, size_t vl);
void vsuxseg8ei32_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint32m2_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
    v5, vuint16m1_t v6, vuint16m1_t v7, size_t vl);
void vsuxseg2ei32_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint32m4_t bindex, vuint16m2_t v0, vuint16m2_t v1, size_t
    vl);
void vsuxseg3ei32_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint32m4_t bindex, vuint16m2_t v0, vuint16m2_t v1,
    vuint16m2_t v2, size_t vl);
void vsuxseg4ei32_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint32m4_t bindex, vuint16m2_t v0, vuint16m2_t v1,
    vuint16m2_t v2, vuint16m2_t v3, size_t vl);
void vsuxseg2ei32_v_u16m4_m (vbool4_t mask, uint16_t *base,
    vuint32m8_t bindex, vuint16m4_t v0, vuint16m4_t v1, size_t
    vl);
void vsuxseg2ei64_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint64m4_t bindex, vuint16m1_t v0, vuint16m1_t v1, size_t
    vl);
void vsuxseg3ei64_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint64m4_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, size_t vl);
void vsuxseg4ei64_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint64m4_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, size_t vl);
void vsuxseg5ei64_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint64m4_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, size_t vl);
void vsuxseg6ei64_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint64m4_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
    v5, size_t vl);
```

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void vsuxseg7ei64_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint64m4_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
    v5, vuint16m1_t v6, size_t vl);
void vsuxseg8ei64_v_u16m1_m (vbool16_t mask, uint16_t *base,
    vuint64m4_t bindex, vuint16m1_t v0, vuint16m1_t v1,
    vuint16m1_t v2, vuint16m1_t v3, vuint16m1_t v4, vuint16m1_t
    v5, vuint16m1_t v6, vuint16m1_t v7, size_t vl);
void vsuxseg2ei64_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint64m8_t bindex, vuint16m2_t v0, vuint16m2_t v1, size_t
    vl);
void vsuxseg3ei64_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint64m8_t bindex, vuint16m2_t v0, vuint16m2_t v1,
    vuint16m2_t v2, size_t vl);
void vsuxseg4ei64_v_u16m2_m (vbool8_t mask, uint16_t *base,
    vuint64m8_t bindex, vuint16m2_t v0, vuint16m2_t v1,
    vuint16m2_t v2, vuint16m2_t v3, size_t vl);
void vsuxseg2ei8_v_u32m4_m (vbool8_t mask, uint32_t *base,
    vuint8m1_t bindex, vuint32m4_t v0, vuint32m4_t v1, size_t
    vl);
void vsuxseg2ei16_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint16m1_t bindex, vuint32m2_t v0, vuint32m2_t v1, size_t
    vl);
void vsuxseg3ei16_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint16m1_t bindex, vuint32m2_t v0, vuint32m2_t v1,
    vuint32m2_t v2, size_t vl);
void vsuxseg4ei16_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint16m1_t bindex, vuint32m2_t v0, vuint32m2_t v1,
    vuint32m2_t v2, vuint32m2_t v3, size_t vl);
void vsuxseg2ei16_v_u32m4_m (vbool8_t mask, uint32_t *base,
    vuint16m2_t bindex, vuint32m4_t v0, vuint32m4_t v1, size_t
    vl);
void vsuxseg2ei32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t bindex, vuint32m1_t v0, vuint32m1_t v1, size_t
    vl);
void vsuxseg3ei32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t bindex, vuint32m1_t v0, vuint32m1_t v1,
    vuint32m1_t v2, size_t vl);
void vsuxseg4ei32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t bindex, vuint32m1_t v0, vuint32m1_t v1,
    vuint32m1_t v2, vuint32m1_t v3, size_t vl);
void vsuxseg5ei32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t bindex, vuint32m1_t v0, vuint32m1_t v1,
    vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, size_t vl);
void vsuxseg6ei32_v_u32m1_m (vbool32_t mask, uint32_t *base,
    vuint32m1_t bindex, vuint32m1_t v0, vuint32m1_t v1,
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                vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, vuint32m1_t
                v5, size_t vl);
void vsuxseg7ei32_v_u32m1_m (vbool32_t mask, uint32_t *base,
                vuint32m1_t bindex, vuint32m1_t v0, vuint32m1_t v1,
                vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, vuint32m1_t
                v5, vuint32m1_t v6, size_t vl);
void vsuxseg8ei32_v_u32m1_m (vbool32_t mask, uint32_t *base,
                vuint32m1_t bindex, vuint32m1_t v0, vuint32m1_t v1,
                vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, vuint32m1_t
                v5, vuint32m1_t v6, vuint32m1_t v7, size_t vl);
void vsuxseg2ei32_v_u32m2_m (vbool16_t mask, uint32_t *base,
                vuint32m2_t bindex, vuint32m2_t v0, vuint32m2_t v1, size_t
                vl);
void vsuxseg3ei32_v_u32m2_m (vbool16_t mask, uint32_t *base,
                vuint32m2_t bindex, vuint32m2_t v0, vuint32m2_t v1,
                vuint32m2_t v2, size_t vl);
void vsuxseg4ei32_v_u32m2_m (vbool16_t mask, uint32_t *base,
                vuint32m2_t bindex, vuint32m2_t v0, vuint32m2_t v1,
                vuint32m2_t v2, vuint32m2_t v3, size_t vl);
void vsuxseg2ei32_v_u32m4_m (vbool8_t mask, uint32_t *base,
                vuint32m4_t bindex, vuint32m4_t v0, vuint32m4_t v1, size_t
                vl);
void vsuxseg2ei64_v_u32m1_m (vbool32_t mask, uint32_t *base,
                vuint64m2_t bindex, vuint32m1_t v0, vuint32m1_t v1, size_t
                vl);
void vsuxseg3ei64_v_u32m1_m (vbool32_t mask, uint32_t *base,
                vuint64m2_t bindex, vuint32m1_t v0, vuint32m1_t v1,
                vuint32m1_t v2, size_t vl);
void vsuxseg4ei64_v_u32m1_m (vbool32_t mask, uint32_t *base,
                vuint64m2_t bindex, vuint32m1_t v0, vuint32m1_t v1,
                vuint32m1_t v2, vuint32m1_t v3, size_t vl);
void vsuxseg5ei64_v_u32m1_m (vbool32_t mask, uint32_t *base,
                vuint64m2_t bindex, vuint32m1_t v0, vuint32m1_t v1,
                vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, size_t vl);
void vsuxseg6ei64_v_u32m1_m (vbool32_t mask, uint32_t *base,
                vuint64m2_t bindex, vuint32m1_t v0, vuint32m1_t v1,
                vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, vuint32m1_t
                v5, size_t vl);
void vsuxseg7ei64_v_u32m1_m (vbool32_t mask, uint32_t *base,
                vuint64m2_t bindex, vuint32m1_t v0, vuint32m1_t v1,
                vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, vuint32m1_t
                v5, vuint32m1_t v6, size_t vl);
void vsuxseg8ei64_v_u32m1_m (vbool32_t mask, uint32_t *base,
                vuint64m2_t bindex, vuint32m1_t v0, vuint32m1_t v1,
                vuint32m1_t v2, vuint32m1_t v3, vuint32m1_t v4, vuint32m1_t
                v5, vuint32m1_t v6, vuint32m1_t v7, size_t vl);
```

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void vsuxseg2ei64_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint64m4_t bindex, vuint32m2_t v0, vuint32m2_t v1, size_t
    vl);
void vsuxseg3ei64_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint64m4_t bindex, vuint32m2_t v0, vuint32m2_t v1,
    vuint32m2_t v2, size_t vl);
void vsuxseg4ei64_v_u32m2_m (vbool16_t mask, uint32_t *base,
    vuint64m4_t bindex, vuint32m2_t v0, vuint32m2_t v1,
    vuint32m2_t v2, vuint32m2_t v3, size_t vl);
void vsuxseg2ei64_v_u32m4_m (vbool8_t mask, uint32_t *base,
    vuint64m8_t bindex, vuint32m4_t v0, vuint32m4_t v1, size_t
    vl);
void vsuxseg2ei16_v_u64m4_m (vbool16_t mask, uint64_t *base,
    vuint16m1_t bindex, vuint64m4_t v0, vuint64m4_t v1, size_t
    vl);
void vsuxseg2ei32_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint32m1_t bindex, vuint64m2_t v0, vuint64m2_t v1, size_t
    vl);
void vsuxseg3ei32_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint32m1_t bindex, vuint64m2_t v0, vuint64m2_t v1,
    vuint64m2_t v2, size_t vl);
void vsuxseg4ei32_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint32m1_t bindex, vuint64m2_t v0, vuint64m2_t v1,
    vuint64m2_t v2, vuint64m2_t v3, size_t vl);
void vsuxseg2ei32_v_u64m4_m (vbool16_t mask, uint64_t *base,
    vuint32m2_t bindex, vuint64m4_t v0, vuint64m4_t v1, size_t
    vl);
void vsuxseg2ei64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t bindex, vuint64m1_t v0, vuint64m1_t v1, size_t
    vl);
void vsuxseg3ei64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t bindex, vuint64m1_t v0, vuint64m1_t v1,
    vuint64m1_t v2, size_t vl);
void vsuxseg4ei64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t bindex, vuint64m1_t v0, vuint64m1_t v1,
    vuint64m1_t v2, vuint64m1_t v3, size_t vl);
void vsuxseg5ei64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t bindex, vuint64m1_t v0, vuint64m1_t v1,
    vuint64m1_t v2, vuint64m1_t v3, vuint64m1_t v4, size_t vl);
void vsuxseg6ei64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t bindex, vuint64m1_t v0, vuint64m1_t v1,
    vuint64m1_t v2, vuint64m1_t v3, vuint64m1_t v4, vuint64m1_t
    v5, size_t vl);
void vsuxseg7ei64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t bindex, vuint64m1_t v0, vuint64m1_t v1,
    vuint64m1_t v2, vuint64m1_t v3, vuint64m1_t v4, vuint64m1_t
```

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        v5, vuint64m1_t v6, size_t vl);
void vsuxseg8ei64_v_u64m1_m (vbool64_t mask, uint64_t *base,
    vuint64m1_t bindex, vuint64m1_t v0, vuint64m1_t v1,
    vuint64m1_t v2, vuint64m1_t v3, vuint64m1_t v4, vuint64m1_t
    v5, vuint64m1_t v6, vuint64m1_t v7, size_t vl);
void vsuxseg2ei64_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint64m2_t bindex, vuint64m2_t v0, vuint64m2_t v1, size_t
    vl);
void vsuxseg3ei64_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint64m2_t bindex, vuint64m2_t v0, vuint64m2_t v1,
    vuint64m2_t v2, size_t vl);
void vsuxseg4ei64_v_u64m2_m (vbool32_t mask, uint64_t *base,
    vuint64m2_t bindex, vuint64m2_t v0, vuint64m2_t v1,
    vuint64m2_t v2, vuint64m2_t v3, size_t vl);
void vsuxseg2ei64_v_u64m4_m (vbool16_t mask, uint64_t *base,
    vuint64m4_t bindex, vuint64m4_t v0, vuint64m4_t v1, size_t
    vl);
void vsuxseg2ei8_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint8m1_t bindex, vfloat16m2_t v0, vfloat16m2_t v1, size_t
    vl);
void vsuxseg3ei8_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint8m1_t bindex, vfloat16m2_t v0, vfloat16m2_t v1,
    vfloat16m2_t v2, size_t vl);
void vsuxseg4ei8_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint8m1_t bindex, vfloat16m2_t v0, vfloat16m2_t v1,
    vfloat16m2_t v2, vfloat16m2_t v3, size_t vl);
void vsuxseg2ei8_v_f16m4_m (vbool4_t mask, float16_t *base,
    vuint8m2_t bindex, vfloat16m4_t v0, vfloat16m4_t v1, size_t
    vl);
void vsuxseg2ei16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint16m1_t bindex, vfloat16m1_t v0, vfloat16m1_t v1, size_t
    vl);
void vsuxseg3ei16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint16m1_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, size_t vl);
void vsuxseg4ei16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint16m1_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, size_t vl);
void vsuxseg5ei16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint16m1_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4, size_t
    vl);
void vsuxseg6ei16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint16m1_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, size_t vl);
```

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void vsuxseg7ei16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint16m1_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, vfloat16m1_t v6, size_t vl);
void vsuxseg8ei16_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint16m1_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, vfloat16m1_t v6, vfloat16m1_t v7, size_t
    vl);
void vsuxseg2ei16_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint16m2_t bindex, vfloat16m2_t v0, vfloat16m2_t v1, size_t
    vl);
void vsuxseg3ei16_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint16m2_t bindex, vfloat16m2_t v0, vfloat16m2_t v1,
    vfloat16m2_t v2, size_t vl);
void vsuxseg4ei16_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint16m2_t bindex, vfloat16m2_t v0, vfloat16m2_t v1,
    vfloat16m2_t v2, vfloat16m2_t v3, size_t vl);
void vsuxseg2ei16_v_f16m4_m (vbool4_t mask, float16_t *base,
    vuint16m4_t bindex, vfloat16m4_t v0, vfloat16m4_t v1, size_t
    vl);
void vsuxseg2ei32_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint32m2_t bindex, vfloat16m1_t v0, vfloat16m1_t v1, size_t
    vl);
void vsuxseg3ei32_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint32m2_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, size_t vl);
void vsuxseg4ei32_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint32m2_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, size_t vl);
void vsuxseg5ei32_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint32m2_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4, size_t
    vl);
void vsuxseg6ei32_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint32m2_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, size_t vl);
void vsuxseg7ei32_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint32m2_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, vfloat16m1_t v6, size_t vl);
void vsuxseg8ei32_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint32m2_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, vfloat16m1_t v6, vfloat16m1_t v7, size_t
```

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    vl);
void vsuxseg2ei32_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint32m4_t bindex, vfloat16m2_t v0, vfloat16m2_t v1, size_t
    vl);
void vsuxseg3ei32_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint32m4_t bindex, vfloat16m2_t v0, vfloat16m2_t v1,
    vfloat16m2_t v2, size_t vl);
void vsuxseg4ei32_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint32m4_t bindex, vfloat16m2_t v0, vfloat16m2_t v1,
    vfloat16m2_t v2, vfloat16m2_t v3, size_t vl);
void vsuxseg2ei32_v_f16m4_m (vbool4_t mask, float16_t *base,
    vuint32m8_t bindex, vfloat16m4_t v0, vfloat16m4_t v1, size_t
    vl);
void vsuxseg2ei64_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint64m4_t bindex, vfloat16m1_t v0, vfloat16m1_t v1, size_t
    vl);
void vsuxseg3ei64_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint64m4_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, size_t vl);
void vsuxseg4ei64_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint64m4_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, size_t vl);
void vsuxseg5ei64_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint64m4_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4, size_t
    vl);
void vsuxseg6ei64_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint64m4_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, size_t vl);
void vsuxseg7ei64_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint64m4_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, vfloat16m1_t v6, size_t vl);
void vsuxseg8ei64_v_f16m1_m (vbool16_t mask, float16_t *base,
    vuint64m4_t bindex, vfloat16m1_t v0, vfloat16m1_t v1,
    vfloat16m1_t v2, vfloat16m1_t v3, vfloat16m1_t v4,
    vfloat16m1_t v5, vfloat16m1_t v6, vfloat16m1_t v7, size_t
    vl);
void vsuxseg2ei64_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint64m8_t bindex, vfloat16m2_t v0, vfloat16m2_t v1, size_t
    vl);
void vsuxseg3ei64_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint64m8_t bindex, vfloat16m2_t v0, vfloat16m2_t v1,
    vfloat16m2_t v2, size_t vl);
```

```
void vsuxseg4ei64_v_f16m2_m (vbool8_t mask, float16_t *base,
    vuint64m8_t bindex, vfloat16m2_t v0, vfloat16m2_t v1,
    vfloat16m2_t v2, vfloat16m2_t v3, size_t vl);
void vsuxseg2ei8_v_f32m4_m (vbool8_t mask, float32_t *base,
    vuint8m1_t bindex, vfloat32m4_t v0, vfloat32m4_t v1, size_t
    vl);
void vsuxseg2ei16_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint16m1_t bindex, vfloat32m2_t v0, vfloat32m2_t v1, size_t
    vl);
void vsuxseg3ei16_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint16m1_t bindex, vfloat32m2_t v0, vfloat32m2_t v1,
    vfloat32m2_t v2, size_t vl);
void vsuxseg4ei16_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint16m1_t bindex, vfloat32m2_t v0, vfloat32m2_t v1,
    vfloat32m2_t v2, vfloat32m2_t v3, size_t vl);
void vsuxseg2ei16_v_f32m4_m (vbool8_t mask, float32_t *base,
    vuint16m2_t bindex, vfloat32m4_t v0, vfloat32m4_t v1, size_t
    vl);
void vsuxseg2ei32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint32m1_t bindex, vfloat32m1_t v0, vfloat32m1_t v1, size_t
    vl);
void vsuxseg3ei32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint32m1_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, size_t vl);
void vsuxseg4ei32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint32m1_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, size_t vl);
void vsuxseg5ei32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint32m1_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4, size_t
    vl);
void vsuxseg6ei32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint32m1_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4,
    vfloat32m1_t v5, size_t vl);
void vsuxseg7ei32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint32m1_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4,
    vfloat32m1_t v5, vfloat32m1_t v6, size_t vl);
void vsuxseg8ei32_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint32m1_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4,
    vfloat32m1_t v5, vfloat32m1_t v6, vfloat32m1_t v7, size_t
    vl);
void vsuxseg2ei32_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint32m2_t bindex, vfloat32m2_t v0, vfloat32m2_t v1, size_t
```

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    vl);
void vsuxseg3ei32_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint32m2_t bindex, vfloat32m2_t v0, vfloat32m2_t v1,
    vfloat32m2_t v2, size_t vl);
void vsuxseg4ei32_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint32m2_t bindex, vfloat32m2_t v0, vfloat32m2_t v1,
    vfloat32m2_t v2, vfloat32m2_t v3, size_t vl);
void vsuxseg2ei32_v_f32m4_m (vbool8_t mask, float32_t *base,
    vuint32m4_t bindex, vfloat32m4_t v0, vfloat32m4_t v1, size_t
    vl);
void vsuxseg2ei64_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint64m2_t bindex, vfloat32m1_t v0, vfloat32m1_t v1, size_t
    vl);
void vsuxseg3ei64_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint64m2_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, size_t vl);
void vsuxseg4ei64_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint64m2_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, size_t vl);
void vsuxseg5ei64_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint64m2_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4, size_t
    vl);
void vsuxseg6ei64_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint64m2_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4,
    vfloat32m1_t v5, size_t vl);
void vsuxseg7ei64_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint64m2_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4,
    vfloat32m1_t v5, vfloat32m1_t v6, size_t vl);
void vsuxseg8ei64_v_f32m1_m (vbool32_t mask, float32_t *base,
    vuint64m2_t bindex, vfloat32m1_t v0, vfloat32m1_t v1,
    vfloat32m1_t v2, vfloat32m1_t v3, vfloat32m1_t v4,
    vfloat32m1_t v5, vfloat32m1_t v6, vfloat32m1_t v7, size_t
    vl);
void vsuxseg2ei64_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint64m4_t bindex, vfloat32m2_t v0, vfloat32m2_t v1, size_t
    vl);
void vsuxseg3ei64_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint64m4_t bindex, vfloat32m2_t v0, vfloat32m2_t v1,
    vfloat32m2_t v2, size_t vl);
void vsuxseg4ei64_v_f32m2_m (vbool16_t mask, float32_t *base,
    vuint64m4_t bindex, vfloat32m2_t v0, vfloat32m2_t v1,
    vfloat32m2_t v2, vfloat32m2_t v3, size_t vl);
```

```
void vsuxseg2ei64_v_f32m4_m (vbool8_t mask, float32_t *base,
    vuint64m8_t bindex, vfloat32m4_t v0, vfloat32m4_t v1, size_t
    vl);
void vsuxseg2ei16_v_f64m4_m (vbool16_t mask, float64_t *base,
    vuint16m1_t bindex, vfloat64m4_t v0, vfloat64m4_t v1, size_t
    vl);
void vsuxseg2ei32_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint32m1_t bindex, vfloat64m2_t v0, vfloat64m2_t v1, size_t
    vl);
void vsuxseg3ei32_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint32m1_t bindex, vfloat64m2_t v0, vfloat64m2_t v1,
    vfloat64m2_t v2, size_t vl);
void vsuxseg4ei32_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint32m1_t bindex, vfloat64m2_t v0, vfloat64m2_t v1,
    vfloat64m2_t v2, vfloat64m2_t v3, size_t vl);
void vsuxseg2ei32_v_f64m4_m (vbool16_t mask, float64_t *base,
    vuint32m2_t bindex, vfloat64m4_t v0, vfloat64m4_t v1, size_t
    vl);
void vsuxseg2ei64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint64m1_t bindex, vfloat64m1_t v0, vfloat64m1_t v1, size_t
    vl);
void vsuxseg3ei64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint64m1_t bindex, vfloat64m1_t v0, vfloat64m1_t v1,
    vfloat64m1_t v2, size_t vl);
void vsuxseg4ei64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint64m1_t bindex, vfloat64m1_t v0, vfloat64m1_t v1,
    vfloat64m1_t v2, vfloat64m1_t v3, size_t vl);
void vsuxseg5ei64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint64m1_t bindex, vfloat64m1_t v0, vfloat64m1_t v1,
    vfloat64m1_t v2, vfloat64m1_t v3, vfloat64m1_t v4, size_t
    vl);
void vsuxseg6ei64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint64m1_t bindex, vfloat64m1_t v0, vfloat64m1_t v1,
    vfloat64m1_t v2, vfloat64m1_t v3, vfloat64m1_t v4,
    vfloat64m1_t v5, size_t vl);
void vsuxseg7ei64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint64m1_t bindex, vfloat64m1_t v0, vfloat64m1_t v1,
    vfloat64m1_t v2, vfloat64m1_t v3, vfloat64m1_t v4,
    vfloat64m1_t v5, vfloat64m1_t v6, size_t vl);
void vsuxseg8ei64_v_f64m1_m (vbool64_t mask, float64_t *base,
    vuint64m1_t bindex, vfloat64m1_t v0, vfloat64m1_t v1,
    vfloat64m1_t v2, vfloat64m1_t v3, vfloat64m1_t v4,
    vfloat64m1_t v5, vfloat64m1_t v6, vfloat64m1_t v7, size_t
    vl);
void vsuxseg2ei64_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint64m2_t bindex, vfloat64m2_t v0, vfloat64m2_t v1, size_t
```

```
    vl);
void vsuxseg3ei64_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint64m2_t bindex, vfloat64m2_t v0, vfloat64m2_t v1,
    vfloat64m2_t v2, size_t vl);
void vsuxseg4ei64_v_f64m2_m (vbool32_t mask, float64_t *base,
    vuint64m2_t bindex, vfloat64m2_t v0, vfloat64m2_t v1,
    vfloat64m2_t v2, vfloat64m2_t v3, size_t vl);
void vsuxseg2ei64_v_f64m4_m (vbool16_t mask, float64_t *base,
    vuint64m4_t bindex, vfloat64m4_t v0, vfloat64m4_t v1, size_t
    vl);
```

Vector Integer Arithmetic Functions:

Vector Single-Width Integer Add and Subtract Functions:

Prototypes:

```
vint8mf8_t vadd_vv_i8mf8 (vint8mf8_t op1, vint8mf8_t op2, size_t
    vl);
vint8mf8_t vadd_vx_i8mf8 (vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vadd_vv_i8mf4 (vint8mf4_t op1, vint8mf4_t op2, size_t
    vl);
vint8mf4_t vadd_vx_i8mf4 (vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vadd_vv_i8mf2 (vint8mf2_t op1, vint8mf2_t op2, size_t
    vl);
vint8mf2_t vadd_vx_i8mf2 (vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vadd_vv_i8m1 (vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vadd_vx_i8m1 (vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vadd_vv_i8m2 (vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vadd_vx_i8m2 (vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vadd_vv_i8m4 (vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vadd_vx_i8m4 (vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vadd_vv_i8m8 (vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vadd_vx_i8m8 (vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vadd_vv_i16mf4 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vint16mf4_t vadd_vx_i16mf4 (vint16mf4_t op1, int16_t op2, size_t
    vl);
vint16mf2_t vadd_vv_i16mf2 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vint16mf2_t vadd_vx_i16mf2 (vint16mf2_t op1, int16_t op2, size_t
    vl);
vint16m1_t vadd_vv_i16m1 (vint16m1_t op1, vint16m1_t op2, size_t
    vl);
vint16m1_t vadd_vx_i16m1 (vint16m1_t op1, int16_t op2, size_t
    vl);
```

```
vint16m2_t vadd_vv_i16m2 (vint16m2_t op1, vint16m2_t op2, size_t
    vl);
vint16m2_t vadd_vx_i16m2 (vint16m2_t op1, int16_t op2, size_t
    vl);
vint16m4_t vadd_vv_i16m4 (vint16m4_t op1, vint16m4_t op2, size_t
    vl);
vint16m4_t vadd_vx_i16m4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vint16m8_t vadd_vv_i16m8 (vint16m8_t op1, vint16m8_t op2, size_t
    vl);
vint16m8_t vadd_vx_i16m8 (vint16m8_t op1, int16_t op2, size_t
    vl);
vint32mf2_t vadd_vv_i32mf2 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vint32mf2_t vadd_vx_i32mf2 (vint32mf2_t op1, int32_t op2, size_t
    vl);
vint32m1_t vadd_vv_i32m1 (vint32m1_t op1, vint32m1_t op2, size_t
    vl);
vint32m1_t vadd_vx_i32m1 (vint32m1_t op1, int32_t op2, size_t
    vl);
vint32m2_t vadd_vv_i32m2 (vint32m2_t op1, vint32m2_t op2, size_t
    vl);
vint32m2_t vadd_vx_i32m2 (vint32m2_t op1, int32_t op2, size_t
    vl);
vint32m4_t vadd_vv_i32m4 (vint32m4_t op1, vint32m4_t op2, size_t
    vl);
vint32m4_t vadd_vx_i32m4 (vint32m4_t op1, int32_t op2, size_t
    vl);
vint32m8_t vadd_vv_i32m8 (vint32m8_t op1, vint32m8_t op2, size_t
    vl);
vint32m8_t vadd_vx_i32m8 (vint32m8_t op1, int32_t op2, size_t
    vl);
vint64m1_t vadd_vv_i64m1 (vint64m1_t op1, vint64m1_t op2, size_t
    vl);
vint64m1_t vadd_vx_i64m1 (vint64m1_t op1, int64_t op2, size_t
    vl);
vint64m2_t vadd_vv_i64m2 (vint64m2_t op1, vint64m2_t op2, size_t
    vl);
vint64m2_t vadd_vx_i64m2 (vint64m2_t op1, int64_t op2, size_t
    vl);
vint64m4_t vadd_vv_i64m4 (vint64m4_t op1, vint64m4_t op2, size_t
    vl);
vint64m4_t vadd_vx_i64m4 (vint64m4_t op1, int64_t op2, size_t
    vl);
vint64m8_t vadd_vv_i64m8 (vint64m8_t op1, vint64m8_t op2, size_t
    vl);
```

```
vint64m8_t vadd_vx_i64m8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vuint8mf8_t vadd_vv_u8mf8 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vuint8mf8_t vadd_vx_u8mf8 (vuint8mf8_t op1, uint8_t op2, size_t
    vl);
vuint8mf4_t vadd_vv_u8mf4 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vuint8mf4_t vadd_vx_u8mf4 (vuint8mf4_t op1, uint8_t op2, size_t
    vl);
vuint8mf2_t vadd_vv_u8mf2 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vuint8mf2_t vadd_vx_u8mf2 (vuint8mf2_t op1, uint8_t op2, size_t
    vl);
vuint8m1_t vadd_vv_u8m1 (vuint8m1_t op1, vuint8m1_t op2, size_t
    vl);
vuint8m1_t vadd_vx_u8m1 (vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vadd_vv_u8m2 (vuint8m2_t op1, vuint8m2_t op2, size_t
    vl);
vuint8m2_t vadd_vx_u8m2 (vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vadd_vv_u8m4 (vuint8m4_t op1, vuint8m4_t op2, size_t
    vl);
vuint8m4_t vadd_vx_u8m4 (vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vadd_vv_u8m8 (vuint8m8_t op1, vuint8m8_t op2, size_t
    vl);
vuint8m8_t vadd_vx_u8m8 (vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vadd_vv_u16mf4 (vuint16mf4_t op1, vuint16mf4_t op2,
    size_t vl);
vuint16mf4_t vadd_vx_u16mf4 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vuint16mf2_t vadd_vv_u16mf2 (vuint16mf2_t op1, vuint16mf2_t op2,
    size_t vl);
vuint16mf2_t vadd_vx_u16mf2 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vuint16m1_t vadd_vv_u16m1 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vuint16m1_t vadd_vx_u16m1 (vuint16m1_t op1, uint16_t op2, size_t
    vl);
vuint16m2_t vadd_vv_u16m2 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vuint16m2_t vadd_vx_u16m2 (vuint16m2_t op1, uint16_t op2, size_t
    vl);
vuint16m4_t vadd_vv_u16m4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vuint16m4_t vadd_vx_u16m4 (vuint16m4_t op1, uint16_t op2, size_t
    vl);
```

```
vuint16m8_t vadd_vv_u16m8 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vuint16m8_t vadd_vx_u16m8 (vuint16m8_t op1, uint16_t op2, size_t
    vl);
vuint32mf2_t vadd_vv_u32mf2 (vuint32mf2_t op1, vuint32mf2_t op2,
    size_t vl);
vuint32mf2_t vadd_vx_u32mf2 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vuint32m1_t vadd_vv_u32m1 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vuint32m1_t vadd_vx_u32m1 (vuint32m1_t op1, uint32_t op2, size_t
    vl);
vuint32m2_t vadd_vv_u32m2 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vuint32m2_t vadd_vx_u32m2 (vuint32m2_t op1, uint32_t op2, size_t
    vl);
vuint32m4_t vadd_vv_u32m4 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vuint32m4_t vadd_vx_u32m4 (vuint32m4_t op1, uint32_t op2, size_t
    vl);
vuint32m8_t vadd_vv_u32m8 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vuint32m8_t vadd_vx_u32m8 (vuint32m8_t op1, uint32_t op2, size_t
    vl);
vuint64m1_t vadd_vv_u64m1 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vuint64m1_t vadd_vx_u64m1 (vuint64m1_t op1, uint64_t op2, size_t
    vl);
vuint64m2_t vadd_vv_u64m2 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vuint64m2_t vadd_vx_u64m2 (vuint64m2_t op1, uint64_t op2, size_t
    vl);
vuint64m4_t vadd_vv_u64m4 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vuint64m4_t vadd_vx_u64m4 (vuint64m4_t op1, uint64_t op2, size_t
    vl);
vuint64m8_t vadd_vv_u64m8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vuint64m8_t vadd_vx_u64m8 (vuint64m8_t op1, uint64_t op2, size_t
    vl);
vint8mf8_t vsub_vv_i8mf8 (vint8mf8_t op1, vint8mf8_t op2, size_t
    vl);
vint8mf8_t vsub_vx_i8mf8 (vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vsub_vv_i8mf4 (vint8mf4_t op1, vint8mf4_t op2, size_t
    vl);
vint8mf4_t vsub_vx_i8mf4 (vint8mf4_t op1, int8_t op2, size_t vl);
```

```
vint8mf2_t vsub_vv_i8mf2 (vint8mf2_t op1, vint8mf2_t op2, size_t
    vl);
vint8mf2_t vsub_vx_i8mf2 (vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vsub_vv_i8m1 (vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vsub_vx_i8m1 (vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vsub_vv_i8m2 (vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vsub_vx_i8m2 (vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vsub_vv_i8m4 (vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vsub_vx_i8m4 (vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vsub_vv_i8m8 (vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vsub_vx_i8m8 (vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vsub_vv_i16mf4 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vint16mf4_t vsub_vx_i16mf4 (vint16mf4_t op1, int16_t op2, size_t
    vl);
vint16mf2_t vsub_vv_i16mf2 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vint16mf2_t vsub_vx_i16mf2 (vint16mf2_t op1, int16_t op2, size_t
    vl);
vint16m1_t vsub_vv_i16m1 (vint16m1_t op1, vint16m1_t op2, size_t
    vl);
vint16m1_t vsub_vx_i16m1 (vint16m1_t op1, int16_t op2, size_t
    vl);
vint16m2_t vsub_vv_i16m2 (vint16m2_t op1, vint16m2_t op2, size_t
    vl);
vint16m2_t vsub_vx_i16m2 (vint16m2_t op1, int16_t op2, size_t
    vl);
vint16m4_t vsub_vv_i16m4 (vint16m4_t op1, vint16m4_t op2, size_t
    vl);
vint16m4_t vsub_vx_i16m4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vint16m8_t vsub_vv_i16m8 (vint16m8_t op1, vint16m8_t op2, size_t
    vl);
vint16m8_t vsub_vx_i16m8 (vint16m8_t op1, int16_t op2, size_t
    vl);
vint32mf2_t vsub_vv_i32mf2 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vint32mf2_t vsub_vx_i32mf2 (vint32mf2_t op1, int32_t op2, size_t
    vl);
vint32m1_t vsub_vv_i32m1 (vint32m1_t op1, vint32m1_t op2, size_t
    vl);
vint32m1_t vsub_vx_i32m1 (vint32m1_t op1, int32_t op2, size_t
    vl);
vint32m2_t vsub_vv_i32m2 (vint32m2_t op1, vint32m2_t op2, size_t
    vl);
```

```
vint32m2_t vsub_vx_i32m2 (vint32m2_t op1, int32_t op2, size_t
    vl);
vint32m4_t vsub_vv_i32m4 (vint32m4_t op1, vint32m4_t op2, size_t
    vl);
vint32m4_t vsub_vx_i32m4 (vint32m4_t op1, int32_t op2, size_t
    vl);
vint32m8_t vsub_vv_i32m8 (vint32m8_t op1, vint32m8_t op2, size_t
    vl);
vint32m8_t vsub_vx_i32m8 (vint32m8_t op1, int32_t op2, size_t
    vl);
vint64m1_t vsub_vv_i64m1 (vint64m1_t op1, vint64m1_t op2, size_t
    vl);
vint64m1_t vsub_vx_i64m1 (vint64m1_t op1, int64_t op2, size_t
    vl);
vint64m2_t vsub_vv_i64m2 (vint64m2_t op1, vint64m2_t op2, size_t
    vl);
vint64m2_t vsub_vx_i64m2 (vint64m2_t op1, int64_t op2, size_t
    vl);
vint64m4_t vsub_vv_i64m4 (vint64m4_t op1, vint64m4_t op2, size_t
    vl);
vint64m4_t vsub_vx_i64m4 (vint64m4_t op1, int64_t op2, size_t
    vl);
vint64m8_t vsub_vv_i64m8 (vint64m8_t op1, vint64m8_t op2, size_t
    vl);
vint64m8_t vsub_vx_i64m8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vuint8mf8_t vsub_vv_u8mf8 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vuint8mf8_t vsub_vx_u8mf8 (vuint8mf8_t op1, uint8_t op2, size_t
    vl);
vuint8mf4_t vsub_vv_u8mf4 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vuint8mf4_t vsub_vx_u8mf4 (vuint8mf4_t op1, uint8_t op2, size_t
    vl);
vuint8mf2_t vsub_vv_u8mf2 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vuint8mf2_t vsub_vx_u8mf2 (vuint8mf2_t op1, uint8_t op2, size_t
    vl);
vuint8m1_t vsub_vv_u8m1 (vuint8m1_t op1, vuint8m1_t op2, size_t
    vl);
vuint8m1_t vsub_vx_u8m1 (vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vsub_vv_u8m2 (vuint8m2_t op1, vuint8m2_t op2, size_t
    vl);
vuint8m2_t vsub_vx_u8m2 (vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vsub_vv_u8m4 (vuint8m4_t op1, vuint8m4_t op2, size_t
    vl);
```

```
vuint8m4_t vsub_vx_u8m4 (vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vsub_vv_u8m8 (vuint8m8_t op1, vuint8m8_t op2, size_t
    vl);
vuint8m8_t vsub_vx_u8m8 (vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vsub_vv_u16mf4 (vuint16mf4_t op1, vuint16mf4_t op2,
    size_t vl);
vuint16mf4_t vsub_vx_u16mf4 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vuint16mf2_t vsub_vv_u16mf2 (vuint16mf2_t op1, vuint16mf2_t op2,
    size_t vl);
vuint16mf2_t vsub_vx_u16mf2 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vuint16m1_t vsub_vv_u16m1 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vuint16m1_t vsub_vx_u16m1 (vuint16m1_t op1, uint16_t op2, size_t
    vl);
vuint16m2_t vsub_vv_u16m2 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vuint16m2_t vsub_vx_u16m2 (vuint16m2_t op1, uint16_t op2, size_t
    vl);
vuint16m4_t vsub_vv_u16m4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vuint16m4_t vsub_vx_u16m4 (vuint16m4_t op1, uint16_t op2, size_t
    vl);
vuint16m8_t vsub_vv_u16m8 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vuint16m8_t vsub_vx_u16m8 (vuint16m8_t op1, uint16_t op2, size_t
    vl);
vuint32mf2_t vsub_vv_u32mf2 (vuint32mf2_t op1, vuint32mf2_t op2,
    size_t vl);
vuint32mf2_t vsub_vx_u32mf2 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vuint32m1_t vsub_vv_u32m1 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vuint32m1_t vsub_vx_u32m1 (vuint32m1_t op1, uint32_t op2, size_t
    vl);
vuint32m2_t vsub_vv_u32m2 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vuint32m2_t vsub_vx_u32m2 (vuint32m2_t op1, uint32_t op2, size_t
    vl);
vuint32m4_t vsub_vv_u32m4 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vuint32m4_t vsub_vx_u32m4 (vuint32m4_t op1, uint32_t op2, size_t
    vl);
vuint32m8_t vsub_vv_u32m8 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
```

```
vuint32m8_t vsub_vx_u32m8 (vuint32m8_t op1, uint32_t op2, size_t
    vl);
vuint64m1_t vsub_vv_u64m1 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vuint64m1_t vsub_vx_u64m1 (vuint64m1_t op1, uint64_t op2, size_t
    vl);
vuint64m2_t vsub_vv_u64m2 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vuint64m2_t vsub_vx_u64m2 (vuint64m2_t op1, uint64_t op2, size_t
    vl);
vuint64m4_t vsub_vv_u64m4 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vuint64m4_t vsub_vx_u64m4 (vuint64m4_t op1, uint64_t op2, size_t
    vl);
vuint64m8_t vsub_vv_u64m8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vuint64m8_t vsub_vx_u64m8 (vuint64m8_t op1, uint64_t op2, size_t
    vl);
vint8mf8_t vrsub_vx_i8mf8 (vint8mf8_t op1, int8_t op2, size_t
    vl);
vint8mf4_t vrsub_vx_i8mf4 (vint8mf4_t op1, int8_t op2, size_t
    vl);
vint8mf2_t vrsub_vx_i8mf2 (vint8mf2_t op1, int8_t op2, size_t
    vl);
vint8m1_t vrsub_vx_i8m1 (vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vrsub_vx_i8m2 (vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vrsub_vx_i8m4 (vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vrsub_vx_i8m8 (vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vrsub_vx_i16mf4 (vint16mf4_t op1, int16_t op2,
    size_t vl);
vint16mf2_t vrsub_vx_i16mf2 (vint16mf2_t op1, int16_t op2,
    size_t vl);
vint16m1_t vrsub_vx_i16m1 (vint16m1_t op1, int16_t op2, size_t
    vl);
vint16m2_t vrsub_vx_i16m2 (vint16m2_t op1, int16_t op2, size_t
    vl);
vint16m4_t vrsub_vx_i16m4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vint16m8_t vrsub_vx_i16m8 (vint16m8_t op1, int16_t op2, size_t
    vl);
vint32mf2_t vrsub_vx_i32mf2 (vint32mf2_t op1, int32_t op2,
    size_t vl);
vint32m1_t vrsub_vx_i32m1 (vint32m1_t op1, int32_t op2, size_t
    vl);
vint32m2_t vrsub_vx_i32m2 (vint32m2_t op1, int32_t op2, size_t
    vl);
```

```
vint32m4_t vrsub_vx_i32m4 (vint32m4_t op1, int32_t op2, size_t
    vl);
vint32m8_t vrsub_vx_i32m8 (vint32m8_t op1, int32_t op2, size_t
    vl);
vint64m1_t vrsub_vx_i64m1 (vint64m1_t op1, int64_t op2, size_t
    vl);
vint64m2_t vrsub_vx_i64m2 (vint64m2_t op1, int64_t op2, size_t
    vl);
vint64m4_t vrsub_vx_i64m4 (vint64m4_t op1, int64_t op2, size_t
    vl);
vint64m8_t vrsub_vx_i64m8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vuint8mf8_t vrsub_vx_u8mf8 (vuint8mf8_t op1, uint8_t op2, size_t
    vl);
vuint8mf4_t vrsub_vx_u8mf4 (vuint8mf4_t op1, uint8_t op2, size_t
    vl);
vuint8mf2_t vrsub_vx_u8mf2 (vuint8mf2_t op1, uint8_t op2, size_t
    vl);
vuint8m1_t vrsub_vx_u8m1 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vuint8m2_t vrsub_vx_u8m2 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vuint8m4_t vrsub_vx_u8m4 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
vuint8m8_t vrsub_vx_u8m8 (vuint8m8_t op1, uint8_t op2, size_t
    vl);
vuint16mf4_t vrsub_vx_u16mf4 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vuint16mf2_t vrsub_vx_u16mf2 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vuint16m1_t vrsub_vx_u16m1 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vuint16m2_t vrsub_vx_u16m2 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vuint16m4_t vrsub_vx_u16m4 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
vuint16m8_t vrsub_vx_u16m8 (vuint16m8_t op1, uint16_t op2,
    size_t vl);
vuint32mf2_t vrsub_vx_u32mf2 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vuint32m1_t vrsub_vx_u32m1 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vuint32m2_t vrsub_vx_u32m2 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vuint32m4_t vrsub_vx_u32m4 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
```

```
vuint32m8_t vrsub_vx_u32m8 (vuint32m8_t op1, uint32_t op2,
    size_t vl);
vuint64m1_t vrsub_vx_u64m1 (vuint64m1_t op1, uint64_t op2,
    size_t vl);
vuint64m2_t vrsub_vx_u64m2 (vuint64m2_t op1, uint64_t op2,
    size_t vl);
vuint64m4_t vrsub_vx_u64m4 (vuint64m4_t op1, uint64_t op2,
    size_t vl);
vuint64m8_t vrsub_vx_u64m8 (vuint64m8_t op1, uint64_t op2,
    size_t vl);
vint8mf8_t vneg_v_i8mf8 (vint8mf8_t op1, size_t vl);
vint8mf4_t vneg_v_i8mf4 (vint8mf4_t op1, size_t vl);
vint8mf2_t vneg_v_i8mf2 (vint8mf2_t op1, size_t vl);
vint8m1_t vneg_v_i8m1 (vint8m1_t op1, size_t vl);
vint8m2_t vneg_v_i8m2 (vint8m2_t op1, size_t vl);
vint8m4_t vneg_v_i8m4 (vint8m4_t op1, size_t vl);
vint8m8_t vneg_v_i8m8 (vint8m8_t op1, size_t vl);
vint16mf4_t vneg_v_i16mf4 (vint16mf4_t op1, size_t vl);
vint16mf2_t vneg_v_i16mf2 (vint16mf2_t op1, size_t vl);
vint16m1_t vneg_v_i16m1 (vint16m1_t op1, size_t vl);
vint16m2_t vneg_v_i16m2 (vint16m2_t op1, size_t vl);
vint16m4_t vneg_v_i16m4 (vint16m4_t op1, size_t vl);
vint16m8_t vneg_v_i16m8 (vint16m8_t op1, size_t vl);
vint32mf2_t vneg_v_i32mf2 (vint32mf2_t op1, size_t vl);
vint32m1_t vneg_v_i32m1 (vint32m1_t op1, size_t vl);
vint32m2_t vneg_v_i32m2 (vint32m2_t op1, size_t vl);
vint32m4_t vneg_v_i32m4 (vint32m4_t op1, size_t vl);
vint32m8_t vneg_v_i32m8 (vint32m8_t op1, size_t vl);
vint64m1_t vneg_v_i64m1 (vint64m1_t op1, size_t vl);
vint64m2_t vneg_v_i64m2 (vint64m2_t op1, size_t vl);
vint64m4_t vneg_v_i64m4 (vint64m4_t op1, size_t vl);
vint64m8_t vneg_v_i64m8 (vint64m8_t op1, size_t vl);
// masked functions
vint8mf8_t vadd_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vint8mf8_t vadd_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vadd_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint8mf4_t vadd_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vadd_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint8mf2_t vadd_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
```

```
vint8m1_t vadd_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vadd_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vadd_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vadd_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vadd_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vadd_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vadd_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vadd_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vadd_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vint16mf4_t vadd_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vint16mf2_t vadd_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vint16mf2_t vadd_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vint16m1_t vadd_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vint16m1_t vadd_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vint16m2_t vadd_vv_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, vint16m2_t op2, size_t vl);
vint16m2_t vadd_vx_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, int16_t op2, size_t vl);
vint16m4_t vadd_vv_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, vint16m4_t op2, size_t vl);
vint16m4_t vadd_vx_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, int16_t op2, size_t vl);
vint16m8_t vadd_vv_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, vint16m8_t op2, size_t vl);
vint16m8_t vadd_vx_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, int16_t op2, size_t vl);
vint32mf2_t vadd_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vint32mf2_t vadd_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vint32m1_t vadd_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
```

```
vint32m1_t vadd_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vint32m2_t vadd_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vint32m2_t vadd_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vint32m4_t vadd_vv_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, vint32m4_t op2, size_t vl);
vint32m4_t vadd_vx_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, int32_t op2, size_t vl);
vint32m8_t vadd_vv_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, vint32m8_t op2, size_t vl);
vint32m8_t vadd_vx_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, int32_t op2, size_t vl);
vint64m1_t vadd_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vint64m1_t vadd_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vint64m2_t vadd_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vint64m2_t vadd_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vint64m4_t vadd_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vint64m4_t vadd_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vint64m8_t vadd_vv_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, vint64m8_t op2, size_t vl);
vint64m8_t vadd_vx_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, int64_t op2, size_t vl);
vuint8mf8_t vadd_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vuint8mf8_t vadd_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vuint8mf4_t vadd_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vuint8mf4_t vadd_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vuint8mf2_t vadd_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vuint8mf2_t vadd_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vuint8m1_t vadd_vv_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vuint8m1_t vadd_vx_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, uint8_t op2, size_t vl);
```

```
vuint8m2_t vadd_vv_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vuint8m2_t vadd_vx_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vadd_vv_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vuint8m4_t vadd_vx_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vadd_vv_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vuint8m8_t vadd_vx_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vadd_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vuint16mf4_t vadd_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vuint16mf2_t vadd_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vuint16mf2_t vadd_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vuint16m1_t vadd_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vuint16m1_t vadd_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vuint16m2_t vadd_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vuint16m2_t vadd_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vuint16m4_t vadd_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vuint16m4_t vadd_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vuint16m8_t vadd_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vuint16m8_t vadd_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vuint32mf2_t vadd_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vuint32mf2_t vadd_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vuint32m1_t vadd_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vuint32m1_t vadd_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vuint32m2_t vadd_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
```

```
vuint32m2_t vadd_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vuint32m4_t vadd_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vuint32m4_t vadd_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vuint32m8_t vadd_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vuint32m8_t vadd_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vuint64m1_t vadd_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vuint64m1_t vadd_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
vuint64m2_t vadd_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vuint64m2_t vadd_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vuint64m4_t vadd_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vuint64m4_t vadd_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vuint64m8_t vadd_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vuint64m8_t vadd_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
vint8mf8_t vsub_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vint8mf8_t vsub_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vsub_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint8mf4_t vsub_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vsub_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint8mf2_t vsub_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vsub_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vsub_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vsub_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vsub_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
```

```
vint8m4_t vsub_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vsub_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vsub_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vsub_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vsub_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vint16mf4_t vsub_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vint16mf2_t vsub_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vint16mf2_t vsub_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vint16m1_t vsub_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vint16m1_t vsub_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vint16m2_t vsub_vv_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, vint16m2_t op2, size_t vl);
vint16m2_t vsub_vx_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, int16_t op2, size_t vl);
vint16m4_t vsub_vv_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, vint16m4_t op2, size_t vl);
vint16m4_t vsub_vx_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, int16_t op2, size_t vl);
vint16m8_t vsub_vv_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, vint16m8_t op2, size_t vl);
vint16m8_t vsub_vx_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, int16_t op2, size_t vl);
vint32mf2_t vsub_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vint32mf2_t vsub_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vint32m1_t vsub_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vint32m1_t vsub_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vint32m2_t vsub_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vint32m2_t vsub_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vint32m4_t vsub_vv_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, vint32m4_t op2, size_t vl);
```

```
vint32m4_t vsub_vx_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, int32_t op2, size_t vl);
vint32m8_t vsub_vv_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, vint32m8_t op2, size_t vl);
vint32m8_t vsub_vx_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, int32_t op2, size_t vl);
vint64m1_t vsub_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vint64m1_t vsub_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vint64m2_t vsub_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vint64m2_t vsub_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vint64m4_t vsub_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vint64m4_t vsub_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vint64m8_t vsub_vv_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, vint64m8_t op2, size_t vl);
vint64m8_t vsub_vx_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, int64_t op2, size_t vl);
vuint8mf8_t vsub_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vuint8mf8_t vsub_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vuint8mf4_t vsub_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vuint8mf4_t vsub_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vuint8mf2_t vsub_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vuint8mf2_t vsub_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vuint8m1_t vsub_vv_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vuint8m1_t vsub_vx_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vsub_vv_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vuint8m2_t vsub_vx_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vsub_vv_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vuint8m4_t vsub_vx_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, uint8_t op2, size_t vl);
```

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vuint8m8_t vsub_vv_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vuint8m8_t vsub_vx_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vsub_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vuint16mf4_t vsub_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vuint16mf2_t vsub_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vuint16mf2_t vsub_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vuint16m1_t vsub_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vuint16m1_t vsub_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vuint16m2_t vsub_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vuint16m2_t vsub_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vuint16m4_t vsub_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vuint16m4_t vsub_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vuint16m8_t vsub_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vuint16m8_t vsub_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vuint32mf2_t vsub_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vuint32mf2_t vsub_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vuint32m1_t vsub_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vuint32m1_t vsub_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vuint32m2_t vsub_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vuint32m2_t vsub_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vuint32m4_t vsub_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vuint32m4_t vsub_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vuint32m8_t vsub_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint32m8_t op2, size_t vl);
```

```
vuint32m8_t vsub_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vuint64m1_t vsub_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vuint64m1_t vsub_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
vuint64m2_t vsub_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vuint64m2_t vsub_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vuint64m4_t vsub_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vuint64m4_t vsub_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vuint64m8_t vsub_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vuint64m8_t vsub_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
vint8mf8_t vrsub_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vrsub_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vrsub_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vrsub_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vrsub_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vrsub_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vrsub_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vrsub_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vint16mf2_t vrsub_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vint16m1_t vrsub_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vint16m2_t vrsub_vx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, int16_t op2, size_t vl);
vint16m4_t vrsub_vx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, int16_t op2, size_t vl);
vint16m8_t vrsub_vx_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, int16_t op2, size_t vl);
vint32mf2_t vrsub_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
```

```
vint32m1_t vrsub_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vint32m2_t vrsub_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vint32m4_t vrsub_vx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, int32_t op2, size_t vl);
vint32m8_t vrsub_vx_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, int32_t op2, size_t vl);
vint64m1_t vrsub_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vint64m2_t vrsub_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vint64m4_t vrsub_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vint64m8_t vrsub_vx_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, int64_t op2, size_t vl);
vuint8mf8_t vrsub_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vuint8mf4_t vrsub_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vuint8mf2_t vrsub_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vuint8m1_t vrsub_vx_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vrsub_vx_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vrsub_vx_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vrsub_vx_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vrsub_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vuint16mf2_t vrsub_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vuint16m1_t vrsub_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vuint16m2_t vrsub_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vuint16m4_t vrsub_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vuint16m8_t vrsub_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vuint32mf2_t vrsub_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vuint32m1_t vrsub_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
```

```
vuint32m2_t vrsub_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vuint32m4_t vrsub_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vuint32m8_t vrsub_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vuint64m1_t vrsub_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
vuint64m2_t vrsub_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vuint64m4_t vrsub_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vuint64m8_t vrsub_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
vint8mf8_t vneg_v_i8mf8_m (vbool64_t mask, vint8mf8_t maskedoff,
    vint8mf8_t op1, size_t vl);
vint8mf4_t vneg_v_i8mf4_m (vbool32_t mask, vint8mf4_t maskedoff,
    vint8mf4_t op1, size_t vl);
vint8mf2_t vneg_v_i8mf2_m (vbool16_t mask, vint8mf2_t maskedoff,
    vint8mf2_t op1, size_t vl);
vint8m1_t vneg_v_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, size_t vl);
vint8m2_t vneg_v_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, size_t vl);
vint8m4_t vneg_v_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, size_t vl);
vint8m8_t vneg_v_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, size_t vl);
vint16mf4_t vneg_v_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, size_t vl);
vint16mf2_t vneg_v_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, size_t vl);
vint16m1_t vneg_v_i16m1_m (vbool16_t mask, vint16m1_t maskedoff,
    vint16m1_t op1, size_t vl);
vint16m2_t vneg_v_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, size_t vl);
vint16m4_t vneg_v_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, size_t vl);
vint16m8_t vneg_v_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, size_t vl);
vint32mf2_t vneg_v_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, size_t vl);
vint32m1_t vneg_v_i32m1_m (vbool32_t mask, vint32m1_t maskedoff,
    vint32m1_t op1, size_t vl);
vint32m2_t vneg_v_i32m2_m (vbool16_t mask, vint32m2_t maskedoff,
    vint32m2_t op1, size_t vl);
```

```
vint32m4_t vneg_v_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, size_t vl);
vint32m8_t vneg_v_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, size_t vl);
vint64m1_t vneg_v_i64m1_m (vbool64_t mask, vint64m1_t maskedoff,
    vint64m1_t op1, size_t vl);
vint64m2_t vneg_v_i64m2_m (vbool32_t mask, vint64m2_t maskedoff,
    vint64m2_t op1, size_t vl);
vint64m4_t vneg_v_i64m4_m (vbool16_t mask, vint64m4_t maskedoff,
    vint64m4_t op1, size_t vl);
vint64m8_t vneg_v_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, size_t vl);
```

Vector Widening Integer Add/Subtract Functions:

Prototypes:

```
vint16mf4_t vwadd_vv_i16mf4 (vint8mf8_t op1, vint8mf8_t op2,
    size_t vl);
vint16mf4_t vwadd_vx_i16mf4 (vint8mf8_t op1, int8_t op2, size_t
    vl);
vint16mf4_t vwadd_wv_i16mf4 (vint16mf4_t op1, vint8mf8_t op2,
    size_t vl);
vint16mf4_t vwadd_wx_i16mf4 (vint16mf4_t op1, int8_t op2, size_t
    vl);
vint16mf2_t vwadd_vv_i16mf2 (vint8mf4_t op1, vint8mf4_t op2,
    size_t vl);
vint16mf2_t vwadd_vx_i16mf2 (vint8mf4_t op1, int8_t op2, size_t
    vl);
vint16mf2_t vwadd_wv_i16mf2 (vint16mf2_t op1, vint8mf4_t op2,
    size_t vl);
vint16mf2_t vwadd_wx_i16mf2 (vint16mf2_t op1, int8_t op2, size_t
    vl);
vint16m1_t vwadd_vv_i16m1 (vint8mf2_t op1, vint8mf2_t op2,
    size_t vl);
vint16m1_t vwadd_vx_i16m1 (vint8mf2_t op1, int8_t op2, size_t
    vl);
vint16m1_t vwadd_wv_i16m1 (vint16m1_t op1, vint8mf2_t op2,
    size_t vl);
vint16m1_t vwadd_wx_i16m1 (vint16m1_t op1, int8_t op2, size_t
    vl);
vint16m2_t vwadd_vv_i16m2 (vint8m1_t op1, vint8m1_t op2, size_t
    vl);
vint16m2_t vwadd_vx_i16m2 (vint8m1_t op1, int8_t op2, size_t vl);
vint16m2_t vwadd_wv_i16m2 (vint16m2_t op1, vint8m1_t op2, size_t
    vl);
```

```
vint16m2_t vwadd_wx_i16m2 (vint16m2_t op1, int8_t op2, size_t
    vl);
vint16m4_t vwadd_vv_i16m4 (vint8m2_t op1, vint8m2_t op2, size_t
    vl);
vint16m4_t vwadd_vx_i16m4 (vint8m2_t op1, int8_t op2, size_t vl);
vint16m4_t vwadd_wv_i16m4 (vint16m4_t op1, vint8m2_t op2, size_t
    vl);
vint16m4_t vwadd_wx_i16m4 (vint16m4_t op1, int8_t op2, size_t
    vl);
vint16m8_t vwadd_vv_i16m8 (vint8m4_t op1, vint8m4_t op2, size_t
    vl);
vint16m8_t vwadd_vx_i16m8 (vint8m4_t op1, int8_t op2, size_t vl);
vint16m8_t vwadd_wv_i16m8 (vint16m8_t op1, vint8m4_t op2, size_t
    vl);
vint16m8_t vwadd_wx_i16m8 (vint16m8_t op1, int8_t op2, size_t
    vl);
vint32mf2_t vwadd_vv_i32mf2 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vint32mf2_t vwadd_vx_i32mf2 (vint16mf4_t op1, int16_t op2,
    size_t vl);
vint32mf2_t vwadd_wv_i32mf2 (vint32mf2_t op1, vint16mf4_t op2,
    size_t vl);
vint32mf2_t vwadd_wx_i32mf2 (vint32mf2_t op1, int16_t op2,
    size_t vl);
vint32m1_t vwadd_vv_i32m1 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vint32m1_t vwadd_vx_i32m1 (vint16mf2_t op1, int16_t op2, size_t
    vl);
vint32m1_t vwadd_wv_i32m1 (vint32m1_t op1, vint16mf2_t op2,
    size_t vl);
vint32m1_t vwadd_wx_i32m1 (vint32m1_t op1, int16_t op2, size_t
    vl);
vint32m2_t vwadd_vv_i32m2 (vint16m1_t op1, vint16m1_t op2,
    size_t vl);
vint32m2_t vwadd_vx_i32m2 (vint16m1_t op1, int16_t op2, size_t
    vl);
vint32m2_t vwadd_wv_i32m2 (vint32m2_t op1, vint16m1_t op2,
    size_t vl);
vint32m2_t vwadd_wx_i32m2 (vint32m2_t op1, int16_t op2, size_t
    vl);
vint32m4_t vwadd_vv_i32m4 (vint16m2_t op1, vint16m2_t op2,
    size_t vl);
vint32m4_t vwadd_vx_i32m4 (vint16m2_t op1, int16_t op2, size_t
    vl);
vint32m4_t vwadd_wv_i32m4 (vint32m4_t op1, vint16m2_t op2,
    size_t vl);
```

```
vint32m4_t vwadd_wx_i32m4 (vint32m4_t op1, int16_t op2, size_t
    vl);
vint32m8_t vwadd_vv_i32m8 (vint16m4_t op1, vint16m4_t op2,
    size_t vl);
vint32m8_t vwadd_vx_i32m8 (vint16m4_t op1, int16_t op2, size_t
    vl);
vint32m8_t vwadd_wv_i32m8 (vint32m8_t op1, vint16m4_t op2,
    size_t vl);
vint32m8_t vwadd_wx_i32m8 (vint32m8_t op1, int16_t op2, size_t
    vl);
vint64m1_t vwadd_vv_i64m1 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vint64m1_t vwadd_vx_i64m1 (vint32mf2_t op1, int32_t op2, size_t
    vl);
vint64m1_t vwadd_wv_i64m1 (vint64m1_t op1, vint32mf2_t op2,
    size_t vl);
vint64m1_t vwadd_wx_i64m1 (vint64m1_t op1, int32_t op2, size_t
    vl);
vint64m2_t vwadd_vv_i64m2 (vint32m1_t op1, vint32m1_t op2,
    size_t vl);
vint64m2_t vwadd_vx_i64m2 (vint32m1_t op1, int32_t op2, size_t
    vl);
vint64m2_t vwadd_wv_i64m2 (vint64m2_t op1, vint32m1_t op2,
    size_t vl);
vint64m2_t vwadd_wx_i64m2 (vint64m2_t op1, int32_t op2, size_t
    vl);
vint64m4_t vwadd_vv_i64m4 (vint32m2_t op1, vint32m2_t op2,
    size_t vl);
vint64m4_t vwadd_vx_i64m4 (vint32m2_t op1, int32_t op2, size_t
    vl);
vint64m4_t vwadd_wv_i64m4 (vint64m4_t op1, vint32m2_t op2,
    size_t vl);
vint64m4_t vwadd_wx_i64m4 (vint64m4_t op1, int32_t op2, size_t
    vl);
vint64m8_t vwadd_vv_i64m8 (vint32m4_t op1, vint32m4_t op2,
    size_t vl);
vint64m8_t vwadd_vx_i64m8 (vint32m4_t op1, int32_t op2, size_t
    vl);
vint64m8_t vwadd_wv_i64m8 (vint64m8_t op1, vint32m4_t op2,
    size_t vl);
vint64m8_t vwadd_wx_i64m8 (vint64m8_t op1, int32_t op2, size_t
    vl);
vuint16mf4_t vwaddu_vv_u16mf4 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vuint16mf4_t vwaddu_vx_u16mf4 (vuint8mf8_t op1, uint8_t op2,
    size_t vl);
```

```
vuint16mf4_t vwaddu_wv_u16mf4 (vuint16mf4_t op1, vuint8mf8_t
    op2, size_t vl);
vuint16mf4_t vwaddu_wx_u16mf4 (vuint16mf4_t op1, uint8_t op2,
    size_t vl);
vuint16mf2_t vwaddu_vv_u16mf2 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vuint16mf2_t vwaddu_vx_u16mf2 (vuint8mf4_t op1, uint8_t op2,
    size_t vl);
vuint16mf2_t vwaddu_wv_u16mf2 (vuint16mf2_t op1, vuint8mf4_t
    op2, size_t vl);
vuint16mf2_t vwaddu_wx_u16mf2 (vuint16mf2_t op1, uint8_t op2,
    size_t vl);
vuint16m1_t vwaddu_vv_u16m1 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vuint16m1_t vwaddu_vx_u16m1 (vuint8mf2_t op1, uint8_t op2,
    size_t vl);
vuint16m1_t vwaddu_wv_u16m1 (vuint16m1_t op1, vuint8mf2_t op2,
    size_t vl);
vuint16m1_t vwaddu_wx_u16m1 (vuint16m1_t op1, uint8_t op2,
    size_t vl);
vuint16m2_t vwaddu_vv_u16m2 (vuint8m1_t op1, vuint8m1_t op2,
    size_t vl);
vuint16m2_t vwaddu_vx_u16m2 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vuint16m2_t vwaddu_wv_u16m2 (vuint16m2_t op1, vuint8m1_t op2,
    size_t vl);
vuint16m2_t vwaddu_wx_u16m2 (vuint16m2_t op1, uint8_t op2,
    size_t vl);
vuint16m4_t vwaddu_vv_u16m4 (vuint8m2_t op1, vuint8m2_t op2,
    size_t vl);
vuint16m4_t vwaddu_vx_u16m4 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vuint16m4_t vwaddu_wv_u16m4 (vuint16m4_t op1, vuint8m2_t op2,
    size_t vl);
vuint16m4_t vwaddu_wx_u16m4 (vuint16m4_t op1, uint8_t op2,
    size_t vl);
vuint16m8_t vwaddu_vv_u16m8 (vuint8m4_t op1, vuint8m4_t op2,
    size_t vl);
vuint16m8_t vwaddu_vx_u16m8 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
vuint16m8_t vwaddu_wv_u16m8 (vuint16m8_t op1, vuint8m4_t op2,
    size_t vl);
vuint16m8_t vwaddu_wx_u16m8 (vuint16m8_t op1, uint8_t op2,
    size_t vl);
vuint32mf2_t vwaddu_vv_u32mf2 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
```

453

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vuint32mf2_t vwaddu_vx_u32mf2 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vuint32mf2_t vwaddu_wv_u32mf2 (vuint32mf2_t op1, vuint16mf4_t
    op2, size_t vl);
vuint32mf2_t vwaddu_wx_u32mf2 (vuint32mf2_t op1, uint16_t op2,
    size_t vl);
vuint32m1_t vwaddu_vv_u32m1 (vuint16mf2_t op1, vuint16mf2_t op2,
    size_t vl);
vuint32m1_t vwaddu_vx_u32m1 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vuint32m1_t vwaddu_wv_u32m1 (vuint32m1_t op1, vuint16mf2_t op2,
    size_t vl);
vuint32m1_t vwaddu_wx_u32m1 (vuint32m1_t op1, uint16_t op2,
    size_t vl);
vuint32m2_t vwaddu_vv_u32m2 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vuint32m2_t vwaddu_vx_u32m2 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vuint32m2_t vwaddu_wv_u32m2 (vuint32m2_t op1, vuint16m1_t op2,
    size_t vl);
vuint32m2_t vwaddu_wx_u32m2 (vuint32m2_t op1, uint16_t op2,
    size_t vl);
vuint32m4_t vwaddu_vv_u32m4 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vuint32m4_t vwaddu_vx_u32m4 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vuint32m4_t vwaddu_wv_u32m4 (vuint32m4_t op1, vuint16m2_t op2,
    size_t vl);
vuint32m4_t vwaddu_wx_u32m4 (vuint32m4_t op1, uint16_t op2,
    size_t vl);
vuint32m8_t vwaddu_vv_u32m8 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vuint32m8_t vwaddu_vx_u32m8 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
vuint32m8_t vwaddu_wv_u32m8 (vuint32m8_t op1, vuint16m4_t op2,
    size_t vl);
vuint32m8_t vwaddu_wx_u32m8 (vuint32m8_t op1, uint16_t op2,
    size_t vl);
vuint64m1_t vwaddu_vv_u64m1 (vuint32mf2_t op1, vuint32mf2_t op2,
    size_t vl);
vuint64m1_t vwaddu_vx_u64m1 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vuint64m1_t vwaddu_wv_u64m1 (vuint64m1_t op1, vuint32mf2_t op2,
    size_t vl);
vuint64m1_t vwaddu_wx_u64m1 (vuint64m1_t op1, uint32_t op2,
    size_t vl);
```

```
vuint64m2_t vwaddu_vv_u64m2 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vuint64m2_t vwaddu_vx_u64m2 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vuint64m2_t vwaddu_wv_u64m2 (vuint64m2_t op1, vuint32m1_t op2,
    size_t vl);
vuint64m2_t vwaddu_wx_u64m2 (vuint64m2_t op1, uint32_t op2,
    size_t vl);
vuint64m4_t vwaddu_vv_u64m4 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vuint64m4_t vwaddu_vx_u64m4 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vuint64m4_t vwaddu_wv_u64m4 (vuint64m4_t op1, vuint32m2_t op2,
    size_t vl);
vuint64m4_t vwaddu_wx_u64m4 (vuint64m4_t op1, uint32_t op2,
    size_t vl);
vuint64m8_t vwaddu_vv_u64m8 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vuint64m8_t vwaddu_vx_u64m8 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
vuint64m8_t vwaddu_wv_u64m8 (vuint64m8_t op1, vuint32m4_t op2,
    size_t vl);
vuint64m8_t vwaddu_wx_u64m8 (vuint64m8_t op1, uint32_t op2,
    size_t vl);
vint16mf4_t vwsub_vv_i16mf4 (vint8mf8_t op1, vint8mf8_t op2,
    size_t vl);
vint16mf4_t vwsub_vx_i16mf4 (vint8mf8_t op1, int8_t op2, size_t
    vl);
vint16mf4_t vwsub_wv_i16mf4 (vint16mf4_t op1, vint8mf8_t op2,
    size_t vl);
vint16mf4_t vwsub_wx_i16mf4 (vint16mf4_t op1, int8_t op2, size_t
    vl);
vint16mf2_t vwsub_vv_i16mf2 (vint8mf4_t op1, vint8mf4_t op2,
    size_t vl);
vint16mf2_t vwsub_vx_i16mf2 (vint8mf4_t op1, int8_t op2, size_t
    vl);
vint16mf2_t vwsub_wv_i16mf2 (vint16mf2_t op1, vint8mf4_t op2,
    size_t vl);
vint16mf2_t vwsub_wx_i16mf2 (vint16mf2_t op1, int8_t op2, size_t
    vl);
vint16m1_t vwsub_vv_i16m1 (vint8mf2_t op1, vint8mf2_t op2,
    size_t vl);
vint16m1_t vwsub_vx_i16m1 (vint8mf2_t op1, int8_t op2, size_t
    vl);
vint16m1_t vwsub_wv_i16m1 (vint16m1_t op1, vint8mf2_t op2,
    size_t vl);
```

```
vint16m1_t vwsub_wx_i16m1 (vint16m1_t op1, int8_t op2, size_t
    vl);
vint16m2_t vwsub_vv_i16m2 (vint8m1_t op1, vint8m1_t op2, size_t
    vl);
vint16m2_t vwsub_vx_i16m2 (vint8m1_t op1, int8_t op2, size_t vl);
vint16m2_t vwsub_wv_i16m2 (vint16m2_t op1, vint8m1_t op2, size_t
    vl);
vint16m2_t vwsub_wx_i16m2 (vint16m2_t op1, int8_t op2, size_t
    vl);
vint16m4_t vwsub_vv_i16m4 (vint8m2_t op1, vint8m2_t op2, size_t
    vl);
vint16m4_t vwsub_vx_i16m4 (vint8m2_t op1, int8_t op2, size_t vl);
vint16m4_t vwsub_wv_i16m4 (vint16m4_t op1, vint8m2_t op2, size_t
    vl);
vint16m4_t vwsub_wx_i16m4 (vint16m4_t op1, int8_t op2, size_t
    vl);
vint16m8_t vwsub_vv_i16m8 (vint8m4_t op1, vint8m4_t op2, size_t
    vl);
vint16m8_t vwsub_vx_i16m8 (vint8m4_t op1, int8_t op2, size_t vl);
vint16m8_t vwsub_wv_i16m8 (vint16m8_t op1, vint8m4_t op2, size_t
    vl);
vint16m8_t vwsub_wx_i16m8 (vint16m8_t op1, int8_t op2, size_t
    vl);
vint32mf2_t vwsub_vv_i32mf2 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vint32mf2_t vwsub_vx_i32mf2 (vint16mf4_t op1, int16_t op2,
    size_t vl);
vint32mf2_t vwsub_wv_i32mf2 (vint32mf2_t op1, vint16mf4_t op2,
    size_t vl);
vint32mf2_t vwsub_wx_i32mf2 (vint32mf2_t op1, int16_t op2,
    size_t vl);
vint32m1_t vwsub_vv_i32m1 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vint32m1_t vwsub_vx_i32m1 (vint16mf2_t op1, int16_t op2, size_t
    vl);
vint32m1_t vwsub_wv_i32m1 (vint32m1_t op1, vint16mf2_t op2,
    size_t vl);
vint32m1_t vwsub_wx_i32m1 (vint32m1_t op1, int16_t op2, size_t
    vl);
vint32m2_t vwsub_vv_i32m2 (vint16m1_t op1, vint16m1_t op2,
    size_t vl);
vint32m2_t vwsub_vx_i32m2 (vint16m1_t op1, int16_t op2, size_t
    vl);
vint32m2_t vwsub_wv_i32m2 (vint32m2_t op1, vint16m1_t op2,
    size_t vl);
```

```
vint32m2_t vwsub_wx_i32m2 (vint32m2_t op1, int16_t op2, size_t
    vl);
vint32m4_t vwsub_vv_i32m4 (vint16m2_t op1, vint16m2_t op2,
    size_t vl);
vint32m4_t vwsub_vx_i32m4 (vint16m2_t op1, int16_t op2, size_t
    vl);
vint32m4_t vwsub_wv_i32m4 (vint32m4_t op1, vint16m2_t op2,
    size_t vl);
vint32m4_t vwsub_wx_i32m4 (vint32m4_t op1, int16_t op2, size_t
    vl);
vint32m8_t vwsub_vv_i32m8 (vint16m4_t op1, vint16m4_t op2,
    size_t vl);
vint32m8_t vwsub_vx_i32m8 (vint16m4_t op1, int16_t op2, size_t
    vl);
vint32m8_t vwsub_wv_i32m8 (vint32m8_t op1, vint16m4_t op2,
    size_t vl);
vint32m8_t vwsub_wx_i32m8 (vint32m8_t op1, int16_t op2, size_t
    vl);
vint64m1_t vwsub_vv_i64m1 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vint64m1_t vwsub_vx_i64m1 (vint32mf2_t op1, int32_t op2, size_t
    vl);
vint64m1_t vwsub_wv_i64m1 (vint64m1_t op1, vint32mf2_t op2,
    size_t vl);
vint64m1_t vwsub_wx_i64m1 (vint64m1_t op1, int32_t op2, size_t
    vl);
vint64m2_t vwsub_vv_i64m2 (vint32m1_t op1, vint32m1_t op2,
    size_t vl);
vint64m2_t vwsub_vx_i64m2 (vint32m1_t op1, int32_t op2, size_t
    vl);
vint64m2_t vwsub_wv_i64m2 (vint64m2_t op1, vint32m1_t op2,
    size_t vl);
vint64m2_t vwsub_wx_i64m2 (vint64m2_t op1, int32_t op2, size_t
    vl);
vint64m4_t vwsub_vv_i64m4 (vint32m2_t op1, vint32m2_t op2,
    size_t vl);
vint64m4_t vwsub_vx_i64m4 (vint32m2_t op1, int32_t op2, size_t
    vl);
vint64m4_t vwsub_wv_i64m4 (vint64m4_t op1, vint32m2_t op2,
    size_t vl);
vint64m4_t vwsub_wx_i64m4 (vint64m4_t op1, int32_t op2, size_t
    vl);
vint64m8_t vwsub_vv_i64m8 (vint32m4_t op1, vint32m4_t op2,
    size_t vl);
vint64m8_t vwsub_vx_i64m8 (vint32m4_t op1, int32_t op2, size_t
    vl);
```

```
vint64m8_t vwsub_wv_i64m8 (vint64m8_t op1, vint32m4_t op2,
    size_t vl);
vint64m8_t vwsub_wx_i64m8 (vint64m8_t op1, int32_t op2, size_t
    vl);
vuint16mf4_t vwsubu_vv_u16mf4 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vuint16mf4_t vwsubu_vx_u16mf4 (vuint8mf8_t op1, uint8_t op2,
    size_t vl);
vuint16mf4_t vwsubu_wv_u16mf4 (vuint16mf4_t op1, vuint8mf8_t
    op2, size_t vl);
vuint16mf4_t vwsubu_wx_u16mf4 (vuint16mf4_t op1, uint8_t op2,
    size_t vl);
vuint16mf2_t vwsubu_vv_u16mf2 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vuint16mf2_t vwsubu_vx_u16mf2 (vuint8mf4_t op1, uint8_t op2,
    size_t vl);
vuint16mf2_t vwsubu_wv_u16mf2 (vuint16mf2_t op1, vuint8mf4_t
    op2, size_t vl);
vuint16mf2_t vwsubu_wx_u16mf2 (vuint16mf2_t op1, uint8_t op2,
    size_t vl);
vuint16m1_t vwsubu_vv_u16m1 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vuint16m1_t vwsubu_vx_u16m1 (vuint8mf2_t op1, uint8_t op2,
    size_t vl);
vuint16m1_t vwsubu_wv_u16m1 (vuint16m1_t op1, vuint8mf2_t op2,
    size_t vl);
vuint16m1_t vwsubu_wx_u16m1 (vuint16m1_t op1, uint8_t op2,
    size_t vl);
vuint16m2_t vwsubu_vv_u16m2 (vuint8m1_t op1, vuint8m1_t op2,
    size_t vl);
vuint16m2_t vwsubu_vx_u16m2 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vuint16m2_t vwsubu_wv_u16m2 (vuint16m2_t op1, vuint8m1_t op2,
    size_t vl);
vuint16m2_t vwsubu_wx_u16m2 (vuint16m2_t op1, uint8_t op2,
    size_t vl);
vuint16m4_t vwsubu_vv_u16m4 (vuint8m2_t op1, vuint8m2_t op2,
    size_t vl);
vuint16m4_t vwsubu_vx_u16m4 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vuint16m4_t vwsubu_wv_u16m4 (vuint16m4_t op1, vuint8m2_t op2,
    size_t vl);
vuint16m4_t vwsubu_wx_u16m4 (vuint16m4_t op1, uint8_t op2,
    size_t vl);
vuint16m8_t vwsubu_vv_u16m8 (vuint8m4_t op1, vuint8m4_t op2,
    size_t vl);
```

```
vuint16m8_t vwsubu_vx_u16m8 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
vuint16m8_t vwsubu_wv_u16m8 (vuint16m8_t op1, vuint8m4_t op2,
    size_t vl);
vuint16m8_t vwsubu_wx_u16m8 (vuint16m8_t op1, uint8_t op2,
    size_t vl);
vuint32mf2_t vwsubu_vv_u32mf2 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vuint32mf2_t vwsubu_vx_u32mf2 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vuint32mf2_t vwsubu_wv_u32mf2 (vuint32mf2_t op1, vuint16mf4_t
    op2, size_t vl);
vuint32mf2_t vwsubu_wx_u32mf2 (vuint32mf2_t op1, uint16_t op2,
    size_t vl);
vuint32m1_t vwsubu_vv_u32m1 (vuint16mf2_t op1, vuint16mf2_t op2,
    size_t vl);
vuint32m1_t vwsubu_vx_u32m1 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vuint32m1_t vwsubu_wv_u32m1 (vuint32m1_t op1, vuint16mf2_t op2,
    size_t vl);
vuint32m1_t vwsubu_wx_u32m1 (vuint32m1_t op1, uint16_t op2,
    size_t vl);
vuint32m2_t vwsubu_vv_u32m2 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vuint32m2_t vwsubu_vx_u32m2 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vuint32m2_t vwsubu_wv_u32m2 (vuint32m2_t op1, vuint16m1_t op2,
    size_t vl);
vuint32m2_t vwsubu_wx_u32m2 (vuint32m2_t op1, uint16_t op2,
    size_t vl);
vuint32m4_t vwsubu_vv_u32m4 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vuint32m4_t vwsubu_vx_u32m4 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vuint32m4_t vwsubu_wv_u32m4 (vuint32m4_t op1, vuint16m2_t op2,
    size_t vl);
vuint32m4_t vwsubu_wx_u32m4 (vuint32m4_t op1, uint16_t op2,
    size_t vl);
vuint32m8_t vwsubu_vv_u32m8 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vuint32m8_t vwsubu_vx_u32m8 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
vuint32m8_t vwsubu_wv_u32m8 (vuint32m8_t op1, vuint16m4_t op2,
    size_t vl);
vuint32m8_t vwsubu_wx_u32m8 (vuint32m8_t op1, uint16_t op2,
    size_t vl);
```

```
vuint64m1_t vwsubu_vv_u64m1 (vuint32mf2_t op1, vuint32mf2_t op2,
    size_t vl);
vuint64m1_t vwsubu_vx_u64m1 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vuint64m1_t vwsubu_wv_u64m1 (vuint64m1_t op1, vuint32mf2_t op2,
    size_t vl);
vuint64m1_t vwsubu_wx_u64m1 (vuint64m1_t op1, uint32_t op2,
    size_t vl);
vuint64m2_t vwsubu_vv_u64m2 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vuint64m2_t vwsubu_vx_u64m2 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vuint64m2_t vwsubu_wv_u64m2 (vuint64m2_t op1, vuint32m1_t op2,
    size_t vl);
vuint64m2_t vwsubu_wx_u64m2 (vuint64m2_t op1, uint32_t op2,
    size_t vl);
vuint64m4_t vwsubu_vv_u64m4 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vuint64m4_t vwsubu_vx_u64m4 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vuint64m4_t vwsubu_wv_u64m4 (vuint64m4_t op1, vuint32m2_t op2,
    size_t vl);
vuint64m4_t vwsubu_wx_u64m4 (vuint64m4_t op1, uint32_t op2,
    size_t vl);
vuint64m8_t vwsubu_vv_u64m8 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vuint64m8_t vwsubu_vx_u64m8 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
vuint64m8_t vwsubu_wv_u64m8 (vuint64m8_t op1, vuint32m4_t op2,
    size_t vl);
vuint64m8_t vwsubu_wx_u64m8 (vuint64m8_t op1, uint32_t op2,
    size_t vl);
// masked functions
vint16mf4_t vwadd_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vint16mf4_t vwadd_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vint16mf4_t vwadd_wv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vint8mf8_t op2, size_t vl);
vint16mf4_t vwadd_wx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, int8_t op2, size_t vl);
vint16mf2_t vwadd_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint16mf2_t vwadd_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
```

```
vint16mf2_t vwadd_wv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vint8mf4_t op2, size_t vl);
vint16mf2_t vwadd_wx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, int8_t op2, size_t vl);
vint16m1_t vwadd_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint16m1_t vwadd_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vint16m1_t vwadd_wv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vint8mf2_t op2, size_t vl);
vint16m1_t vwadd_wx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, int8_t op2, size_t vl);
vint16m2_t vwadd_vv_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint8m1_t op1, vint8m1_t op2, size_t vl);
vint16m2_t vwadd_vx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint8m1_t op1, int8_t op2, size_t vl);
vint16m2_t vwadd_wv_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, vint8m1_t op2, size_t vl);
vint16m2_t vwadd_wx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, int8_t op2, size_t vl);
vint16m4_t vwadd_vv_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint8m2_t op1, vint8m2_t op2, size_t vl);
vint16m4_t vwadd_vx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint8m2_t op1, int8_t op2, size_t vl);
vint16m4_t vwadd_wv_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, vint8m2_t op2, size_t vl);
vint16m4_t vwadd_wx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, int8_t op2, size_t vl);
vint16m8_t vwadd_vv_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint8m4_t op1, vint8m4_t op2, size_t vl);
vint16m8_t vwadd_vx_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint8m4_t op1, int8_t op2, size_t vl);
vint16m8_t vwadd_wv_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, vint8m4_t op2, size_t vl);
vint16m8_t vwadd_wx_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, int8_t op2, size_t vl);
vint32mf2_t vwadd_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vint32mf2_t vwadd_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vint32mf2_t vwadd_wv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vint16mf4_t op2, size_t vl);
vint32mf2_t vwadd_wx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, int16_t op2, size_t vl);
vint32m1_t vwadd_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
```

```
vint32m1_t vwadd_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vint32m1_t vwadd_wv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vint16mf2_t op2, size_t vl);
vint32m1_t vwadd_wx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, int16_t op2, size_t vl);
vint32m2_t vwadd_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vint32m2_t vwadd_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vint32m2_t vwadd_wv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vint16m1_t op2, size_t vl);
vint32m2_t vwadd_wx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, int16_t op2, size_t vl);
vint32m4_t vwadd_vv_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint16m2_t op1, vint16m2_t op2, size_t vl);
vint32m4_t vwadd_vx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint16m2_t op1, int16_t op2, size_t vl);
vint32m4_t vwadd_wv_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, vint16m2_t op2, size_t vl);
vint32m4_t vwadd_wx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, int16_t op2, size_t vl);
vint32m8_t vwadd_vv_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint16m4_t op1, vint16m4_t op2, size_t vl);
vint32m8_t vwadd_vx_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint16m4_t op1, int16_t op2, size_t vl);
vint32m8_t vwadd_wv_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, vint16m4_t op2, size_t vl);
vint32m8_t vwadd_wx_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, int16_t op2, size_t vl);
vint64m1_t vwadd_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vint64m1_t vwadd_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vint64m1_t vwadd_wv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vint32mf2_t op2, size_t vl);
vint64m1_t vwadd_wx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, int32_t op2, size_t vl);
vint64m2_t vwadd_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vint64m2_t vwadd_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vint64m2_t vwadd_wv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vint32m1_t op2, size_t vl);
vint64m2_t vwadd_wx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, int32_t op2, size_t vl);
```

```
vint64m4_t vwadd_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vint64m4_t vwadd_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vint64m4_t vwadd_wv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vint32m2_t op2, size_t vl);
vint64m4_t vwadd_wx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, int32_t op2, size_t vl);
vint64m8_t vwadd_vv_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint32m4_t op1, vint32m4_t op2, size_t vl);
vint64m8_t vwadd_vx_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint32m4_t op1, int32_t op2, size_t vl);
vint64m8_t vwadd_wv_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, vint32m4_t op2, size_t vl);
vint64m8_t vwadd_wx_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, int32_t op2, size_t vl);
vuint16mf4_t vwaddu_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vuint16mf4_t vwaddu_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vwaddu_wv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint8mf8_t op2, size_t vl);
vuint16mf4_t vwaddu_wx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, uint8_t op2, size_t vl);
vuint16mf2_t vwaddu_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vuint16mf2_t vwaddu_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vuint16mf2_t vwaddu_wv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint8mf4_t op2, size_t vl);
vuint16mf2_t vwaddu_wx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, uint8_t op2, size_t vl);
vuint16m1_t vwaddu_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vuint16m1_t vwaddu_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vuint16m1_t vwaddu_wv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint8mf2_t op2, size_t vl);
vuint16m1_t vwaddu_wx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, uint8_t op2, size_t vl);
vuint16m2_t vwaddu_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vuint16m2_t vwaddu_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint8m1_t op1, uint8_t op2, size_t vl);
vuint16m2_t vwaddu_wv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint8m1_t op2, size_t vl);
```

```
vuint16m2_t vwaddu_wx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, uint8_t op2, size_t vl);
vuint16m4_t vwaddu_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vuint16m4_t vwaddu_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint8m2_t op1, uint8_t op2, size_t vl);
vuint16m4_t vwaddu_wv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint8m2_t op2, size_t vl);
vuint16m4_t vwaddu_wx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, uint8_t op2, size_t vl);
vuint16m8_t vwaddu_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vuint16m8_t vwaddu_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint8m4_t op1, uint8_t op2, size_t vl);
vuint16m8_t vwaddu_wv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint8m4_t op2, size_t vl);
vuint16m8_t vwaddu_wx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, uint8_t op2, size_t vl);
vuint32mf2_t vwaddu_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vuint32mf2_t vwaddu_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vuint32mf2_t vwaddu_wv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint16mf4_t op2, size_t vl);
vuint32mf2_t vwaddu_wx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, uint16_t op2, size_t vl);
vuint32m1_t vwaddu_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vuint32m1_t vwaddu_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vuint32m1_t vwaddu_wv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint16mf2_t op2, size_t vl);
vuint32m1_t vwaddu_wx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, uint16_t op2, size_t vl);
vuint32m2_t vwaddu_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vuint32m2_t vwaddu_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vuint32m2_t vwaddu_wv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint16m1_t op2, size_t vl);
vuint32m2_t vwaddu_wx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, uint16_t op2, size_t vl);
vuint32m4_t vwaddu_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vuint32m4_t vwaddu_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
```

```
vuint32m4_t vwaddu_wv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint16m2_t op2, size_t vl);
vuint32m4_t vwaddu_wx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, uint16_t op2, size_t vl);
vuint32m8_t vwaddu_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vuint32m8_t vwaddu_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vuint32m8_t vwaddu_wv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint16m4_t op2, size_t vl);
vuint32m8_t vwaddu_wx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, uint16_t op2, size_t vl);
vuint64m1_t vwaddu_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vuint64m1_t vwaddu_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vuint64m1_t vwaddu_wv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint32mf2_t op2, size_t vl);
vuint64m1_t vwaddu_wx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, uint32_t op2, size_t vl);
vuint64m2_t vwaddu_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vuint64m2_t vwaddu_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vuint64m2_t vwaddu_wv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint32m1_t op2, size_t vl);
vuint64m2_t vwaddu_wx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, uint32_t op2, size_t vl);
vuint64m4_t vwaddu_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vuint64m4_t vwaddu_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vuint64m4_t vwaddu_wv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint32m2_t op2, size_t vl);
vuint64m4_t vwaddu_wx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, uint32_t op2, size_t vl);
vuint64m8_t vwaddu_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vuint64m8_t vwaddu_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vuint64m8_t vwaddu_wv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint32m4_t op2, size_t vl);
vuint64m8_t vwaddu_wx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, uint32_t op2, size_t vl);
vint16mf4_t vwsub_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
```

```
vint16mf4_t vwsub_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vint16mf4_t vwsub_wv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vint8mf8_t op2, size_t vl);
vint16mf4_t vwsub_wx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, int8_t op2, size_t vl);
vint16mf2_t vwsub_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint16mf2_t vwsub_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vint16mf2_t vwsub_wv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vint8mf4_t op2, size_t vl);
vint16mf2_t vwsub_wx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, int8_t op2, size_t vl);
vint16m1_t vwsub_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint16m1_t vwsub_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vint16m1_t vwsub_wv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vint8mf2_t op2, size_t vl);
vint16m1_t vwsub_wx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, int8_t op2, size_t vl);
vint16m2_t vwsub_vv_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint8m1_t op1, vint8m1_t op2, size_t vl);
vint16m2_t vwsub_vx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint8m1_t op1, int8_t op2, size_t vl);
vint16m2_t vwsub_wv_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, vint8m1_t op2, size_t vl);
vint16m2_t vwsub_wx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, int8_t op2, size_t vl);
vint16m4_t vwsub_vv_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint8m2_t op1, vint8m2_t op2, size_t vl);
vint16m4_t vwsub_vx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint8m2_t op1, int8_t op2, size_t vl);
vint16m4_t vwsub_wv_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, vint8m2_t op2, size_t vl);
vint16m4_t vwsub_wx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, int8_t op2, size_t vl);
vint16m8_t vwsub_vv_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint8m4_t op1, vint8m4_t op2, size_t vl);
vint16m8_t vwsub_vx_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint8m4_t op1, int8_t op2, size_t vl);
vint16m8_t vwsub_wv_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, vint8m4_t op2, size_t vl);
vint16m8_t vwsub_wx_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, int8_t op2, size_t vl);
```

```
vint32mf2_t vwsub_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vint32mf2_t vwsub_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vint32mf2_t vwsub_wv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vint16mf4_t op2, size_t vl);
vint32mf2_t vwsub_wx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, int16_t op2, size_t vl);
vint32m1_t vwsub_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vint32m1_t vwsub_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vint32m1_t vwsub_wv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vint16mf2_t op2, size_t vl);
vint32m1_t vwsub_wx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, int16_t op2, size_t vl);
vint32m2_t vwsub_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vint32m2_t vwsub_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vint32m2_t vwsub_wv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vint16m1_t op2, size_t vl);
vint32m2_t vwsub_wx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, int16_t op2, size_t vl);
vint32m4_t vwsub_vv_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint16m2_t op1, vint16m2_t op2, size_t vl);
vint32m4_t vwsub_vx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint16m2_t op1, int16_t op2, size_t vl);
vint32m4_t vwsub_wv_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, vint16m2_t op2, size_t vl);
vint32m4_t vwsub_wx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, int16_t op2, size_t vl);
vint32m8_t vwsub_vv_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint16m4_t op1, vint16m4_t op2, size_t vl);
vint32m8_t vwsub_vx_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint16m4_t op1, int16_t op2, size_t vl);
vint32m8_t vwsub_wv_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, vint16m4_t op2, size_t vl);
vint32m8_t vwsub_wx_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, int16_t op2, size_t vl);
vint64m1_t vwsub_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vint64m1_t vwsub_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vint64m1_t vwsub_wv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vint32mf2_t op2, size_t vl);
```

```
vint64m1_t vwsub_wx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, int32_t op2, size_t vl);
vint64m2_t vwsub_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vint64m2_t vwsub_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vint64m2_t vwsub_wv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vint32m1_t op2, size_t vl);
vint64m2_t vwsub_wx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, int32_t op2, size_t vl);
vint64m4_t vwsub_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vint64m4_t vwsub_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vint64m4_t vwsub_wv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vint32m2_t op2, size_t vl);
vint64m4_t vwsub_wx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, int32_t op2, size_t vl);
vint64m8_t vwsub_vv_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint32m4_t op1, vint32m4_t op2, size_t vl);
vint64m8_t vwsub_vx_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint32m4_t op1, int32_t op2, size_t vl);
vint64m8_t vwsub_wv_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, vint32m4_t op2, size_t vl);
vint64m8_t vwsub_wx_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, int32_t op2, size_t vl);
vuint16mf4_t vwsubu_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vuint16mf4_t vwsubu_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vwsubu_wv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint8mf8_t op2, size_t vl);
vuint16mf4_t vwsubu_wx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, uint8_t op2, size_t vl);
vuint16mf2_t vwsubu_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vuint16mf2_t vwsubu_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vuint16mf2_t vwsubu_wv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint8mf4_t op2, size_t vl);
vuint16mf2_t vwsubu_wx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, uint8_t op2, size_t vl);
vuint16m1_t vwsubu_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vuint16m1_t vwsubu_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
```

```
vuint16m1_t vwsubu_wv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint8mf2_t op2, size_t vl);
vuint16m1_t vwsubu_wx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, uint8_t op2, size_t vl);
vuint16m2_t vwsubu_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vuint16m2_t vwsubu_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint8m1_t op1, uint8_t op2, size_t vl);
vuint16m2_t vwsubu_wv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint8m1_t op2, size_t vl);
vuint16m2_t vwsubu_wx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, uint8_t op2, size_t vl);
vuint16m4_t vwsubu_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vuint16m4_t vwsubu_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint8m2_t op1, uint8_t op2, size_t vl);
vuint16m4_t vwsubu_wv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint8m2_t op2, size_t vl);
vuint16m4_t vwsubu_wx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, uint8_t op2, size_t vl);
vuint16m8_t vwsubu_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vuint16m8_t vwsubu_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint8m4_t op1, uint8_t op2, size_t vl);
vuint16m8_t vwsubu_wv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint8m4_t op2, size_t vl);
vuint16m8_t vwsubu_wx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, uint8_t op2, size_t vl);
vuint32mf2_t vwsubu_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vuint32mf2_t vwsubu_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vuint32mf2_t vwsubu_wv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint16mf4_t op2, size_t vl);
vuint32mf2_t vwsubu_wx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, uint16_t op2, size_t vl);
vuint32m1_t vwsubu_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vuint32m1_t vwsubu_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vuint32m1_t vwsubu_wv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint16mf2_t op2, size_t vl);
vuint32m1_t vwsubu_wx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, uint16_t op2, size_t vl);
vuint32m2_t vwsubu_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
```

```
vuint32m2_t vwsubu_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vuint32m2_t vwsubu_wv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint16m1_t op2, size_t vl);
vuint32m2_t vwsubu_wx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, uint16_t op2, size_t vl);
vuint32m4_t vwsubu_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vuint32m4_t vwsubu_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vuint32m4_t vwsubu_wv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint16m2_t op2, size_t vl);
vuint32m4_t vwsubu_wx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, uint16_t op2, size_t vl);
vuint32m8_t vwsubu_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vuint32m8_t vwsubu_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vuint32m8_t vwsubu_wv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint16m4_t op2, size_t vl);
vuint32m8_t vwsubu_wx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, uint16_t op2, size_t vl);
vuint64m1_t vwsubu_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vuint64m1_t vwsubu_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vuint64m1_t vwsubu_wv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint32mf2_t op2, size_t vl);
vuint64m1_t vwsubu_wx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, uint32_t op2, size_t vl);
vuint64m2_t vwsubu_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vuint64m2_t vwsubu_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vuint64m2_t vwsubu_wv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint32m1_t op2, size_t vl);
vuint64m2_t vwsubu_wx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, uint32_t op2, size_t vl);
vuint64m4_t vwsubu_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vuint64m4_t vwsubu_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vuint64m4_t vwsubu_wv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint32m2_t op2, size_t vl);
vuint64m4_t vwsubu_wx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, uint32_t op2, size_t vl);
```

```
vuint64m8_t vwsubu_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vuint64m8_t vwsubu_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vuint64m8_t vwsubu_wv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint32m4_t op2, size_t vl);
vuint64m8_t vwsubu_wx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, uint32_t op2, size_t vl);
```

Vector Integer Extension Functions:

Prototypes:

```
vuint16mf4_t vzext_vf2_u16mf4 (vuint8mf8_t op1, size_t vl);
vuint16mf2_t vzext_vf2_u16mf2 (vuint8mf4_t op1, size_t vl);
vuint16m1_t vzext_vf2_u16m1 (vuint8mf2_t op1, size_t vl);
vuint16m2_t vzext_vf2_u16m2 (vuint8m1_t op1, size_t vl);
vuint16m4_t vzext_vf2_u16m4 (vuint8m2_t op1, size_t vl);
vuint16m8_t vzext_vf2_u16m8 (vuint8m4_t op1, size_t vl);
vuint32mf2_t vzext_vf4_u32mf2 (vuint8mf8_t op1, size_t vl);
vuint32m1_t vzext_vf4_u32m1 (vuint8mf4_t op1, size_t vl);
vuint32m2_t vzext_vf4_u32m2 (vuint8mf2_t op1, size_t vl);
vuint32m4_t vzext_vf4_u32m4 (vuint8m1_t op1, size_t vl);
vuint32m8_t vzext_vf4_u32m8 (vuint8m2_t op1, size_t vl);
vuint64m1_t vzext_vf8_u64m1 (vuint8mf8_t op1, size_t vl);
vuint64m2_t vzext_vf8_u64m2 (vuint8mf4_t op1, size_t vl);
vuint64m4_t vzext_vf8_u64m4 (vuint8mf2_t op1, size_t vl);
vuint64m8_t vzext_vf8_u64m8 (vuint8m1_t op1, size_t vl);
vuint32mf2_t vzext_vf2_u32mf2 (vuint16mf4_t op1, size_t vl);
vuint32m1_t vzext_vf2_u32m1 (vuint16mf2_t op1, size_t vl);
vuint32m2_t vzext_vf2_u32m2 (vuint16m1_t op1, size_t vl);
vuint32m4_t vzext_vf2_u32m4 (vuint16m2_t op1, size_t vl);
vuint32m8_t vzext_vf2_u32m8 (vuint16m4_t op1, size_t vl);
vuint64m1_t vzext_vf4_u64m1 (vuint16mf4_t op1, size_t vl);
vuint64m2_t vzext_vf4_u64m2 (vuint16mf2_t op1, size_t vl);
vuint64m4_t vzext_vf4_u64m4 (vuint16m1_t op1, size_t vl);
vuint64m8_t vzext_vf4_u64m8 (vuint16m2_t op1, size_t vl);
vuint64m1_t vzext_vf2_u64m1 (vuint32mf2_t op1, size_t vl);
vuint64m2_t vzext_vf2_u64m2 (vuint32m1_t op1, size_t vl);
vuint64m4_t vzext_vf2_u64m4 (vuint32m2_t op1, size_t vl);
vuint64m8_t vzext_vf2_u64m8 (vuint32m4_t op1, size_t vl);
vint16mf4_t vsext_vf2_i16mf4 (vint8mf8_t op1, size_t vl);
vint16mf2_t vsext_vf2_i16mf2 (vint8mf4_t op1, size_t vl);
vint16m1_t vsext_vf2_i16m1 (vint8mf2_t op1, size_t vl);
vint16m2_t vsext_vf2_i16m2 (vint8m1_t op1, size_t vl);
vint16m4_t vsext_vf2_i16m4 (vint8m2_t op1, size_t vl);
```

```
vint16m8_t vsext_vf2_i16m8 (vint8m4_t op1, size_t vl);
vint32mf2_t vsext_vf4_i32mf2 (vint8mf8_t op1, size_t vl);
vint32m1_t vsext_vf4_i32m1 (vint8mf4_t op1, size_t vl);
vint32m2_t vsext_vf4_i32m2 (vint8mf2_t op1, size_t vl);
vint32m4_t vsext_vf4_i32m4 (vint8m1_t op1, size_t vl);
vint32m8_t vsext_vf4_i32m8 (vint8m2_t op1, size_t vl);
vint64m1_t vsext_vf8_i64m1 (vint8mf8_t op1, size_t vl);
vint64m2_t vsext_vf8_i64m2 (vint8mf4_t op1, size_t vl);
vint64m4_t vsext_vf8_i64m4 (vint8mf2_t op1, size_t vl);
vint64m8_t vsext_vf8_i64m8 (vint8m1_t op1, size_t vl);
vint32mf2_t vsext_vf2_i32mf2 (vint16mf4_t op1, size_t vl);
vint32m1_t vsext_vf2_i32m1 (vint16mf2_t op1, size_t vl);
vint32m2_t vsext_vf2_i32m2 (vint16m1_t op1, size_t vl);
vint32m4_t vsext_vf2_i32m4 (vint16m2_t op1, size_t vl);
vint32m8_t vsext_vf2_i32m8 (vint16m4_t op1, size_t vl);
vint64m1_t vsext_vf4_i64m1 (vint16mf4_t op1, size_t vl);
vint64m2_t vsext_vf4_i64m2 (vint16mf2_t op1, size_t vl);
vint64m4_t vsext_vf4_i64m4 (vint16m1_t op1, size_t vl);
vint64m8_t vsext_vf4_i64m8 (vint16m2_t op1, size_t vl);
vint64m1_t vsext_vf2_i64m1 (vint32mf2_t op1, size_t vl);
vint64m2_t vsext_vf2_i64m2 (vint32m1_t op1, size_t vl);
vint64m4_t vsext_vf2_i64m4 (vint32m2_t op1, size_t vl);
vint64m8_t vsext_vf2_i64m8 (vint32m4_t op1, size_t vl);
// masked functions
vuint16mf4_t vzext_vf2_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint8mf8_t op1, size_t vl);
vuint16mf2_t vzext_vf2_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint8mf4_t op1, size_t vl);
vuint16m1_t vzext_vf2_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint8mf2_t op1, size_t vl);
vuint16m2_t vzext_vf2_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint8m1_t op1, size_t vl);
vuint16m4_t vzext_vf2_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint8m2_t op1, size_t vl);
vuint16m8_t vzext_vf2_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint8m4_t op1, size_t vl);
vuint32mf2_t vzext_vf4_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint8mf8_t op1, size_t vl);
vuint32m1_t vzext_vf4_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint8mf4_t op1, size_t vl);
vuint32m2_t vzext_vf4_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint8mf2_t op1, size_t vl);
vuint32m4_t vzext_vf4_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint8m1_t op1, size_t vl);
vuint32m8_t vzext_vf4_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint8m2_t op1, size_t vl);
```

```
vuint64m1_t vzext_vf8_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint8mf8_t op1, size_t vl);
vuint64m2_t vzext_vf8_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint8mf4_t op1, size_t vl);
vuint64m4_t vzext_vf8_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint8mf2_t op1, size_t vl);
vuint64m8_t vzext_vf8_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint8m1_t op1, size_t vl);
vuint32mf2_t vzext_vf2_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint16mf4_t op1, size_t vl);
vuint32m1_t vzext_vf2_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint16mf2_t op1, size_t vl);
vuint32m2_t vzext_vf2_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint16m1_t op1, size_t vl);
vuint32m4_t vzext_vf2_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint16m2_t op1, size_t vl);
vuint32m8_t vzext_vf2_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint16m4_t op1, size_t vl);
vuint64m1_t vzext_vf4_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint16mf4_t op1, size_t vl);
vuint64m2_t vzext_vf4_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint16mf2_t op1, size_t vl);
vuint64m4_t vzext_vf4_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint16m1_t op1, size_t vl);
vuint64m8_t vzext_vf4_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint16m2_t op1, size_t vl);
vuint64m1_t vzext_vf2_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint32mf2_t op1, size_t vl);
vuint64m2_t vzext_vf2_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint32m1_t op1, size_t vl);
vuint64m4_t vzext_vf2_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint32m2_t op1, size_t vl);
vuint64m8_t vzext_vf2_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint32m4_t op1, size_t vl);
vint16mf4_t vsext_vf2_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint8mf8_t op1, size_t vl);
vint16mf2_t vsext_vf2_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint8mf4_t op1, size_t vl);
vint16m1_t vsext_vf2_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint8mf2_t op1, size_t vl);
vint16m2_t vsext_vf2_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint8m1_t op1, size_t vl);
vint16m4_t vsext_vf2_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint8m2_t op1, size_t vl);
vint16m8_t vsext_vf2_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint8m4_t op1, size_t vl);
```

```
vint32mf2_t vsext_vf4_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint8mf8_t op1, size_t vl);
vint32m1_t vsext_vf4_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint8mf4_t op1, size_t vl);
vint32m2_t vsext_vf4_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint8mf2_t op1, size_t vl);
vint32m4_t vsext_vf4_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint8m1_t op1, size_t vl);
vint32m8_t vsext_vf4_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint8m2_t op1, size_t vl);
vint64m1_t vsext_vf8_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint8mf8_t op1, size_t vl);
vint64m2_t vsext_vf8_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint8mf4_t op1, size_t vl);
vint64m4_t vsext_vf8_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint8mf2_t op1, size_t vl);
vint64m8_t vsext_vf8_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint8m1_t op1, size_t vl);
vint32mf2_t vsext_vf2_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint16mf4_t op1, size_t vl);
vint32m1_t vsext_vf2_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint16mf2_t op1, size_t vl);
vint32m2_t vsext_vf2_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint16m1_t op1, size_t vl);
vint32m4_t vsext_vf2_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint16m2_t op1, size_t vl);
vint32m8_t vsext_vf2_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint16m4_t op1, size_t vl);
vint64m1_t vsext_vf4_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint16mf4_t op1, size_t vl);
vint64m2_t vsext_vf4_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint16mf2_t op1, size_t vl);
vint64m4_t vsext_vf4_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint16m1_t op1, size_t vl);
vint64m8_t vsext_vf4_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint16m2_t op1, size_t vl);
vint64m1_t vsext_vf2_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint32mf2_t op1, size_t vl);
vint64m2_t vsext_vf2_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint32m1_t op1, size_t vl);
vint64m4_t vsext_vf2_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint32m2_t op1, size_t vl);
vint64m8_t vsext_vf2_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint32m4_t op1, size_t vl);
```

Vector Integer Add-with-Carry / Subtract-with-Borrow Functions:

Prototypes:

```
vint8mf8_t vadc_vvm_i8mf8 (vint8mf8_t op1, vint8mf8_t op2,
    vbool64_t carryin, size_t vl);
vint8mf8_t vadc_vxm_i8mf8 (vint8mf8_t op1, int8_t op2, vbool64_t
    carryin, size_t vl);
vint8mf4_t vadc_vvm_i8mf4 (vint8mf4_t op1, vint8mf4_t op2,
    vbool32_t carryin, size_t vl);
vint8mf4_t vadc_vxm_i8mf4 (vint8mf4_t op1, int8_t op2, vbool32_t
    carryin, size_t vl);
vint8mf2_t vadc_vvm_i8mf2 (vint8mf2_t op1, vint8mf2_t op2,
    vbool16_t carryin, size_t vl);
vint8mf2_t vadc_vxm_i8mf2 (vint8mf2_t op1, int8_t op2, vbool16_t
    carryin, size_t vl);
vint8m1_t vadc_vvm_i8m1 (vint8m1_t op1, vint8m1_t op2, vbool8_t
    carryin, size_t vl);
vint8m1_t vadc_vxm_i8m1 (vint8m1_t op1, int8_t op2, vbool8_t
    carryin, size_t vl);
vint8m2_t vadc_vvm_i8m2 (vint8m2_t op1, vint8m2_t op2, vbool4_t
    carryin, size_t vl);
vint8m2_t vadc_vxm_i8m2 (vint8m2_t op1, int8_t op2, vbool4_t
    carryin, size_t vl);
vint8m4_t vadc_vvm_i8m4 (vint8m4_t op1, vint8m4_t op2, vbool2_t
    carryin, size_t vl);
vint8m4_t vadc_vxm_i8m4 (vint8m4_t op1, int8_t op2, vbool2_t
    carryin, size_t vl);
vint8m8_t vadc_vvm_i8m8 (vint8m8_t op1, vint8m8_t op2, vbool1_t
    carryin, size_t vl);
vint8m8_t vadc_vxm_i8m8 (vint8m8_t op1, int8_t op2, vbool1_t
    carryin, size_t vl);
vint16mf4_t vadc_vvm_i16mf4 (vint16mf4_t op1, vint16mf4_t op2,
    vbool64_t carryin, size_t vl);
vint16mf4_t vadc_vxm_i16mf4 (vint16mf4_t op1, int16_t op2,
    vbool64_t carryin, size_t vl);
vint16mf2_t vadc_vvm_i16mf2 (vint16mf2_t op1, vint16mf2_t op2,
    vbool32_t carryin, size_t vl);
vint16mf2_t vadc_vxm_i16mf2 (vint16mf2_t op1, int16_t op2,
    vbool32_t carryin, size_t vl);
vint16m1_t vadc_vvm_i16m1 (vint16m1_t op1, vint16m1_t op2,
    vbool16_t carryin, size_t vl);
vint16m1_t vadc_vxm_i16m1 (vint16m1_t op1, int16_t op2,
    vbool16_t carryin, size_t vl);
vint16m2_t vadc_vvm_i16m2 (vint16m2_t op1, vint16m2_t op2,
    vbool8_t carryin, size_t vl);
```

```
vint16m2_t vadc_vxm_i16m2 (vint16m2_t op1, int16_t op2, vbool8_t
    carryin, size_t vl);
vint16m4_t vadc_vvm_i16m4 (vint16m4_t op1, vint16m4_t op2,
    vbool4_t carryin, size_t vl);
vint16m4_t vadc_vxm_i16m4 (vint16m4_t op1, int16_t op2, vbool4_t
    carryin, size_t vl);
vint16m8_t vadc_vvm_i16m8 (vint16m8_t op1, vint16m8_t op2,
    vbool2_t carryin, size_t vl);
vint16m8_t vadc_vxm_i16m8 (vint16m8_t op1, int16_t op2, vbool2_t
    carryin, size_t vl);
vint32mf2_t vadc_vvm_i32mf2 (vint32mf2_t op1, vint32mf2_t op2,
    vbool64_t carryin, size_t vl);
vint32mf2_t vadc_vxm_i32mf2 (vint32mf2_t op1, int32_t op2,
    vbool64_t carryin, size_t vl);
vint32m1_t vadc_vvm_i32m1 (vint32m1_t op1, vint32m1_t op2,
    vbool32_t carryin, size_t vl);
vint32m1_t vadc_vxm_i32m1 (vint32m1_t op1, int32_t op2,
    vbool32_t carryin, size_t vl);
vint32m2_t vadc_vvm_i32m2 (vint32m2_t op1, vint32m2_t op2,
    vbool16_t carryin, size_t vl);
vint32m2_t vadc_vxm_i32m2 (vint32m2_t op1, int32_t op2,
    vbool16_t carryin, size_t vl);
vint32m4_t vadc_vvm_i32m4 (vint32m4_t op1, vint32m4_t op2,
    vbool8_t carryin, size_t vl);
vint32m4_t vadc_vxm_i32m4 (vint32m4_t op1, int32_t op2, vbool8_t
    carryin, size_t vl);
vint32m8_t vadc_vvm_i32m8 (vint32m8_t op1, vint32m8_t op2,
    vbool4_t carryin, size_t vl);
vint32m8_t vadc_vxm_i32m8 (vint32m8_t op1, int32_t op2, vbool4_t
    carryin, size_t vl);
vint64m1_t vadc_vvm_i64m1 (vint64m1_t op1, vint64m1_t op2,
    vbool64_t carryin, size_t vl);
vint64m1_t vadc_vxm_i64m1 (vint64m1_t op1, int64_t op2,
    vbool64_t carryin, size_t vl);
vint64m2_t vadc_vvm_i64m2 (vint64m2_t op1, vint64m2_t op2,
    vbool32_t carryin, size_t vl);
vint64m2_t vadc_vxm_i64m2 (vint64m2_t op1, int64_t op2,
    vbool32_t carryin, size_t vl);
vint64m4_t vadc_vvm_i64m4 (vint64m4_t op1, vint64m4_t op2,
    vbool16_t carryin, size_t vl);
vint64m4_t vadc_vxm_i64m4 (vint64m4_t op1, int64_t op2,
    vbool16_t carryin, size_t vl);
vint64m8_t vadc_vvm_i64m8 (vint64m8_t op1, vint64m8_t op2,
    vbool8_t carryin, size_t vl);
vint64m8_t vadc_vxm_i64m8 (vint64m8_t op1, int64_t op2, vbool8_t
    carryin, size_t vl);
```

```
vuint8mf8_t vadc_vvm_u8mf8 (vuint8mf8_t op1, vuint8mf8_t op2,
    vbool64_t carryin, size_t vl);
vuint8mf8_t vadc_vxm_u8mf8 (vuint8mf8_t op1, uint8_t op2,
    vbool64_t carryin, size_t vl);
vuint8mf4_t vadc_vvm_u8mf4 (vuint8mf4_t op1, vuint8mf4_t op2,
    vbool32_t carryin, size_t vl);
vuint8mf4_t vadc_vxm_u8mf4 (vuint8mf4_t op1, uint8_t op2,
    vbool32_t carryin, size_t vl);
vuint8mf2_t vadc_vvm_u8mf2 (vuint8mf2_t op1, vuint8mf2_t op2,
    vbool16_t carryin, size_t vl);
vuint8mf2_t vadc_vxm_u8mf2 (vuint8mf2_t op1, uint8_t op2,
    vbool16_t carryin, size_t vl);
vuint8m1_t vadc_vvm_u8m1 (vuint8m1_t op1, vuint8m1_t op2,
    vbool8_t carryin, size_t vl);
vuint8m1_t vadc_vxm_u8m1 (vuint8m1_t op1, uint8_t op2, vbool8_t
    carryin, size_t vl);
vuint8m2_t vadc_vvm_u8m2 (vuint8m2_t op1, vuint8m2_t op2,
    vbool4_t carryin, size_t vl);
vuint8m2_t vadc_vxm_u8m2 (vuint8m2_t op1, uint8_t op2, vbool4_t
    carryin, size_t vl);
vuint8m4_t vadc_vvm_u8m4 (vuint8m4_t op1, vuint8m4_t op2,
    vbool2_t carryin, size_t vl);
vuint8m4_t vadc_vxm_u8m4 (vuint8m4_t op1, uint8_t op2, vbool2_t
    carryin, size_t vl);
vuint8m8_t vadc_vvm_u8m8 (vuint8m8_t op1, vuint8m8_t op2,
    vbool1_t carryin, size_t vl);
vuint8m8_t vadc_vxm_u8m8 (vuint8m8_t op1, uint8_t op2, vbool1_t
    carryin, size_t vl);
vuint16mf4_t vadc_vvm_u16mf4 (vuint16mf4_t op1, vuint16mf4_t
    op2, vbool64_t carryin, size_t vl);
vuint16mf4_t vadc_vxm_u16mf4 (vuint16mf4_t op1, uint16_t op2,
    vbool64_t carryin, size_t vl);
vuint16mf2_t vadc_vvm_u16mf2 (vuint16mf2_t op1, vuint16mf2_t
    op2, vbool32_t carryin, size_t vl);
vuint16mf2_t vadc_vxm_u16mf2 (vuint16mf2_t op1, uint16_t op2,
    vbool32_t carryin, size_t vl);
vuint16m1_t vadc_vvm_u16m1 (vuint16m1_t op1, vuint16m1_t op2,
    vbool16_t carryin, size_t vl);
vuint16m1_t vadc_vxm_u16m1 (vuint16m1_t op1, uint16_t op2,
    vbool16_t carryin, size_t vl);
vuint16m2_t vadc_vvm_u16m2 (vuint16m2_t op1, vuint16m2_t op2,
    vbool8_t carryin, size_t vl);
vuint16m2_t vadc_vxm_u16m2 (vuint16m2_t op1, uint16_t op2,
    vbool8_t carryin, size_t vl);
vuint16m4_t vadc_vvm_u16m4 (vuint16m4_t op1, vuint16m4_t op2,
    vbool4_t carryin, size_t vl);
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477

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vuint16m4_t vadc_vxm_u16m4 (vuint16m4_t op1, uint16_t op2,
    vbool4_t carryin, size_t vl);
vuint16m8_t vadc_vvm_u16m8 (vuint16m8_t op1, vuint16m8_t op2,
    vbool2_t carryin, size_t vl);
vuint16m8_t vadc_vxm_u16m8 (vuint16m8_t op1, uint16_t op2,
    vbool2_t carryin, size_t vl);
vuint32mf2_t vadc_vvm_u32mf2 (vuint32mf2_t op1, vuint32mf2_t
    op2, vbool64_t carryin, size_t vl);
vuint32mf2_t vadc_vxm_u32mf2 (vuint32mf2_t op1, uint32_t op2,
    vbool64_t carryin, size_t vl);
vuint32m1_t vadc_vvm_u32m1 (vuint32m1_t op1, vuint32m1_t op2,
    vbool32_t carryin, size_t vl);
vuint32m1_t vadc_vxm_u32m1 (vuint32m1_t op1, uint32_t op2,
    vbool32_t carryin, size_t vl);
vuint32m2_t vadc_vvm_u32m2 (vuint32m2_t op1, vuint32m2_t op2,
    vbool16_t carryin, size_t vl);
vuint32m2_t vadc_vxm_u32m2 (vuint32m2_t op1, uint32_t op2,
    vbool16_t carryin, size_t vl);
vuint32m4_t vadc_vvm_u32m4 (vuint32m4_t op1, vuint32m4_t op2,
    vbool8_t carryin, size_t vl);
vuint32m4_t vadc_vxm_u32m4 (vuint32m4_t op1, uint32_t op2,
    vbool8_t carryin, size_t vl);
vuint32m8_t vadc_vvm_u32m8 (vuint32m8_t op1, vuint32m8_t op2,
    vbool4_t carryin, size_t vl);
vuint32m8_t vadc_vxm_u32m8 (vuint32m8_t op1, uint32_t op2,
    vbool4_t carryin, size_t vl);
vuint64m1_t vadc_vvm_u64m1 (vuint64m1_t op1, vuint64m1_t op2,
    vbool64_t carryin, size_t vl);
vuint64m1_t vadc_vxm_u64m1 (vuint64m1_t op1, uint64_t op2,
    vbool64_t carryin, size_t vl);
vuint64m2_t vadc_vvm_u64m2 (vuint64m2_t op1, vuint64m2_t op2,
    vbool32_t carryin, size_t vl);
vuint64m2_t vadc_vxm_u64m2 (vuint64m2_t op1, uint64_t op2,
    vbool32_t carryin, size_t vl);
vuint64m4_t vadc_vvm_u64m4 (vuint64m4_t op1, vuint64m4_t op2,
    vbool16_t carryin, size_t vl);
vuint64m4_t vadc_vxm_u64m4 (vuint64m4_t op1, uint64_t op2,
    vbool16_t carryin, size_t vl);
vuint64m8_t vadc_vvm_u64m8 (vuint64m8_t op1, vuint64m8_t op2,
    vbool8_t carryin, size_t vl);
vuint64m8_t vadc_vxm_u64m8 (vuint64m8_t op1, uint64_t op2,
    vbool8_t carryin, size_t vl);
vbool64_t vmadc_vvm_i8mf8_b64 (vint8mf8_t op1, vint8mf8_t op2,
    vbool64_t carryin, size_t vl);
vbool64_t vmadc_vxm_i8mf8_b64 (vint8mf8_t op1, int8_t op2,
    vbool64_t carryin, size_t vl);
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vbool64_t vmadc_vv_i8mf8_b64 (vint8mf8_t op1, vint8mf8_t op2,
    size_t vl);
vbool64_t vmadc_vx_i8mf8_b64 (vint8mf8_t op1, int8_t op2, size_t
    vl);
vbool32_t vmadc_vvm_i8mf4_b32 (vint8mf4_t op1, vint8mf4_t op2,
    vbool32_t carryin, size_t vl);
vbool32_t vmadc_vxm_i8mf4_b32 (vint8mf4_t op1, int8_t op2,
    vbool32_t carryin, size_t vl);
vbool32_t vmadc_vv_i8mf4_b32 (vint8mf4_t op1, vint8mf4_t op2,
    size_t vl);
vbool32_t vmadc_vx_i8mf4_b32 (vint8mf4_t op1, int8_t op2, size_t
    vl);
vbool16_t vmadc_vvm_i8mf2_b16 (vint8mf2_t op1, vint8mf2_t op2,
    vbool16_t carryin, size_t vl);
vbool16_t vmadc_vxm_i8mf2_b16 (vint8mf2_t op1, int8_t op2,
    vbool16_t carryin, size_t vl);
vbool16_t vmadc_vv_i8mf2_b16 (vint8mf2_t op1, vint8mf2_t op2,
    size_t vl);
vbool16_t vmadc_vx_i8mf2_b16 (vint8mf2_t op1, int8_t op2, size_t
    vl);
vbool8_t vmadc_vvm_i8m1_b8 (vint8m1_t op1, vint8m1_t op2,
    vbool8_t carryin, size_t vl);
vbool8_t vmadc_vxm_i8m1_b8 (vint8m1_t op1, int8_t op2, vbool8_t
    carryin, size_t vl);
vbool8_t vmadc_vv_i8m1_b8 (vint8m1_t op1, vint8m1_t op2, size_t
    vl);
vbool8_t vmadc_vx_i8m1_b8 (vint8m1_t op1, int8_t op2, size_t vl);
vbool4_t vmadc_vvm_i8m2_b4 (vint8m2_t op1, vint8m2_t op2,
    vbool4_t carryin, size_t vl);
vbool4_t vmadc_vxm_i8m2_b4 (vint8m2_t op1, int8_t op2, vbool4_t
    carryin, size_t vl);
vbool4_t vmadc_vv_i8m2_b4 (vint8m2_t op1, vint8m2_t op2, size_t
    vl);
vbool4_t vmadc_vx_i8m2_b4 (vint8m2_t op1, int8_t op2, size_t vl);
vbool2_t vmadc_vvm_i8m4_b2 (vint8m4_t op1, vint8m4_t op2,
    vbool2_t carryin, size_t vl);
vbool2_t vmadc_vxm_i8m4_b2 (vint8m4_t op1, int8_t op2, vbool2_t
    carryin, size_t vl);
vbool2_t vmadc_vv_i8m4_b2 (vint8m4_t op1, vint8m4_t op2, size_t
    vl);
vbool2_t vmadc_vx_i8m4_b2 (vint8m4_t op1, int8_t op2, size_t vl);
vbool1_t vmadc_vvm_i8m8_b1 (vint8m8_t op1, vint8m8_t op2,
    vbool1_t carryin, size_t vl);
vbool1_t vmadc_vxm_i8m8_b1 (vint8m8_t op1, int8_t op2, vbool1_t
    carryin, size_t vl);
```

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vbool1_t vmadc_vv_i8m8_b1 (vint8m8_t op1, vint8m8_t op2, size_t
    vl);
vbool1_t vmadc_vx_i8m8_b1 (vint8m8_t op1, int8_t op2, size_t vl);
vbool64_t vmadc_vvm_i16mf4_b64 (vint16mf4_t op1, vint16mf4_t
    op2, vbool64_t carryin, size_t vl);
vbool64_t vmadc_vxm_i16mf4_b64 (vint16mf4_t op1, int16_t op2,
    vbool64_t carryin, size_t vl);
vbool64_t vmadc_vv_i16mf4_b64 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vbool64_t vmadc_vx_i16mf4_b64 (vint16mf4_t op1, int16_t op2,
    size_t vl);
vbool32_t vmadc_vvm_i16mf2_b32 (vint16mf2_t op1, vint16mf2_t
    op2, vbool32_t carryin, size_t vl);
vbool32_t vmadc_vxm_i16mf2_b32 (vint16mf2_t op1, int16_t op2,
    vbool32_t carryin, size_t vl);
vbool32_t vmadc_vv_i16mf2_b32 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vbool32_t vmadc_vx_i16mf2_b32 (vint16mf2_t op1, int16_t op2,
    size_t vl);
vbool16_t vmadc_vvm_i16m1_b16 (vint16m1_t op1, vint16m1_t op2,
    vbool16_t carryin, size_t vl);
vbool16_t vmadc_vxm_i16m1_b16 (vint16m1_t op1, int16_t op2,
    vbool16_t carryin, size_t vl);
vbool16_t vmadc_vv_i16m1_b16 (vint16m1_t op1, vint16m1_t op2,
    size_t vl);
vbool16_t vmadc_vx_i16m1_b16 (vint16m1_t op1, int16_t op2,
    size_t vl);
vbool8_t vmadc_vvm_i16m2_b8 (vint16m2_t op1, vint16m2_t op2,
    vbool8_t carryin, size_t vl);
vbool8_t vmadc_vxm_i16m2_b8 (vint16m2_t op1, int16_t op2,
    vbool8_t carryin, size_t vl);
vbool8_t vmadc_vv_i16m2_b8 (vint16m2_t op1, vint16m2_t op2,
    size_t vl);
vbool8_t vmadc_vx_i16m2_b8 (vint16m2_t op1, int16_t op2, size_t
    vl);
vbool4_t vmadc_vvm_i16m4_b4 (vint16m4_t op1, vint16m4_t op2,
    vbool4_t carryin, size_t vl);
vbool4_t vmadc_vxm_i16m4_b4 (vint16m4_t op1, int16_t op2,
    vbool4_t carryin, size_t vl);
vbool4_t vmadc_vv_i16m4_b4 (vint16m4_t op1, vint16m4_t op2,
    size_t vl);
vbool4_t vmadc_vx_i16m4_b4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vbool2_t vmadc_vvm_i16m8_b2 (vint16m8_t op1, vint16m8_t op2,
    vbool2_t carryin, size_t vl);
```

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vbool2_t vmadc_vxm_i16m8_b2 (vint16m8_t op1, int16_t op2,
    vbool2_t carryin, size_t vl);
vbool2_t vmadc_vv_i16m8_b2 (vint16m8_t op1, vint16m8_t op2,
    size_t vl);
vbool2_t vmadc_vx_i16m8_b2 (vint16m8_t op1, int16_t op2, size_t
    vl);
vbool64_t vmadc_vvm_i32mf2_b64 (vint32mf2_t op1, vint32mf2_t
    op2, vbool64_t carryin, size_t vl);
vbool64_t vmadc_vxm_i32mf2_b64 (vint32mf2_t op1, int32_t op2,
    vbool64_t carryin, size_t vl);
vbool64_t vmadc_vv_i32mf2_b64 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vbool64_t vmadc_vx_i32mf2_b64 (vint32mf2_t op1, int32_t op2,
    size_t vl);
vbool32_t vmadc_vvm_i32m1_b32 (vint32m1_t op1, vint32m1_t op2,
    vbool32_t carryin, size_t vl);
vbool32_t vmadc_vxm_i32m1_b32 (vint32m1_t op1, int32_t op2,
    vbool32_t carryin, size_t vl);
vbool32_t vmadc_vv_i32m1_b32 (vint32m1_t op1, vint32m1_t op2,
    size_t vl);
vbool32_t vmadc_vx_i32m1_b32 (vint32m1_t op1, int32_t op2,
    size_t vl);
vbool16_t vmadc_vvm_i32m2_b16 (vint32m2_t op1, vint32m2_t op2,
    vbool16_t carryin, size_t vl);
vbool16_t vmadc_vxm_i32m2_b16 (vint32m2_t op1, int32_t op2,
    vbool16_t carryin, size_t vl);
vbool16_t vmadc_vv_i32m2_b16 (vint32m2_t op1, vint32m2_t op2,
    size_t vl);
vbool16_t vmadc_vx_i32m2_b16 (vint32m2_t op1, int32_t op2,
    size_t vl);
vbool8_t vmadc_vvm_i32m4_b8 (vint32m4_t op1, vint32m4_t op2,
    vbool8_t carryin, size_t vl);
vbool8_t vmadc_vxm_i32m4_b8 (vint32m4_t op1, int32_t op2,
    vbool8_t carryin, size_t vl);
vbool8_t vmadc_vv_i32m4_b8 (vint32m4_t op1, vint32m4_t op2,
    size_t vl);
vbool8_t vmadc_vx_i32m4_b8 (vint32m4_t op1, int32_t op2, size_t
    vl);
vbool4_t vmadc_vvm_i32m8_b4 (vint32m8_t op1, vint32m8_t op2,
    vbool4_t carryin, size_t vl);
vbool4_t vmadc_vxm_i32m8_b4 (vint32m8_t op1, int32_t op2,
    vbool4_t carryin, size_t vl);
vbool4_t vmadc_vv_i32m8_b4 (vint32m8_t op1, vint32m8_t op2,
    size_t vl);
vbool4_t vmadc_vx_i32m8_b4 (vint32m8_t op1, int32_t op2, size_t
    vl);
```

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vbool64_t vmadc_vvm_i64m1_b64 (vint64m1_t op1, vint64m1_t op2,
    vbool64_t carryin, size_t vl);
vbool64_t vmadc_vxm_i64m1_b64 (vint64m1_t op1, int64_t op2,
    vbool64_t carryin, size_t vl);
vbool64_t vmadc_vv_i64m1_b64 (vint64m1_t op1, vint64m1_t op2,
    size_t vl);
vbool64_t vmadc_vx_i64m1_b64 (vint64m1_t op1, int64_t op2,
    size_t vl);
vbool32_t vmadc_vvm_i64m2_b32 (vint64m2_t op1, vint64m2_t op2,
    vbool32_t carryin, size_t vl);
vbool32_t vmadc_vxm_i64m2_b32 (vint64m2_t op1, int64_t op2,
    vbool32_t carryin, size_t vl);
vbool32_t vmadc_vv_i64m2_b32 (vint64m2_t op1, vint64m2_t op2,
    size_t vl);
vbool32_t vmadc_vx_i64m2_b32 (vint64m2_t op1, int64_t op2,
    size_t vl);
vbool16_t vmadc_vvm_i64m4_b16 (vint64m4_t op1, vint64m4_t op2,
    vbool16_t carryin, size_t vl);
vbool16_t vmadc_vxm_i64m4_b16 (vint64m4_t op1, int64_t op2,
    vbool16_t carryin, size_t vl);
vbool16_t vmadc_vv_i64m4_b16 (vint64m4_t op1, vint64m4_t op2,
    size_t vl);
vbool16_t vmadc_vx_i64m4_b16 (vint64m4_t op1, int64_t op2,
    size_t vl);
vbool8_t vmadc_vvm_i64m8_b8 (vint64m8_t op1, vint64m8_t op2,
    vbool8_t carryin, size_t vl);
vbool8_t vmadc_vxm_i64m8_b8 (vint64m8_t op1, int64_t op2,
    vbool8_t carryin, size_t vl);
vbool8_t vmadc_vv_i64m8_b8 (vint64m8_t op1, vint64m8_t op2,
    size_t vl);
vbool8_t vmadc_vx_i64m8_b8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vbool64_t vmadc_vvm_u8mf8_b64 (vuint8mf8_t op1, vuint8mf8_t op2,
    vbool64_t carryin, size_t vl);
vbool64_t vmadc_vxm_u8mf8_b64 (vuint8mf8_t op1, uint8_t op2,
    vbool64_t carryin, size_t vl);
vbool64_t vmadc_vv_u8mf8_b64 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vbool64_t vmadc_vx_u8mf8_b64 (vuint8mf8_t op1, uint8_t op2,
    size_t vl);
vbool32_t vmadc_vvm_u8mf4_b32 (vuint8mf4_t op1, vuint8mf4_t op2,
    vbool32_t carryin, size_t vl);
vbool32_t vmadc_vxm_u8mf4_b32 (vuint8mf4_t op1, uint8_t op2,
    vbool32_t carryin, size_t vl);
vbool32_t vmadc_vv_u8mf4_b32 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
```

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vbool32_t vmadc_vx_u8mf4_b32 (vuint8mf4_t op1, uint8_t op2,
    size_t vl);
vbool16_t vmadc_vvm_u8mf2_b16 (vuint8mf2_t op1, vuint8mf2_t op2,
    vbool16_t carryin, size_t vl);
vbool16_t vmadc_vxm_u8mf2_b16 (vuint8mf2_t op1, uint8_t op2,
    vbool16_t carryin, size_t vl);
vbool16_t vmadc_vv_u8mf2_b16 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vbool16_t vmadc_vx_u8mf2_b16 (vuint8mf2_t op1, uint8_t op2,
    size_t vl);
vbool8_t vmadc_vvm_u8m1_b8 (vuint8m1_t op1, vuint8m1_t op2,
    vbool8_t carryin, size_t vl);
vbool8_t vmadc_vxm_u8m1_b8 (vuint8m1_t op1, uint8_t op2,
    vbool8_t carryin, size_t vl);
vbool8_t vmadc_vv_u8m1_b8 (vuint8m1_t op1, vuint8m1_t op2,
    size_t vl);
vbool8_t vmadc_vx_u8m1_b8 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vbool4_t vmadc_vvm_u8m2_b4 (vuint8m2_t op1, vuint8m2_t op2,
    vbool4_t carryin, size_t vl);
vbool4_t vmadc_vxm_u8m2_b4 (vuint8m2_t op1, uint8_t op2,
    vbool4_t carryin, size_t vl);
vbool4_t vmadc_vv_u8m2_b4 (vuint8m2_t op1, vuint8m2_t op2,
    size_t vl);
vbool4_t vmadc_vx_u8m2_b4 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vbool2_t vmadc_vvm_u8m4_b2 (vuint8m4_t op1, vuint8m4_t op2,
    vbool2_t carryin, size_t vl);
vbool2_t vmadc_vxm_u8m4_b2 (vuint8m4_t op1, uint8_t op2,
    vbool2_t carryin, size_t vl);
vbool2_t vmadc_vv_u8m4_b2 (vuint8m4_t op1, vuint8m4_t op2,
    size_t vl);
vbool2_t vmadc_vx_u8m4_b2 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
vbool1_t vmadc_vvm_u8m8_b1 (vuint8m8_t op1, vuint8m8_t op2,
    vbool1_t carryin, size_t vl);
vbool1_t vmadc_vxm_u8m8_b1 (vuint8m8_t op1, uint8_t op2,
    vbool1_t carryin, size_t vl);
vbool1_t vmadc_vv_u8m8_b1 (vuint8m8_t op1, vuint8m8_t op2,
    size_t vl);
vbool1_t vmadc_vx_u8m8_b1 (vuint8m8_t op1, uint8_t op2, size_t
    vl);
vbool64_t vmadc_vvm_u16mf4_b64 (vuint16mf4_t op1, vuint16mf4_t
    op2, vbool64_t carryin, size_t vl);
vbool64_t vmadc_vxm_u16mf4_b64 (vuint16mf4_t op1, uint16_t op2,
    vbool64_t carryin, size_t vl);
```

```
vbool64_t vmadc_vv_u16mf4_b64 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vbool64_t vmadc_vx_u16mf4_b64 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vbool32_t vmadc_vvm_u16mf2_b32 (vuint16mf2_t op1, vuint16mf2_t
    op2, vbool32_t carryin, size_t vl);
vbool32_t vmadc_vxm_u16mf2_b32 (vuint16mf2_t op1, uint16_t op2,
    vbool32_t carryin, size_t vl);
vbool32_t vmadc_vv_u16mf2_b32 (vuint16mf2_t op1, vuint16mf2_t
    op2, size_t vl);
vbool32_t vmadc_vx_u16mf2_b32 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vbool16_t vmadc_vvm_u16m1_b16 (vuint16m1_t op1, vuint16m1_t op2,
    vbool16_t carryin, size_t vl);
vbool16_t vmadc_vxm_u16m1_b16 (vuint16m1_t op1, uint16_t op2,
    vbool16_t carryin, size_t vl);
vbool16_t vmadc_vv_u16m1_b16 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vbool16_t vmadc_vx_u16m1_b16 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vbool8_t vmadc_vvm_u16m2_b8 (vuint16m2_t op1, vuint16m2_t op2,
    vbool8_t carryin, size_t vl);
vbool8_t vmadc_vxm_u16m2_b8 (vuint16m2_t op1, uint16_t op2,
    vbool8_t carryin, size_t vl);
vbool8_t vmadc_vv_u16m2_b8 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vbool8_t vmadc_vx_u16m2_b8 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vbool4_t vmadc_vvm_u16m4_b4 (vuint16m4_t op1, vuint16m4_t op2,
    vbool4_t carryin, size_t vl);
vbool4_t vmadc_vxm_u16m4_b4 (vuint16m4_t op1, uint16_t op2,
    vbool4_t carryin, size_t vl);
vbool4_t vmadc_vv_u16m4_b4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vbool4_t vmadc_vx_u16m4_b4 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
vbool2_t vmadc_vvm_u16m8_b2 (vuint16m8_t op1, vuint16m8_t op2,
    vbool2_t carryin, size_t vl);
vbool2_t vmadc_vxm_u16m8_b2 (vuint16m8_t op1, uint16_t op2,
    vbool2_t carryin, size_t vl);
vbool2_t vmadc_vv_u16m8_b2 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vbool2_t vmadc_vx_u16m8_b2 (vuint16m8_t op1, uint16_t op2,
    size_t vl);
vbool64_t vmadc_vvm_u32mf2_b64 (vuint32mf2_t op1, vuint32mf2_t
    op2, vbool64_t carryin, size_t vl);
```

```
vbool64_t vmadc_vxm_u32mf2_b64 (vuint32mf2_t op1, uint32_t op2,
    vbool64_t carryin, size_t vl);
vbool64_t vmadc_vv_u32mf2_b64 (vuint32mf2_t op1, vuint32mf2_t
    op2, size_t vl);
vbool64_t vmadc_vx_u32mf2_b64 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vbool32_t vmadc_vvm_u32m1_b32 (vuint32m1_t op1, vuint32m1_t op2,
    vbool32_t carryin, size_t vl);
vbool32_t vmadc_vxm_u32m1_b32 (vuint32m1_t op1, uint32_t op2,
    vbool32_t carryin, size_t vl);
vbool32_t vmadc_vv_u32m1_b32 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vbool32_t vmadc_vx_u32m1_b32 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vbool16_t vmadc_vvm_u32m2_b16 (vuint32m2_t op1, vuint32m2_t op2,
    vbool16_t carryin, size_t vl);
vbool16_t vmadc_vxm_u32m2_b16 (vuint32m2_t op1, uint32_t op2,
    vbool16_t carryin, size_t vl);
vbool16_t vmadc_vv_u32m2_b16 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vbool16_t vmadc_vx_u32m2_b16 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vbool8_t vmadc_vvm_u32m4_b8 (vuint32m4_t op1, vuint32m4_t op2,
    vbool8_t carryin, size_t vl);
vbool8_t vmadc_vxm_u32m4_b8 (vuint32m4_t op1, uint32_t op2,
    vbool8_t carryin, size_t vl);
vbool8_t vmadc_vv_u32m4_b8 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vbool8_t vmadc_vx_u32m4_b8 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
vbool4_t vmadc_vvm_u32m8_b4 (vuint32m8_t op1, vuint32m8_t op2,
    vbool4_t carryin, size_t vl);
vbool4_t vmadc_vxm_u32m8_b4 (vuint32m8_t op1, uint32_t op2,
    vbool4_t carryin, size_t vl);
vbool4_t vmadc_vv_u32m8_b4 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vbool4_t vmadc_vx_u32m8_b4 (vuint32m8_t op1, uint32_t op2,
    size_t vl);
vbool64_t vmadc_vvm_u64m1_b64 (vuint64m1_t op1, vuint64m1_t op2,
    vbool64_t carryin, size_t vl);
vbool64_t vmadc_vxm_u64m1_b64 (vuint64m1_t op1, uint64_t op2,
    vbool64_t carryin, size_t vl);
vbool64_t vmadc_vv_u64m1_b64 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vbool64_t vmadc_vx_u64m1_b64 (vuint64m1_t op1, uint64_t op2,
    size_t vl);
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485

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vbool32_t vmadc_vvm_u64m2_b32 (vuint64m2_t op1, vuint64m2_t op2,
    vbool32_t carryin, size_t vl);
vbool32_t vmadc_vxm_u64m2_b32 (vuint64m2_t op1, uint64_t op2,
    vbool32_t carryin, size_t vl);
vbool32_t vmadc_vv_u64m2_b32 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vbool32_t vmadc_vx_u64m2_b32 (vuint64m2_t op1, uint64_t op2,
    size_t vl);
vbool16_t vmadc_vvm_u64m4_b16 (vuint64m4_t op1, vuint64m4_t op2,
    vbool16_t carryin, size_t vl);
vbool16_t vmadc_vxm_u64m4_b16 (vuint64m4_t op1, uint64_t op2,
    vbool16_t carryin, size_t vl);
vbool16_t vmadc_vv_u64m4_b16 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vbool16_t vmadc_vx_u64m4_b16 (vuint64m4_t op1, uint64_t op2,
    size_t vl);
vbool8_t vmadc_vvm_u64m8_b8 (vuint64m8_t op1, vuint64m8_t op2,
    vbool8_t carryin, size_t vl);
vbool8_t vmadc_vxm_u64m8_b8 (vuint64m8_t op1, uint64_t op2,
    vbool8_t carryin, size_t vl);
vbool8_t vmadc_vv_u64m8_b8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vbool8_t vmadc_vx_u64m8_b8 (vuint64m8_t op1, uint64_t op2,
    size_t vl);
vint8mf8_t vsbc_vvm_i8mf8 (vint8mf8_t op1, vint8mf8_t op2,
    vbool64_t borrowin, size_t vl);
vint8mf8_t vsbc_vxm_i8mf8 (vint8mf8_t op1, int8_t op2, vbool64_t
    borrowin, size_t vl);
vint8mf4_t vsbc_vvm_i8mf4 (vint8mf4_t op1, vint8mf4_t op2,
    vbool32_t borrowin, size_t vl);
vint8mf4_t vsbc_vxm_i8mf4 (vint8mf4_t op1, int8_t op2, vbool32_t
    borrowin, size_t vl);
vint8mf2_t vsbc_vvm_i8mf2 (vint8mf2_t op1, vint8mf2_t op2,
    vbool16_t borrowin, size_t vl);
vint8mf2_t vsbc_vxm_i8mf2 (vint8mf2_t op1, int8_t op2, vbool16_t
    borrowin, size_t vl);
vint8m1_t vsbc_vvm_i8m1 (vint8m1_t op1, vint8m1_t op2, vbool8_t
    borrowin, size_t vl);
vint8m1_t vsbc_vxm_i8m1 (vint8m1_t op1, int8_t op2, vbool8_t
    borrowin, size_t vl);
vint8m2_t vsbc_vvm_i8m2 (vint8m2_t op1, vint8m2_t op2, vbool4_t
    borrowin, size_t vl);
vint8m2_t vsbc_vxm_i8m2 (vint8m2_t op1, int8_t op2, vbool4_t
    borrowin, size_t vl);
vint8m4_t vsbc_vvm_i8m4 (vint8m4_t op1, vint8m4_t op2, vbool2_t
    borrowin, size_t vl);
```

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vint8m4_t vsbc_vxm_i8m4 (vint8m4_t op1, int8_t op2, vbool2_t
    borrowin, size_t vl);
vint8m8_t vsbc_vvm_i8m8 (vint8m8_t op1, vint8m8_t op2, vbool1_t
    borrowin, size_t vl);
vint8m8_t vsbc_vxm_i8m8 (vint8m8_t op1, int8_t op2, vbool1_t
    borrowin, size_t vl);
vint16mf4_t vsbc_vvm_i16mf4 (vint16mf4_t op1, vint16mf4_t op2,
    vbool64_t borrowin, size_t vl);
vint16mf4_t vsbc_vxm_i16mf4 (vint16mf4_t op1, int16_t op2,
    vbool64_t borrowin, size_t vl);
vint16mf2_t vsbc_vvm_i16mf2 (vint16mf2_t op1, vint16mf2_t op2,
    vbool32_t borrowin, size_t vl);
vint16mf2_t vsbc_vxm_i16mf2 (vint16mf2_t op1, int16_t op2,
    vbool32_t borrowin, size_t vl);
vint16m1_t vsbc_vvm_i16m1 (vint16m1_t op1, vint16m1_t op2,
    vbool16_t borrowin, size_t vl);
vint16m1_t vsbc_vxm_i16m1 (vint16m1_t op1, int16_t op2,
    vbool16_t borrowin, size_t vl);
vint16m2_t vsbc_vvm_i16m2 (vint16m2_t op1, vint16m2_t op2,
    vbool8_t borrowin, size_t vl);
vint16m2_t vsbc_vxm_i16m2 (vint16m2_t op1, int16_t op2, vbool8_t
    borrowin, size_t vl);
vint16m4_t vsbc_vvm_i16m4 (vint16m4_t op1, vint16m4_t op2,
    vbool4_t borrowin, size_t vl);
vint16m4_t vsbc_vxm_i16m4 (vint16m4_t op1, int16_t op2, vbool4_t
    borrowin, size_t vl);
vint16m8_t vsbc_vvm_i16m8 (vint16m8_t op1, vint16m8_t op2,
    vbool2_t borrowin, size_t vl);
vint16m8_t vsbc_vxm_i16m8 (vint16m8_t op1, int16_t op2, vbool2_t
    borrowin, size_t vl);
vint32mf2_t vsbc_vvm_i32mf2 (vint32mf2_t op1, vint32mf2_t op2,
    vbool64_t borrowin, size_t vl);
vint32mf2_t vsbc_vxm_i32mf2 (vint32mf2_t op1, int32_t op2,
    vbool64_t borrowin, size_t vl);
vint32m1_t vsbc_vvm_i32m1 (vint32m1_t op1, vint32m1_t op2,
    vbool32_t borrowin, size_t vl);
vint32m1_t vsbc_vxm_i32m1 (vint32m1_t op1, int32_t op2,
    vbool32_t borrowin, size_t vl);
vint32m2_t vsbc_vvm_i32m2 (vint32m2_t op1, vint32m2_t op2,
    vbool16_t borrowin, size_t vl);
vint32m2_t vsbc_vxm_i32m2 (vint32m2_t op1, int32_t op2,
    vbool16_t borrowin, size_t vl);
vint32m4_t vsbc_vvm_i32m4 (vint32m4_t op1, vint32m4_t op2,
    vbool8_t borrowin, size_t vl);
vint32m4_t vsbc_vxm_i32m4 (vint32m4_t op1, int32_t op2, vbool8_t
    borrowin, size_t vl);
```

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vint32m8_t vsbc_vvm_i32m8 (vint32m8_t op1, vint32m8_t op2,
    vbool4_t borrowin, size_t vl);
vint32m8_t vsbc_vxm_i32m8 (vint32m8_t op1, int32_t op2, vbool4_t
    borrowin, size_t vl);
vint64m1_t vsbc_vvm_i64m1 (vint64m1_t op1, vint64m1_t op2,
    vbool64_t borrowin, size_t vl);
vint64m1_t vsbc_vxm_i64m1 (vint64m1_t op1, int64_t op2,
    vbool64_t borrowin, size_t vl);
vint64m2_t vsbc_vvm_i64m2 (vint64m2_t op1, vint64m2_t op2,
    vbool32_t borrowin, size_t vl);
vint64m2_t vsbc_vxm_i64m2 (vint64m2_t op1, int64_t op2,
    vbool32_t borrowin, size_t vl);
vint64m4_t vsbc_vvm_i64m4 (vint64m4_t op1, vint64m4_t op2,
    vbool16_t borrowin, size_t vl);
vint64m4_t vsbc_vxm_i64m4 (vint64m4_t op1, int64_t op2,
    vbool16_t borrowin, size_t vl);
vint64m8_t vsbc_vvm_i64m8 (vint64m8_t op1, vint64m8_t op2,
    vbool8_t borrowin, size_t vl);
vint64m8_t vsbc_vxm_i64m8 (vint64m8_t op1, int64_t op2, vbool8_t
    borrowin, size_t vl);
vuint8mf8_t vsbc_vvm_u8mf8 (vuint8mf8_t op1, vuint8mf8_t op2,
    vbool64_t borrowin, size_t vl);
vuint8mf8_t vsbc_vxm_u8mf8 (vuint8mf8_t op1, uint8_t op2,
    vbool64_t borrowin, size_t vl);
vuint8mf4_t vsbc_vvm_u8mf4 (vuint8mf4_t op1, vuint8mf4_t op2,
    vbool32_t borrowin, size_t vl);
vuint8mf4_t vsbc_vxm_u8mf4 (vuint8mf4_t op1, uint8_t op2,
    vbool32_t borrowin, size_t vl);
vuint8mf2_t vsbc_vvm_u8mf2 (vuint8mf2_t op1, vuint8mf2_t op2,
    vbool16_t borrowin, size_t vl);
vuint8mf2_t vsbc_vxm_u8mf2 (vuint8mf2_t op1, uint8_t op2,
    vbool16_t borrowin, size_t vl);
vuint8m1_t vsbc_vvm_u8m1 (vuint8m1_t op1, vuint8m1_t op2,
    vbool8_t borrowin, size_t vl);
vuint8m1_t vsbc_vxm_u8m1 (vuint8m1_t op1, uint8_t op2, vbool8_t
    borrowin, size_t vl);
vuint8m2_t vsbc_vvm_u8m2 (vuint8m2_t op1, vuint8m2_t op2,
    vbool4_t borrowin, size_t vl);
vuint8m2_t vsbc_vxm_u8m2 (vuint8m2_t op1, uint8_t op2, vbool4_t
    borrowin, size_t vl);
vuint8m4_t vsbc_vvm_u8m4 (vuint8m4_t op1, vuint8m4_t op2,
    vbool2_t borrowin, size_t vl);
vuint8m4_t vsbc_vxm_u8m4 (vuint8m4_t op1, uint8_t op2, vbool2_t
    borrowin, size_t vl);
vuint8m8_t vsbc_vvm_u8m8 (vuint8m8_t op1, vuint8m8_t op2,
    vbool1_t borrowin, size_t vl);
```

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vuint8m8_t vsbc_vxm_u8m8 (vuint8m8_t op1, uint8_t op2, vbool1_t
    borrowin, size_t vl);
vuint16mf4_t vsbc_vvm_u16mf4 (vuint16mf4_t op1, vuint16mf4_t
    op2, vbool64_t borrowin, size_t vl);
vuint16mf4_t vsbc_vxm_u16mf4 (vuint16mf4_t op1, uint16_t op2,
    vbool64_t borrowin, size_t vl);
vuint16mf2_t vsbc_vvm_u16mf2 (vuint16mf2_t op1, vuint16mf2_t
    op2, vbool32_t borrowin, size_t vl);
vuint16mf2_t vsbc_vxm_u16mf2 (vuint16mf2_t op1, uint16_t op2,
    vbool32_t borrowin, size_t vl);
vuint16m1_t vsbc_vvm_u16m1 (vuint16m1_t op1, vuint16m1_t op2,
    vbool16_t borrowin, size_t vl);
vuint16m1_t vsbc_vxm_u16m1 (vuint16m1_t op1, uint16_t op2,
    vbool16_t borrowin, size_t vl);
vuint16m2_t vsbc_vvm_u16m2 (vuint16m2_t op1, vuint16m2_t op2,
    vbool8_t borrowin, size_t vl);
vuint16m2_t vsbc_vxm_u16m2 (vuint16m2_t op1, uint16_t op2,
    vbool8_t borrowin, size_t vl);
vuint16m4_t vsbc_vvm_u16m4 (vuint16m4_t op1, vuint16m4_t op2,
    vbool4_t borrowin, size_t vl);
vuint16m4_t vsbc_vxm_u16m4 (vuint16m4_t op1, uint16_t op2,
    vbool4_t borrowin, size_t vl);
vuint16m8_t vsbc_vvm_u16m8 (vuint16m8_t op1, vuint16m8_t op2,
    vbool2_t borrowin, size_t vl);
vuint16m8_t vsbc_vxm_u16m8 (vuint16m8_t op1, uint16_t op2,
    vbool2_t borrowin, size_t vl);
vuint32mf2_t vsbc_vvm_u32mf2 (vuint32mf2_t op1, vuint32mf2_t
    op2, vbool64_t borrowin, size_t vl);
vuint32mf2_t vsbc_vxm_u32mf2 (vuint32mf2_t op1, uint32_t op2,
    vbool64_t borrowin, size_t vl);
vuint32m1_t vsbc_vvm_u32m1 (vuint32m1_t op1, vuint32m1_t op2,
    vbool32_t borrowin, size_t vl);
vuint32m1_t vsbc_vxm_u32m1 (vuint32m1_t op1, uint32_t op2,
    vbool32_t borrowin, size_t vl);
vuint32m2_t vsbc_vvm_u32m2 (vuint32m2_t op1, vuint32m2_t op2,
    vbool16_t borrowin, size_t vl);
vuint32m2_t vsbc_vxm_u32m2 (vuint32m2_t op1, uint32_t op2,
    vbool16_t borrowin, size_t vl);
vuint32m4_t vsbc_vvm_u32m4 (vuint32m4_t op1, vuint32m4_t op2,
    vbool8_t borrowin, size_t vl);
vuint32m4_t vsbc_vxm_u32m4 (vuint32m4_t op1, uint32_t op2,
    vbool8_t borrowin, size_t vl);
vuint32m8_t vsbc_vvm_u32m8 (vuint32m8_t op1, vuint32m8_t op2,
    vbool4_t borrowin, size_t vl);
vuint32m8_t vsbc_vxm_u32m8 (vuint32m8_t op1, uint32_t op2,
    vbool4_t borrowin, size_t vl);
```

```
vuint64m1_t vsbc_vvm_u64m1 (vuint64m1_t op1, vuint64m1_t op2,
    vbool64_t borrowin, size_t vl);
vuint64m1_t vsbc_vxm_u64m1 (vuint64m1_t op1, uint64_t op2,
    vbool64_t borrowin, size_t vl);
vuint64m2_t vsbc_vvm_u64m2 (vuint64m2_t op1, vuint64m2_t op2,
    vbool32_t borrowin, size_t vl);
vuint64m2_t vsbc_vxm_u64m2 (vuint64m2_t op1, uint64_t op2,
    vbool32_t borrowin, size_t vl);
vuint64m4_t vsbc_vvm_u64m4 (vuint64m4_t op1, vuint64m4_t op2,
    vbool16_t borrowin, size_t vl);
vuint64m4_t vsbc_vxm_u64m4 (vuint64m4_t op1, uint64_t op2,
    vbool16_t borrowin, size_t vl);
vuint64m8_t vsbc_vvm_u64m8 (vuint64m8_t op1, vuint64m8_t op2,
    vbool8_t borrowin, size_t vl);
vuint64m8_t vsbc_vxm_u64m8 (vuint64m8_t op1, uint64_t op2,
    vbool8_t borrowin, size_t vl);
vbool64_t vmsbc_vvm_i8mf8_b64 (vint8mf8_t op1, vint8mf8_t op2,
    vbool64_t borrowin, size_t vl);
vbool64_t vmsbc_vxm_i8mf8_b64 (vint8mf8_t op1, int8_t op2,
    vbool64_t borrowin, size_t vl);
vbool64_t vmsbc_vv_i8mf8_b64 (vint8mf8_t op1, vint8mf8_t op2,
    size_t vl);
vbool64_t vmsbc_vx_i8mf8_b64 (vint8mf8_t op1, int8_t op2, size_t
    vl);
vbool32_t vmsbc_vvm_i8mf4_b32 (vint8mf4_t op1, vint8mf4_t op2,
    vbool32_t borrowin, size_t vl);
vbool32_t vmsbc_vxm_i8mf4_b32 (vint8mf4_t op1, int8_t op2,
    vbool32_t borrowin, size_t vl);
vbool32_t vmsbc_vv_i8mf4_b32 (vint8mf4_t op1, vint8mf4_t op2,
    size_t vl);
vbool32_t vmsbc_vx_i8mf4_b32 (vint8mf4_t op1, int8_t op2, size_t
    vl);
vbool16_t vmsbc_vvm_i8mf2_b16 (vint8mf2_t op1, vint8mf2_t op2,
    vbool16_t borrowin, size_t vl);
vbool16_t vmsbc_vxm_i8mf2_b16 (vint8mf2_t op1, int8_t op2,
    vbool16_t borrowin, size_t vl);
vbool16_t vmsbc_vv_i8mf2_b16 (vint8mf2_t op1, vint8mf2_t op2,
    size_t vl);
vbool16_t vmsbc_vx_i8mf2_b16 (vint8mf2_t op1, int8_t op2, size_t
    vl);
vbool8_t vmsbc_vvm_i8m1_b8 (vint8m1_t op1, vint8m1_t op2,
    vbool8_t borrowin, size_t vl);
vbool8_t vmsbc_vxm_i8m1_b8 (vint8m1_t op1, int8_t op2, vbool8_t
    borrowin, size_t vl);
vbool8_t vmsbc_vv_i8m1_b8 (vint8m1_t op1, vint8m1_t op2, size_t
    vl);
```

```
vbool8_t vmsbc_vx_i8m1_b8 (vint8m1_t op1, int8_t op2, size_t vl);
vbool4_t vmsbc_vvm_i8m2_b4 (vint8m2_t op1, vint8m2_t op2,
    vbool4_t borrowin, size_t vl);
vbool4_t vmsbc_vxm_i8m2_b4 (vint8m2_t op1, int8_t op2, vbool4_t
    borrowin, size_t vl);
vbool4_t vmsbc_vv_i8m2_b4 (vint8m2_t op1, vint8m2_t op2, size_t
    vl);
vbool4_t vmsbc_vx_i8m2_b4 (vint8m2_t op1, int8_t op2, size_t vl);
vbool2_t vmsbc_vvm_i8m4_b2 (vint8m4_t op1, vint8m4_t op2,
    vbool2_t borrowin, size_t vl);
vbool2_t vmsbc_vxm_i8m4_b2 (vint8m4_t op1, int8_t op2, vbool2_t
    borrowin, size_t vl);
vbool2_t vmsbc_vv_i8m4_b2 (vint8m4_t op1, vint8m4_t op2, size_t
    vl);
vbool2_t vmsbc_vx_i8m4_b2 (vint8m4_t op1, int8_t op2, size_t vl);
vbool1_t vmsbc_vvm_i8m8_b1 (vint8m8_t op1, vint8m8_t op2,
    vbool1_t borrowin, size_t vl);
vbool1_t vmsbc_vxm_i8m8_b1 (vint8m8_t op1, int8_t op2, vbool1_t
    borrowin, size_t vl);
vbool1_t vmsbc_vv_i8m8_b1 (vint8m8_t op1, vint8m8_t op2, size_t
    vl);
vbool1_t vmsbc_vx_i8m8_b1 (vint8m8_t op1, int8_t op2, size_t vl);
vbool64_t vmsbc_vvm_i16mf4_b64 (vint16mf4_t op1, vint16mf4_t
    op2, vbool64_t borrowin, size_t vl);
vbool64_t vmsbc_vxm_i16mf4_b64 (vint16mf4_t op1, int16_t op2,
    vbool64_t borrowin, size_t vl);
vbool64_t vmsbc_vv_i16mf4_b64 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vbool64_t vmsbc_vx_i16mf4_b64 (vint16mf4_t op1, int16_t op2,
    size_t vl);
vbool32_t vmsbc_vvm_i16mf2_b32 (vint16mf2_t op1, vint16mf2_t
    op2, vbool32_t borrowin, size_t vl);
vbool32_t vmsbc_vxm_i16mf2_b32 (vint16mf2_t op1, int16_t op2,
    vbool32_t borrowin, size_t vl);
vbool32_t vmsbc_vv_i16mf2_b32 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vbool32_t vmsbc_vx_i16mf2_b32 (vint16mf2_t op1, int16_t op2,
    size_t vl);
vbool16_t vmsbc_vvm_i16m1_b16 (vint16m1_t op1, vint16m1_t op2,
    vbool16_t borrowin, size_t vl);
vbool16_t vmsbc_vxm_i16m1_b16 (vint16m1_t op1, int16_t op2,
    vbool16_t borrowin, size_t vl);
vbool16_t vmsbc_vv_i16m1_b16 (vint16m1_t op1, vint16m1_t op2,
    size_t vl);
vbool16_t vmsbc_vx_i16m1_b16 (vint16m1_t op1, int16_t op2,
    size_t vl);
```

```
vbool8_t vmsbc_vvm_i16m2_b8 (vint16m2_t op1, vint16m2_t op2,
    vbool8_t borrowin, size_t vl);
vbool8_t vmsbc_vxm_i16m2_b8 (vint16m2_t op1, int16_t op2,
    vbool8_t borrowin, size_t vl);
vbool8_t vmsbc_vv_i16m2_b8 (vint16m2_t op1, vint16m2_t op2,
    size_t vl);
vbool8_t vmsbc_vx_i16m2_b8 (vint16m2_t op1, int16_t op2, size_t
    vl);
vbool4_t vmsbc_vvm_i16m4_b4 (vint16m4_t op1, vint16m4_t op2,
    vbool4_t borrowin, size_t vl);
vbool4_t vmsbc_vxm_i16m4_b4 (vint16m4_t op1, int16_t op2,
    vbool4_t borrowin, size_t vl);
vbool4_t vmsbc_vv_i16m4_b4 (vint16m4_t op1, vint16m4_t op2,
    size_t vl);
vbool4_t vmsbc_vx_i16m4_b4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vbool2_t vmsbc_vvm_i16m8_b2 (vint16m8_t op1, vint16m8_t op2,
    vbool2_t borrowin, size_t vl);
vbool2_t vmsbc_vxm_i16m8_b2 (vint16m8_t op1, int16_t op2,
    vbool2_t borrowin, size_t vl);
vbool2_t vmsbc_vv_i16m8_b2 (vint16m8_t op1, vint16m8_t op2,
    size_t vl);
vbool2_t vmsbc_vx_i16m8_b2 (vint16m8_t op1, int16_t op2, size_t
    vl);
vbool64_t vmsbc_vvm_i32mf2_b64 (vint32mf2_t op1, vint32mf2_t
    op2, vbool64_t borrowin, size_t vl);
vbool64_t vmsbc_vxm_i32mf2_b64 (vint32mf2_t op1, int32_t op2,
    vbool64_t borrowin, size_t vl);
vbool64_t vmsbc_vv_i32mf2_b64 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vbool64_t vmsbc_vx_i32mf2_b64 (vint32mf2_t op1, int32_t op2,
    size_t vl);
vbool32_t vmsbc_vvm_i32m1_b32 (vint32m1_t op1, vint32m1_t op2,
    vbool32_t borrowin, size_t vl);
vbool32_t vmsbc_vxm_i32m1_b32 (vint32m1_t op1, int32_t op2,
    vbool32_t borrowin, size_t vl);
vbool32_t vmsbc_vv_i32m1_b32 (vint32m1_t op1, vint32m1_t op2,
    size_t vl);
vbool32_t vmsbc_vx_i32m1_b32 (vint32m1_t op1, int32_t op2,
    size_t vl);
vbool16_t vmsbc_vvm_i32m2_b16 (vint32m2_t op1, vint32m2_t op2,
    vbool16_t borrowin, size_t vl);
vbool16_t vmsbc_vxm_i32m2_b16 (vint32m2_t op1, int32_t op2,
    vbool16_t borrowin, size_t vl);
vbool16_t vmsbc_vv_i32m2_b16 (vint32m2_t op1, vint32m2_t op2,
    size_t vl);
```

```
vbool16_t vmsbc_vx_i32m2_b16 (vint32m2_t op1, int32_t op2,
    size_t vl);
vbool8_t vmsbc_vvm_i32m4_b8 (vint32m4_t op1, vint32m4_t op2,
    vbool8_t borrowin, size_t vl);
vbool8_t vmsbc_vxm_i32m4_b8 (vint32m4_t op1, int32_t op2,
    vbool8_t borrowin, size_t vl);
vbool8_t vmsbc_vv_i32m4_b8 (vint32m4_t op1, vint32m4_t op2,
    size_t vl);
vbool8_t vmsbc_vx_i32m4_b8 (vint32m4_t op1, int32_t op2, size_t
    vl);
vbool4_t vmsbc_vvm_i32m8_b4 (vint32m8_t op1, vint32m8_t op2,
    vbool4_t borrowin, size_t vl);
vbool4_t vmsbc_vxm_i32m8_b4 (vint32m8_t op1, int32_t op2,
    vbool4_t borrowin, size_t vl);
vbool4_t vmsbc_vv_i32m8_b4 (vint32m8_t op1, vint32m8_t op2,
    size_t vl);
vbool4_t vmsbc_vx_i32m8_b4 (vint32m8_t op1, int32_t op2, size_t
    vl);
vbool64_t vmsbc_vvm_i64m1_b64 (vint64m1_t op1, vint64m1_t op2,
    vbool64_t borrowin, size_t vl);
vbool64_t vmsbc_vxm_i64m1_b64 (vint64m1_t op1, int64_t op2,
    vbool64_t borrowin, size_t vl);
vbool64_t vmsbc_vv_i64m1_b64 (vint64m1_t op1, vint64m1_t op2,
    size_t vl);
vbool64_t vmsbc_vx_i64m1_b64 (vint64m1_t op1, int64_t op2,
    size_t vl);
vbool32_t vmsbc_vvm_i64m2_b32 (vint64m2_t op1, vint64m2_t op2,
    vbool32_t borrowin, size_t vl);
vbool32_t vmsbc_vxm_i64m2_b32 (vint64m2_t op1, int64_t op2,
    vbool32_t borrowin, size_t vl);
vbool32_t vmsbc_vv_i64m2_b32 (vint64m2_t op1, vint64m2_t op2,
    size_t vl);
vbool32_t vmsbc_vx_i64m2_b32 (vint64m2_t op1, int64_t op2,
    size_t vl);
vbool16_t vmsbc_vvm_i64m4_b16 (vint64m4_t op1, vint64m4_t op2,
    vbool16_t borrowin, size_t vl);
vbool16_t vmsbc_vxm_i64m4_b16 (vint64m4_t op1, int64_t op2,
    vbool16_t borrowin, size_t vl);
vbool16_t vmsbc_vv_i64m4_b16 (vint64m4_t op1, vint64m4_t op2,
    size_t vl);
vbool16_t vmsbc_vx_i64m4_b16 (vint64m4_t op1, int64_t op2,
    size_t vl);
vbool8_t vmsbc_vvm_i64m8_b8 (vint64m8_t op1, vint64m8_t op2,
    vbool8_t borrowin, size_t vl);
vbool8_t vmsbc_vxm_i64m8_b8 (vint64m8_t op1, int64_t op2,
    vbool8_t borrowin, size_t vl);
```

```
vbool8_t vmsbc_vv_i64m8_b8 (vint64m8_t op1, vint64m8_t op2,
    size_t vl);
vbool8_t vmsbc_vx_i64m8_b8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vbool64_t vmsbc_vvm_u8mf8_b64 (vuint8mf8_t op1, vuint8mf8_t op2,
    vbool64_t borrowin, size_t vl);
vbool64_t vmsbc_vxm_u8mf8_b64 (vuint8mf8_t op1, uint8_t op2,
    vbool64_t borrowin, size_t vl);
vbool64_t vmsbc_vv_u8mf8_b64 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vbool64_t vmsbc_vx_u8mf8_b64 (vuint8mf8_t op1, uint8_t op2,
    size_t vl);
vbool32_t vmsbc_vvm_u8mf4_b32 (vuint8mf4_t op1, vuint8mf4_t op2,
    vbool32_t borrowin, size_t vl);
vbool32_t vmsbc_vxm_u8mf4_b32 (vuint8mf4_t op1, uint8_t op2,
    vbool32_t borrowin, size_t vl);
vbool32_t vmsbc_vv_u8mf4_b32 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vbool32_t vmsbc_vx_u8mf4_b32 (vuint8mf4_t op1, uint8_t op2,
    size_t vl);
vbool16_t vmsbc_vvm_u8mf2_b16 (vuint8mf2_t op1, vuint8mf2_t op2,
    vbool16_t borrowin, size_t vl);
vbool16_t vmsbc_vxm_u8mf2_b16 (vuint8mf2_t op1, uint8_t op2,
    vbool16_t borrowin, size_t vl);
vbool16_t vmsbc_vv_u8mf2_b16 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vbool16_t vmsbc_vx_u8mf2_b16 (vuint8mf2_t op1, uint8_t op2,
    size_t vl);
vbool8_t vmsbc_vvm_u8m1_b8 (vuint8m1_t op1, vuint8m1_t op2,
    vbool8_t borrowin, size_t vl);
vbool8_t vmsbc_vxm_u8m1_b8 (vuint8m1_t op1, uint8_t op2,
    vbool8_t borrowin, size_t vl);
vbool8_t vmsbc_vv_u8m1_b8 (vuint8m1_t op1, vuint8m1_t op2,
    size_t vl);
vbool8_t vmsbc_vx_u8m1_b8 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vbool4_t vmsbc_vvm_u8m2_b4 (vuint8m2_t op1, vuint8m2_t op2,
    vbool4_t borrowin, size_t vl);
vbool4_t vmsbc_vxm_u8m2_b4 (vuint8m2_t op1, uint8_t op2,
    vbool4_t borrowin, size_t vl);
vbool4_t vmsbc_vv_u8m2_b4 (vuint8m2_t op1, vuint8m2_t op2,
    size_t vl);
vbool4_t vmsbc_vx_u8m2_b4 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vbool2_t vmsbc_vvm_u8m4_b2 (vuint8m4_t op1, vuint8m4_t op2,
    vbool2_t borrowin, size_t vl);
```

```
vbool2_t vmsbc_vxm_u8m4_b2 (vuint8m4_t op1, uint8_t op2,
    vbool2_t borrowin, size_t vl);
vbool2_t vmsbc_vv_u8m4_b2 (vuint8m4_t op1, vuint8m4_t op2,
    size_t vl);
vbool2_t vmsbc_vx_u8m4_b2 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
vbool1_t vmsbc_vvm_u8m8_b1 (vuint8m8_t op1, vuint8m8_t op2,
    vbool1_t borrowin, size_t vl);
vbool1_t vmsbc_vxm_u8m8_b1 (vuint8m8_t op1, uint8_t op2,
    vbool1_t borrowin, size_t vl);
vbool1_t vmsbc_vv_u8m8_b1 (vuint8m8_t op1, vuint8m8_t op2,
    size_t vl);
vbool1_t vmsbc_vx_u8m8_b1 (vuint8m8_t op1, uint8_t op2, size_t
    vl);
vbool64_t vmsbc_vvm_u16mf4_b64 (vuint16mf4_t op1, vuint16mf4_t
    op2, vbool64_t borrowin, size_t vl);
vbool64_t vmsbc_vxm_u16mf4_b64 (vuint16mf4_t op1, uint16_t op2,
    vbool64_t borrowin, size_t vl);
vbool64_t vmsbc_vv_u16mf4_b64 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vbool64_t vmsbc_vx_u16mf4_b64 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vbool32_t vmsbc_vvm_u16mf2_b32 (vuint16mf2_t op1, vuint16mf2_t
    op2, vbool32_t borrowin, size_t vl);
vbool32_t vmsbc_vxm_u16mf2_b32 (vuint16mf2_t op1, uint16_t op2,
    vbool32_t borrowin, size_t vl);
vbool32_t vmsbc_vv_u16mf2_b32 (vuint16mf2_t op1, vuint16mf2_t
    op2, size_t vl);
vbool32_t vmsbc_vx_u16mf2_b32 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vbool16_t vmsbc_vvm_u16m1_b16 (vuint16m1_t op1, vuint16m1_t op2,
    vbool16_t borrowin, size_t vl);
vbool16_t vmsbc_vxm_u16m1_b16 (vuint16m1_t op1, uint16_t op2,
    vbool16_t borrowin, size_t vl);
vbool16_t vmsbc_vv_u16m1_b16 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vbool16_t vmsbc_vx_u16m1_b16 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vbool8_t vmsbc_vvm_u16m2_b8 (vuint16m2_t op1, vuint16m2_t op2,
    vbool8_t borrowin, size_t vl);
vbool8_t vmsbc_vxm_u16m2_b8 (vuint16m2_t op1, uint16_t op2,
    vbool8_t borrowin, size_t vl);
vbool8_t vmsbc_vv_u16m2_b8 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vbool8_t vmsbc_vx_u16m2_b8 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
```

```
vbool4_t vmsbc_vvm_u16m4_b4 (vuint16m4_t op1, vuint16m4_t op2,
    vbool4_t borrowin, size_t vl);
vbool4_t vmsbc_vxm_u16m4_b4 (vuint16m4_t op1, uint16_t op2,
    vbool4_t borrowin, size_t vl);
vbool4_t vmsbc_vv_u16m4_b4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vbool4_t vmsbc_vx_u16m4_b4 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
vbool2_t vmsbc_vvm_u16m8_b2 (vuint16m8_t op1, vuint16m8_t op2,
    vbool2_t borrowin, size_t vl);
vbool2_t vmsbc_vxm_u16m8_b2 (vuint16m8_t op1, uint16_t op2,
    vbool2_t borrowin, size_t vl);
vbool2_t vmsbc_vv_u16m8_b2 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vbool2_t vmsbc_vx_u16m8_b2 (vuint16m8_t op1, uint16_t op2,
    size_t vl);
vbool64_t vmsbc_vvm_u32mf2_b64 (vuint32mf2_t op1, vuint32mf2_t
    op2, vbool64_t borrowin, size_t vl);
vbool64_t vmsbc_vxm_u32mf2_b64 (vuint32mf2_t op1, uint32_t op2,
    vbool64_t borrowin, size_t vl);
vbool64_t vmsbc_vv_u32mf2_b64 (vuint32mf2_t op1, vuint32mf2_t
    op2, size_t vl);
vbool64_t vmsbc_vx_u32mf2_b64 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vbool32_t vmsbc_vvm_u32m1_b32 (vuint32m1_t op1, vuint32m1_t op2,
    vbool32_t borrowin, size_t vl);
vbool32_t vmsbc_vxm_u32m1_b32 (vuint32m1_t op1, uint32_t op2,
    vbool32_t borrowin, size_t vl);
vbool32_t vmsbc_vv_u32m1_b32 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vbool32_t vmsbc_vx_u32m1_b32 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vbool16_t vmsbc_vvm_u32m2_b16 (vuint32m2_t op1, vuint32m2_t op2,
    vbool16_t borrowin, size_t vl);
vbool16_t vmsbc_vxm_u32m2_b16 (vuint32m2_t op1, uint32_t op2,
    vbool16_t borrowin, size_t vl);
vbool16_t vmsbc_vv_u32m2_b16 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vbool16_t vmsbc_vx_u32m2_b16 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vbool8_t vmsbc_vvm_u32m4_b8 (vuint32m4_t op1, vuint32m4_t op2,
    vbool8_t borrowin, size_t vl);
vbool8_t vmsbc_vxm_u32m4_b8 (vuint32m4_t op1, uint32_t op2,
    vbool8_t borrowin, size_t vl);
vbool8_t vmsbc_vv_u32m4_b8 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
```

```
vbool8_t vmsbc_vx_u32m4_b8 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
vbool4_t vmsbc_vvm_u32m8_b4 (vuint32m8_t op1, vuint32m8_t op2,
    vbool4_t borrowin, size_t vl);
vbool4_t vmsbc_vxm_u32m8_b4 (vuint32m8_t op1, uint32_t op2,
    vbool4_t borrowin, size_t vl);
vbool4_t vmsbc_vv_u32m8_b4 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vbool4_t vmsbc_vx_u32m8_b4 (vuint32m8_t op1, uint32_t op2,
    size_t vl);
vbool64_t vmsbc_vvm_u64m1_b64 (vuint64m1_t op1, vuint64m1_t op2,
    vbool64_t borrowin, size_t vl);
vbool64_t vmsbc_vxm_u64m1_b64 (vuint64m1_t op1, uint64_t op2,
    vbool64_t borrowin, size_t vl);
vbool64_t vmsbc_vv_u64m1_b64 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vbool64_t vmsbc_vx_u64m1_b64 (vuint64m1_t op1, uint64_t op2,
    size_t vl);
vbool32_t vmsbc_vvm_u64m2_b32 (vuint64m2_t op1, vuint64m2_t op2,
    vbool32_t borrowin, size_t vl);
vbool32_t vmsbc_vxm_u64m2_b32 (vuint64m2_t op1, uint64_t op2,
    vbool32_t borrowin, size_t vl);
vbool32_t vmsbc_vv_u64m2_b32 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vbool32_t vmsbc_vx_u64m2_b32 (vuint64m2_t op1, uint64_t op2,
    size_t vl);
vbool16_t vmsbc_vvm_u64m4_b16 (vuint64m4_t op1, vuint64m4_t op2,
    vbool16_t borrowin, size_t vl);
vbool16_t vmsbc_vxm_u64m4_b16 (vuint64m4_t op1, uint64_t op2,
    vbool16_t borrowin, size_t vl);
vbool16_t vmsbc_vv_u64m4_b16 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vbool16_t vmsbc_vx_u64m4_b16 (vuint64m4_t op1, uint64_t op2,
    size_t vl);
vbool8_t vmsbc_vvm_u64m8_b8 (vuint64m8_t op1, vuint64m8_t op2,
    vbool8_t borrowin, size_t vl);
vbool8_t vmsbc_vxm_u64m8_b8 (vuint64m8_t op1, uint64_t op2,
    vbool8_t borrowin, size_t vl);
vbool8_t vmsbc_vv_u64m8_b8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vbool8_t vmsbc_vx_u64m8_b8 (vuint64m8_t op1, uint64_t op2,
    size_t vl);
```

Vector Bitwise Logical Functions:

Prototypes:

497

```
vint8mf8_t vand_vv_i8mf8 (vint8mf8_t op1, vint8mf8_t op2, size_t
    vl);
vint8mf8_t vand_vx_i8mf8 (vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vand_vv_i8mf4 (vint8mf4_t op1, vint8mf4_t op2, size_t
    vl);
vint8mf4_t vand_vx_i8mf4 (vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vand_vv_i8mf2 (vint8mf2_t op1, vint8mf2_t op2, size_t
    vl);
vint8mf2_t vand_vx_i8mf2 (vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vand_vv_i8m1 (vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vand_vx_i8m1 (vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vand_vv_i8m2 (vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vand_vx_i8m2 (vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vand_vv_i8m4 (vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vand_vx_i8m4 (vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vand_vv_i8m8 (vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vand_vx_i8m8 (vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vand_vv_i16mf4 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vint16mf4_t vand_vx_i16mf4 (vint16mf4_t op1, int16_t op2, size_t
    vl);
vint16mf2_t vand_vv_i16mf2 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vint16mf2_t vand_vx_i16mf2 (vint16mf2_t op1, int16_t op2, size_t
    vl);
vint16m1_t vand_vv_i16m1 (vint16m1_t op1, vint16m1_t op2, size_t
    vl);
vint16m1_t vand_vx_i16m1 (vint16m1_t op1, int16_t op2, size_t
    vl);
vint16m2_t vand_vv_i16m2 (vint16m2_t op1, vint16m2_t op2, size_t
    vl);
vint16m2_t vand_vx_i16m2 (vint16m2_t op1, int16_t op2, size_t
    vl);
vint16m4_t vand_vv_i16m4 (vint16m4_t op1, vint16m4_t op2, size_t
    vl);
vint16m4_t vand_vx_i16m4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vint16m8_t vand_vv_i16m8 (vint16m8_t op1, vint16m8_t op2, size_t
    vl);
vint16m8_t vand_vx_i16m8 (vint16m8_t op1, int16_t op2, size_t
    vl);
vint32mf2_t vand_vv_i32mf2 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vint32mf2_t vand_vx_i32mf2 (vint32mf2_t op1, int32_t op2, size_t
    vl);
```

```
vint32m1_t vand_vv_i32m1 (vint32m1_t op1, vint32m1_t op2, size_t
    vl);
vint32m1_t vand_vx_i32m1 (vint32m1_t op1, int32_t op2, size_t
    vl);
vint32m2_t vand_vv_i32m2 (vint32m2_t op1, vint32m2_t op2, size_t
    vl);
vint32m2_t vand_vx_i32m2 (vint32m2_t op1, int32_t op2, size_t
    vl);
vint32m4_t vand_vv_i32m4 (vint32m4_t op1, vint32m4_t op2, size_t
    vl);
vint32m4_t vand_vx_i32m4 (vint32m4_t op1, int32_t op2, size_t
    vl);
vint32m8_t vand_vv_i32m8 (vint32m8_t op1, vint32m8_t op2, size_t
    vl);
vint32m8_t vand_vx_i32m8 (vint32m8_t op1, int32_t op2, size_t
    vl);
vint64m1_t vand_vv_i64m1 (vint64m1_t op1, vint64m1_t op2, size_t
    vl);
vint64m1_t vand_vx_i64m1 (vint64m1_t op1, int64_t op2, size_t
    vl);
vint64m2_t vand_vv_i64m2 (vint64m2_t op1, vint64m2_t op2, size_t
    vl);
vint64m2_t vand_vx_i64m2 (vint64m2_t op1, int64_t op2, size_t
    vl);
vint64m4_t vand_vv_i64m4 (vint64m4_t op1, vint64m4_t op2, size_t
    vl);
vint64m4_t vand_vx_i64m4 (vint64m4_t op1, int64_t op2, size_t
    vl);
vint64m8_t vand_vv_i64m8 (vint64m8_t op1, vint64m8_t op2, size_t
    vl);
vint64m8_t vand_vx_i64m8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vuint8mf8_t vand_vv_u8mf8 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vuint8mf8_t vand_vx_u8mf8 (vuint8mf8_t op1, uint8_t op2, size_t
    vl);
vuint8mf4_t vand_vv_u8mf4 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vuint8mf4_t vand_vx_u8mf4 (vuint8mf4_t op1, uint8_t op2, size_t
    vl);
vuint8mf2_t vand_vv_u8mf2 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vuint8mf2_t vand_vx_u8mf2 (vuint8mf2_t op1, uint8_t op2, size_t
    vl);
vuint8m1_t vand_vv_u8m1 (vuint8m1_t op1, vuint8m1_t op2, size_t
    vl);
```

```
vuint8m1_t vand_vx_u8m1 (vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vand_vv_u8m2 (vuint8m2_t op1, vuint8m2_t op2, size_t
    vl);
vuint8m2_t vand_vx_u8m2 (vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vand_vv_u8m4 (vuint8m4_t op1, vuint8m4_t op2, size_t
    vl);
vuint8m4_t vand_vx_u8m4 (vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vand_vv_u8m8 (vuint8m8_t op1, vuint8m8_t op2, size_t
    vl);
vuint8m8_t vand_vx_u8m8 (vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vand_vv_u16mf4 (vuint16mf4_t op1, vuint16mf4_t op2,
    size_t vl);
vuint16mf4_t vand_vx_u16mf4 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vuint16mf2_t vand_vv_u16mf2 (vuint16mf2_t op1, vuint16mf2_t op2,
    size_t vl);
vuint16mf2_t vand_vx_u16mf2 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vuint16m1_t vand_vv_u16m1 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vuint16m1_t vand_vx_u16m1 (vuint16m1_t op1, uint16_t op2, size_t
    vl);
vuint16m2_t vand_vv_u16m2 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vuint16m2_t vand_vx_u16m2 (vuint16m2_t op1, uint16_t op2, size_t
    vl);
vuint16m4_t vand_vv_u16m4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vuint16m4_t vand_vx_u16m4 (vuint16m4_t op1, uint16_t op2, size_t
    vl);
vuint16m8_t vand_vv_u16m8 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vuint16m8_t vand_vx_u16m8 (vuint16m8_t op1, uint16_t op2, size_t
    vl);
vuint32mf2_t vand_vv_u32mf2 (vuint32mf2_t op1, vuint32mf2_t op2,
    size_t vl);
vuint32mf2_t vand_vx_u32mf2 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vuint32m1_t vand_vv_u32m1 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vuint32m1_t vand_vx_u32m1 (vuint32m1_t op1, uint32_t op2, size_t
    vl);
vuint32m2_t vand_vv_u32m2 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vuint32m2_t vand_vx_u32m2 (vuint32m2_t op1, uint32_t op2, size_t
    vl);
```

```
vuint32m4_t vand_vv_u32m4 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vuint32m4_t vand_vx_u32m4 (vuint32m4_t op1, uint32_t op2, size_t
    vl);
vuint32m8_t vand_vv_u32m8 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vuint32m8_t vand_vx_u32m8 (vuint32m8_t op1, uint32_t op2, size_t
    vl);
vuint64m1_t vand_vv_u64m1 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vuint64m1_t vand_vx_u64m1 (vuint64m1_t op1, uint64_t op2, size_t
    vl);
vuint64m2_t vand_vv_u64m2 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vuint64m2_t vand_vx_u64m2 (vuint64m2_t op1, uint64_t op2, size_t
    vl);
vuint64m4_t vand_vv_u64m4 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vuint64m4_t vand_vx_u64m4 (vuint64m4_t op1, uint64_t op2, size_t
    vl);
vuint64m8_t vand_vv_u64m8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vuint64m8_t vand_vx_u64m8 (vuint64m8_t op1, uint64_t op2, size_t
    vl);
vint8mf8_t vor_vv_i8mf8 (vint8mf8_t op1, vint8mf8_t op2, size_t
    vl);
vint8mf8_t vor_vx_i8mf8 (vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vor_vv_i8mf4 (vint8mf4_t op1, vint8mf4_t op2, size_t
    vl);
vint8mf4_t vor_vx_i8mf4 (vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vor_vv_i8mf2 (vint8mf2_t op1, vint8mf2_t op2, size_t
    vl);
vint8mf2_t vor_vx_i8mf2 (vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vor_vv_i8m1 (vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vor_vx_i8m1 (vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vor_vv_i8m2 (vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vor_vx_i8m2 (vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vor_vv_i8m4 (vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vor_vx_i8m4 (vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vor_vv_i8m8 (vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vor_vx_i8m8 (vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vor_vv_i16mf4 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vint16mf4_t vor_vx_i16mf4 (vint16mf4_t op1, int16_t op2, size_t
    vl);
```

```
vint16mf2_t vor_vv_i16mf2 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vint16mf2_t vor_vx_i16mf2 (vint16mf2_t op1, int16_t op2, size_t
    vl);
vint16m1_t vor_vv_i16m1 (vint16m1_t op1, vint16m1_t op2, size_t
    vl);
vint16m1_t vor_vx_i16m1 (vint16m1_t op1, int16_t op2, size_t vl);
vint16m2_t vor_vv_i16m2 (vint16m2_t op1, vint16m2_t op2, size_t
    vl);
vint16m2_t vor_vx_i16m2 (vint16m2_t op1, int16_t op2, size_t vl);
vint16m4_t vor_vv_i16m4 (vint16m4_t op1, vint16m4_t op2, size_t
    vl);
vint16m4_t vor_vx_i16m4 (vint16m4_t op1, int16_t op2, size_t vl);
vint16m8_t vor_vv_i16m8 (vint16m8_t op1, vint16m8_t op2, size_t
    vl);
vint16m8_t vor_vx_i16m8 (vint16m8_t op1, int16_t op2, size_t vl);
vint32mf2_t vor_vv_i32mf2 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vint32mf2_t vor_vx_i32mf2 (vint32mf2_t op1, int32_t op2, size_t
    vl);
vint32m1_t vor_vv_i32m1 (vint32m1_t op1, vint32m1_t op2, size_t
    vl);
vint32m1_t vor_vx_i32m1 (vint32m1_t op1, int32_t op2, size_t vl);
vint32m2_t vor_vv_i32m2 (vint32m2_t op1, vint32m2_t op2, size_t
    vl);
vint32m2_t vor_vx_i32m2 (vint32m2_t op1, int32_t op2, size_t vl);
vint32m4_t vor_vv_i32m4 (vint32m4_t op1, vint32m4_t op2, size_t
    vl);
vint32m4_t vor_vx_i32m4 (vint32m4_t op1, int32_t op2, size_t vl);
vint32m8_t vor_vv_i32m8 (vint32m8_t op1, vint32m8_t op2, size_t
    vl);
vint32m8_t vor_vx_i32m8 (vint32m8_t op1, int32_t op2, size_t vl);
vint64m1_t vor_vv_i64m1 (vint64m1_t op1, vint64m1_t op2, size_t
    vl);
vint64m1_t vor_vx_i64m1 (vint64m1_t op1, int64_t op2, size_t vl);
vint64m2_t vor_vv_i64m2 (vint64m2_t op1, vint64m2_t op2, size_t
    vl);
vint64m2_t vor_vx_i64m2 (vint64m2_t op1, int64_t op2, size_t vl);
vint64m4_t vor_vv_i64m4 (vint64m4_t op1, vint64m4_t op2, size_t
    vl);
vint64m4_t vor_vx_i64m4 (vint64m4_t op1, int64_t op2, size_t vl);
vint64m8_t vor_vv_i64m8 (vint64m8_t op1, vint64m8_t op2, size_t
    vl);
vint64m8_t vor_vx_i64m8 (vint64m8_t op1, int64_t op2, size_t vl);
vuint8mf8_t vor_vv_u8mf8 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
```

```
vuint8mf8_t vor_vx_u8mf8 (vuint8mf8_t op1, uint8_t op2, size_t
    vl);
vuint8mf4_t vor_vv_u8mf4 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vuint8mf4_t vor_vx_u8mf4 (vuint8mf4_t op1, uint8_t op2, size_t
    vl);
vuint8mf2_t vor_vv_u8mf2 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vuint8mf2_t vor_vx_u8mf2 (vuint8mf2_t op1, uint8_t op2, size_t
    vl);
vuint8m1_t vor_vv_u8m1 (vuint8m1_t op1, vuint8m1_t op2, size_t
    vl);
vuint8m1_t vor_vx_u8m1 (vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vor_vv_u8m2 (vuint8m2_t op1, vuint8m2_t op2, size_t
    vl);
vuint8m2_t vor_vx_u8m2 (vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vor_vv_u8m4 (vuint8m4_t op1, vuint8m4_t op2, size_t
    vl);
vuint8m4_t vor_vx_u8m4 (vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vor_vv_u8m8 (vuint8m8_t op1, vuint8m8_t op2, size_t
    vl);
vuint8m8_t vor_vx_u8m8 (vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vor_vv_u16mf4 (vuint16mf4_t op1, vuint16mf4_t op2,
    size_t vl);
vuint16mf4_t vor_vx_u16mf4 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vuint16mf2_t vor_vv_u16mf2 (vuint16mf2_t op1, vuint16mf2_t op2,
    size_t vl);
vuint16mf2_t vor_vx_u16mf2 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vuint16m1_t vor_vv_u16m1 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vuint16m1_t vor_vx_u16m1 (vuint16m1_t op1, uint16_t op2, size_t
    vl);
vuint16m2_t vor_vv_u16m2 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vuint16m2_t vor_vx_u16m2 (vuint16m2_t op1, uint16_t op2, size_t
    vl);
vuint16m4_t vor_vv_u16m4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vuint16m4_t vor_vx_u16m4 (vuint16m4_t op1, uint16_t op2, size_t
    vl);
vuint16m8_t vor_vv_u16m8 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vuint16m8_t vor_vx_u16m8 (vuint16m8_t op1, uint16_t op2, size_t
    vl);
```

```
vuint32mf2_t vor_vv_u32mf2 (vuint32mf2_t op1, vuint32mf2_t op2,
    size_t vl);
vuint32mf2_t vor_vx_u32mf2 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vuint32m1_t vor_vv_u32m1 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vuint32m1_t vor_vx_u32m1 (vuint32m1_t op1, uint32_t op2, size_t
    vl);
vuint32m2_t vor_vv_u32m2 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vuint32m2_t vor_vx_u32m2 (vuint32m2_t op1, uint32_t op2, size_t
    vl);
vuint32m4_t vor_vv_u32m4 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vuint32m4_t vor_vx_u32m4 (vuint32m4_t op1, uint32_t op2, size_t
    vl);
vuint32m8_t vor_vv_u32m8 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vuint32m8_t vor_vx_u32m8 (vuint32m8_t op1, uint32_t op2, size_t
    vl);
vuint64m1_t vor_vv_u64m1 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vuint64m1_t vor_vx_u64m1 (vuint64m1_t op1, uint64_t op2, size_t
    vl);
vuint64m2_t vor_vv_u64m2 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vuint64m2_t vor_vx_u64m2 (vuint64m2_t op1, uint64_t op2, size_t
    vl);
vuint64m4_t vor_vv_u64m4 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vuint64m4_t vor_vx_u64m4 (vuint64m4_t op1, uint64_t op2, size_t
    vl);
vuint64m8_t vor_vv_u64m8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vuint64m8_t vor_vx_u64m8 (vuint64m8_t op1, uint64_t op2, size_t
    vl);
vint8mf8_t vxor_vv_i8mf8 (vint8mf8_t op1, vint8mf8_t op2, size_t
    vl);
vint8mf8_t vxor_vx_i8mf8 (vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vxor_vv_i8mf4 (vint8mf4_t op1, vint8mf4_t op2, size_t
    vl);
vint8mf4_t vxor_vx_i8mf4 (vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vxor_vv_i8mf2 (vint8mf2_t op1, vint8mf2_t op2, size_t
    vl);
vint8mf2_t vxor_vx_i8mf2 (vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vxor_vv_i8m1 (vint8m1_t op1, vint8m1_t op2, size_t vl);
```

```
vint8m1_t vxor_vx_i8m1 (vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vxor_vv_i8m2 (vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vxor_vx_i8m2 (vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vxor_vv_i8m4 (vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vxor_vx_i8m4 (vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vxor_vv_i8m8 (vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vxor_vx_i8m8 (vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vxor_vv_i16mf4 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vint16mf4_t vxor_vx_i16mf4 (vint16mf4_t op1, int16_t op2, size_t
    vl);
vint16mf2_t vxor_vv_i16mf2 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vint16mf2_t vxor_vx_i16mf2 (vint16mf2_t op1, int16_t op2, size_t
    vl);
vint16m1_t vxor_vv_i16m1 (vint16m1_t op1, vint16m1_t op2, size_t
    vl);
vint16m1_t vxor_vx_i16m1 (vint16m1_t op1, int16_t op2, size_t
    vl);
vint16m2_t vxor_vv_i16m2 (vint16m2_t op1, vint16m2_t op2, size_t
    vl);
vint16m2_t vxor_vx_i16m2 (vint16m2_t op1, int16_t op2, size_t
    vl);
vint16m4_t vxor_vv_i16m4 (vint16m4_t op1, vint16m4_t op2, size_t
    vl);
vint16m4_t vxor_vx_i16m4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vint16m8_t vxor_vv_i16m8 (vint16m8_t op1, vint16m8_t op2, size_t
    vl);
vint16m8_t vxor_vx_i16m8 (vint16m8_t op1, int16_t op2, size_t
    vl);
vint32mf2_t vxor_vv_i32mf2 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vint32mf2_t vxor_vx_i32mf2 (vint32mf2_t op1, int32_t op2, size_t
    vl);
vint32m1_t vxor_vv_i32m1 (vint32m1_t op1, vint32m1_t op2, size_t
    vl);
vint32m1_t vxor_vx_i32m1 (vint32m1_t op1, int32_t op2, size_t
    vl);
vint32m2_t vxor_vv_i32m2 (vint32m2_t op1, vint32m2_t op2, size_t
    vl);
vint32m2_t vxor_vx_i32m2 (vint32m2_t op1, int32_t op2, size_t
    vl);
vint32m4_t vxor_vv_i32m4 (vint32m4_t op1, vint32m4_t op2, size_t
    vl);
```

```
vint32m4_t vxor_vx_i32m4 (vint32m4_t op1, int32_t op2, size_t
    vl);
vint32m8_t vxor_vv_i32m8 (vint32m8_t op1, vint32m8_t op2, size_t
    vl);
vint32m8_t vxor_vx_i32m8 (vint32m8_t op1, int32_t op2, size_t
    vl);
vint64m1_t vxor_vv_i64m1 (vint64m1_t op1, vint64m1_t op2, size_t
    vl);
vint64m1_t vxor_vx_i64m1 (vint64m1_t op1, int64_t op2, size_t
    vl);
vint64m2_t vxor_vv_i64m2 (vint64m2_t op1, vint64m2_t op2, size_t
    vl);
vint64m2_t vxor_vx_i64m2 (vint64m2_t op1, int64_t op2, size_t
    vl);
vint64m4_t vxor_vv_i64m4 (vint64m4_t op1, vint64m4_t op2, size_t
    vl);
vint64m4_t vxor_vx_i64m4 (vint64m4_t op1, int64_t op2, size_t
    vl);
vint64m8_t vxor_vv_i64m8 (vint64m8_t op1, vint64m8_t op2, size_t
    vl);
vint64m8_t vxor_vx_i64m8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vuint8mf8_t vxor_vv_u8mf8 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vuint8mf8_t vxor_vx_u8mf8 (vuint8mf8_t op1, uint8_t op2, size_t
    vl);
vuint8mf4_t vxor_vv_u8mf4 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vuint8mf4_t vxor_vx_u8mf4 (vuint8mf4_t op1, uint8_t op2, size_t
    vl);
vuint8mf2_t vxor_vv_u8mf2 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vuint8mf2_t vxor_vx_u8mf2 (vuint8mf2_t op1, uint8_t op2, size_t
    vl);
vuint8m1_t vxor_vv_u8m1 (vuint8m1_t op1, vuint8m1_t op2, size_t
    vl);
vuint8m1_t vxor_vx_u8m1 (vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vxor_vv_u8m2 (vuint8m2_t op1, vuint8m2_t op2, size_t
    vl);
vuint8m2_t vxor_vx_u8m2 (vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vxor_vv_u8m4 (vuint8m4_t op1, vuint8m4_t op2, size_t
    vl);
vuint8m4_t vxor_vx_u8m4 (vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vxor_vv_u8m8 (vuint8m8_t op1, vuint8m8_t op2, size_t
    vl);
vuint8m8_t vxor_vx_u8m8 (vuint8m8_t op1, uint8_t op2, size_t vl);
```

```
vuint16mf4_t vxor_vv_u16mf4 (vuint16mf4_t op1, vuint16mf4_t op2,
    size_t vl);
vuint16mf4_t vxor_vx_u16mf4 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vuint16mf2_t vxor_vv_u16mf2 (vuint16mf2_t op1, vuint16mf2_t op2,
    size_t vl);
vuint16mf2_t vxor_vx_u16mf2 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vuint16m1_t vxor_vv_u16m1 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vuint16m1_t vxor_vx_u16m1 (vuint16m1_t op1, uint16_t op2, size_t
    vl);
vuint16m2_t vxor_vv_u16m2 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vuint16m2_t vxor_vx_u16m2 (vuint16m2_t op1, uint16_t op2, size_t
    vl);
vuint16m4_t vxor_vv_u16m4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vuint16m4_t vxor_vx_u16m4 (vuint16m4_t op1, uint16_t op2, size_t
    vl);
vuint16m8_t vxor_vv_u16m8 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vuint16m8_t vxor_vx_u16m8 (vuint16m8_t op1, uint16_t op2, size_t
    vl);
vuint32mf2_t vxor_vv_u32mf2 (vuint32mf2_t op1, vuint32mf2_t op2,
    size_t vl);
vuint32mf2_t vxor_vx_u32mf2 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vuint32m1_t vxor_vv_u32m1 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vuint32m1_t vxor_vx_u32m1 (vuint32m1_t op1, uint32_t op2, size_t
    vl);
vuint32m2_t vxor_vv_u32m2 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vuint32m2_t vxor_vx_u32m2 (vuint32m2_t op1, uint32_t op2, size_t
    vl);
vuint32m4_t vxor_vv_u32m4 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vuint32m4_t vxor_vx_u32m4 (vuint32m4_t op1, uint32_t op2, size_t
    vl);
vuint32m8_t vxor_vv_u32m8 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vuint32m8_t vxor_vx_u32m8 (vuint32m8_t op1, uint32_t op2, size_t
    vl);
vuint64m1_t vxor_vv_u64m1 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
```

```
vuint64m1_t vxor_vx_u64m1 (vuint64m1_t op1, uint64_t op2, size_t
    vl);
vuint64m2_t vxor_vv_u64m2 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vuint64m2_t vxor_vx_u64m2 (vuint64m2_t op1, uint64_t op2, size_t
    vl);
vuint64m4_t vxor_vv_u64m4 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vuint64m4_t vxor_vx_u64m4 (vuint64m4_t op1, uint64_t op2, size_t
    vl);
vuint64m8_t vxor_vv_u64m8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vuint64m8_t vxor_vx_u64m8 (vuint64m8_t op1, uint64_t op2, size_t
    vl);
// masked functions
vint8mf8_t vand_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vint8mf8_t vand_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vand_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint8mf4_t vand_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vand_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint8mf2_t vand_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vand_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vand_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vand_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vand_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vand_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vand_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vand_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vand_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vand_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
```

```
vint16mf4_t vand_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vint16mf2_t vand_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vint16mf2_t vand_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vint16m1_t vand_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vint16m1_t vand_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vint16m2_t vand_vv_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, vint16m2_t op2, size_t vl);
vint16m2_t vand_vx_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, int16_t op2, size_t vl);
vint16m4_t vand_vv_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, vint16m4_t op2, size_t vl);
vint16m4_t vand_vx_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, int16_t op2, size_t vl);
vint16m8_t vand_vv_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, vint16m8_t op2, size_t vl);
vint16m8_t vand_vx_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, int16_t op2, size_t vl);
vint32mf2_t vand_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vint32mf2_t vand_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vint32m1_t vand_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vint32m1_t vand_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vint32m2_t vand_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vint32m2_t vand_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vint32m4_t vand_vv_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, vint32m4_t op2, size_t vl);
vint32m4_t vand_vx_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, int32_t op2, size_t vl);
vint32m8_t vand_vv_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, vint32m8_t op2, size_t vl);
vint32m8_t vand_vx_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, int32_t op2, size_t vl);
vint64m1_t vand_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vint64m1_t vand_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
```

```
vint64m2_t vand_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vint64m2_t vand_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vint64m4_t vand_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vint64m4_t vand_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vint64m8_t vand_vv_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, vint64m8_t op2, size_t vl);
vint64m8_t vand_vx_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, int64_t op2, size_t vl);
vuint8mf8_t vand_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vuint8mf8_t vand_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vuint8mf4_t vand_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vuint8mf4_t vand_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vuint8mf2_t vand_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vuint8mf2_t vand_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vuint8m1_t vand_vv_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vuint8m1_t vand_vx_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vand_vv_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vuint8m2_t vand_vx_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vand_vv_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vuint8m4_t vand_vx_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vand_vv_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vuint8m8_t vand_vx_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vand_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vuint16mf4_t vand_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vuint16mf2_t vand_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
```

```
vuint16mf2_t vand_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vuint16m1_t vand_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vuint16m1_t vand_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vuint16m2_t vand_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vuint16m2_t vand_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vuint16m4_t vand_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vuint16m4_t vand_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vuint16m8_t vand_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vuint16m8_t vand_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vuint32mf2_t vand_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vuint32mf2_t vand_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vuint32m1_t vand_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vuint32m1_t vand_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vuint32m2_t vand_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vuint32m2_t vand_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vuint32m4_t vand_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vuint32m4_t vand_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vuint32m8_t vand_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vuint32m8_t vand_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vuint64m1_t vand_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vuint64m1_t vand_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
vuint64m2_t vand_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vuint64m2_t vand_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
```

```
vuint64m4_t vand_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vuint64m4_t vand_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vuint64m8_t vand_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vuint64m8_t vand_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
vint8mf8_t vor_vv_i8mf8_m (vbool64_t mask, vint8mf8_t maskedoff,
    vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vint8mf8_t vor_vx_i8mf8_m (vbool64_t mask, vint8mf8_t maskedoff,
    vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vor_vv_i8mf4_m (vbool32_t mask, vint8mf4_t maskedoff,
    vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint8mf4_t vor_vx_i8mf4_m (vbool32_t mask, vint8mf4_t maskedoff,
    vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vor_vv_i8mf2_m (vbool16_t mask, vint8mf2_t maskedoff,
    vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint8mf2_t vor_vx_i8mf2_m (vbool16_t mask, vint8mf2_t maskedoff,
    vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vor_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vor_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vor_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vor_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vor_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vor_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vor_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vor_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vor_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vint16mf4_t vor_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vint16mf2_t vor_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vint16mf2_t vor_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vint16m1_t vor_vv_i16m1_m (vbool16_t mask, vint16m1_t maskedoff,
    vint16m1_t op1, vint16m1_t op2, size_t vl);
```

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vint16m1_t vor_vx_i16m1_m (vbool16_t mask, vint16m1_t maskedoff,
    vint16m1_t op1, int16_t op2, size_t vl);
vint16m2_t vor_vv_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, vint16m2_t op2, size_t vl);
vint16m2_t vor_vx_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, int16_t op2, size_t vl);
vint16m4_t vor_vv_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, vint16m4_t op2, size_t vl);
vint16m4_t vor_vx_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, int16_t op2, size_t vl);
vint16m8_t vor_vv_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, vint16m8_t op2, size_t vl);
vint16m8_t vor_vx_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, int16_t op2, size_t vl);
vint32mf2_t vor_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vint32mf2_t vor_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vint32m1_t vor_vv_i32m1_m (vbool32_t mask, vint32m1_t maskedoff,
    vint32m1_t op1, vint32m1_t op2, size_t vl);
vint32m1_t vor_vx_i32m1_m (vbool32_t mask, vint32m1_t maskedoff,
    vint32m1_t op1, int32_t op2, size_t vl);
vint32m2_t vor_vv_i32m2_m (vbool16_t mask, vint32m2_t maskedoff,
    vint32m2_t op1, vint32m2_t op2, size_t vl);
vint32m2_t vor_vx_i32m2_m (vbool16_t mask, vint32m2_t maskedoff,
    vint32m2_t op1, int32_t op2, size_t vl);
vint32m4_t vor_vv_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, vint32m4_t op2, size_t vl);
vint32m4_t vor_vx_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, int32_t op2, size_t vl);
vint32m8_t vor_vv_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, vint32m8_t op2, size_t vl);
vint32m8_t vor_vx_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, int32_t op2, size_t vl);
vint64m1_t vor_vv_i64m1_m (vbool64_t mask, vint64m1_t maskedoff,
    vint64m1_t op1, vint64m1_t op2, size_t vl);
vint64m1_t vor_vx_i64m1_m (vbool64_t mask, vint64m1_t maskedoff,
    vint64m1_t op1, int64_t op2, size_t vl);
vint64m2_t vor_vv_i64m2_m (vbool32_t mask, vint64m2_t maskedoff,
    vint64m2_t op1, vint64m2_t op2, size_t vl);
vint64m2_t vor_vx_i64m2_m (vbool32_t mask, vint64m2_t maskedoff,
    vint64m2_t op1, int64_t op2, size_t vl);
vint64m4_t vor_vv_i64m4_m (vbool16_t mask, vint64m4_t maskedoff,
    vint64m4_t op1, vint64m4_t op2, size_t vl);
vint64m4_t vor_vx_i64m4_m (vbool16_t mask, vint64m4_t maskedoff,
    vint64m4_t op1, int64_t op2, size_t vl);
```

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vint64m8_t vor_vv_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, vint64m8_t op2, size_t vl);
vint64m8_t vor_vx_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, int64_t op2, size_t vl);
vuint8mf8_t vor_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vuint8mf8_t vor_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vuint8mf4_t vor_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vuint8mf4_t vor_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vuint8mf2_t vor_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vuint8mf2_t vor_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vuint8m1_t vor_vv_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vuint8m1_t vor_vx_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vor_vv_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vuint8m2_t vor_vx_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vor_vv_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vuint8m4_t vor_vx_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vor_vv_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vuint8m8_t vor_vx_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vor_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vuint16mf4_t vor_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vuint16mf2_t vor_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vuint16mf2_t vor_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vuint16m1_t vor_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vuint16m1_t vor_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vuint16m2_t vor_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
```

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vuint16m2_t vor_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vuint16m4_t vor_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vuint16m4_t vor_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vuint16m8_t vor_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vuint16m8_t vor_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vuint32mf2_t vor_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vuint32mf2_t vor_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vuint32m1_t vor_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vuint32m1_t vor_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vuint32m2_t vor_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vuint32m2_t vor_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vuint32m4_t vor_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vuint32m4_t vor_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vuint32m8_t vor_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vuint32m8_t vor_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vuint64m1_t vor_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vuint64m1_t vor_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
vuint64m2_t vor_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vuint64m2_t vor_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vuint64m4_t vor_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vuint64m4_t vor_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vuint64m8_t vor_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vuint64m8_t vor_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
```

```
vint8mf8_t vxor_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vint8mf8_t vxor_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vxor_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint8mf4_t vxor_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vxor_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint8mf2_t vxor_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vxor_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vxor_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vxor_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vxor_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vxor_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vxor_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vxor_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vxor_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vxor_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vint16mf4_t vxor_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vint16mf2_t vxor_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vint16mf2_t vxor_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vint16m1_t vxor_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vint16m1_t vxor_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vint16m2_t vxor_vv_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, vint16m2_t op2, size_t vl);
vint16m2_t vxor_vx_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, int16_t op2, size_t vl);
vint16m4_t vxor_vv_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, vint16m4_t op2, size_t vl);
```

```
vint16m4_t vxor_vx_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, int16_t op2, size_t vl);
vint16m8_t vxor_vv_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, vint16m8_t op2, size_t vl);
vint16m8_t vxor_vx_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, int16_t op2, size_t vl);
vint32mf2_t vxor_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vint32mf2_t vxor_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vint32m1_t vxor_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vint32m1_t vxor_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vint32m2_t vxor_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vint32m2_t vxor_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vint32m4_t vxor_vv_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, vint32m4_t op2, size_t vl);
vint32m4_t vxor_vx_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, int32_t op2, size_t vl);
vint32m8_t vxor_vv_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, vint32m8_t op2, size_t vl);
vint32m8_t vxor_vx_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, int32_t op2, size_t vl);
vint64m1_t vxor_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vint64m1_t vxor_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vint64m2_t vxor_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vint64m2_t vxor_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vint64m4_t vxor_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vint64m4_t vxor_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vint64m8_t vxor_vv_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, vint64m8_t op2, size_t vl);
vint64m8_t vxor_vx_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, int64_t op2, size_t vl);
vuint8mf8_t vxor_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vuint8mf8_t vxor_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
```

```
vuint8mf4_t vxor_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vuint8mf4_t vxor_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vuint8mf2_t vxor_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vuint8mf2_t vxor_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vuint8m1_t vxor_vv_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vuint8m1_t vxor_vx_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vxor_vv_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vuint8m2_t vxor_vx_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vxor_vv_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vuint8m4_t vxor_vx_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vxor_vv_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vuint8m8_t vxor_vx_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vxor_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vuint16mf4_t vxor_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vuint16mf2_t vxor_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vuint16mf2_t vxor_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vuint16m1_t vxor_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vuint16m1_t vxor_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vuint16m2_t vxor_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vuint16m2_t vxor_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vuint16m4_t vxor_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vuint16m4_t vxor_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vuint16m8_t vxor_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
```

```
vuint16m8_t vxor_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vuint32mf2_t vxor_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vuint32mf2_t vxor_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vuint32m1_t vxor_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vuint32m1_t vxor_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vuint32m2_t vxor_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vuint32m2_t vxor_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vuint32m4_t vxor_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vuint32m4_t vxor_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vuint32m8_t vxor_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vuint32m8_t vxor_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vuint64m1_t vxor_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vuint64m1_t vxor_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
vuint64m2_t vxor_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vuint64m2_t vxor_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vuint64m4_t vxor_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vuint64m4_t vxor_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vuint64m8_t vxor_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vuint64m8_t vxor_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
```

Vector Bitwise Logical Functions:

Prototypes:

```
vint8mf8_t vnot_v_i8mf8 (vint8mf8_t op1, size_t vl);
vint8mf4_t vnot_v_i8mf4 (vint8mf4_t op1, size_t vl);
vint8mf2_t vnot_v_i8mf2 (vint8mf2_t op1, size_t vl);
```

```
vint8m1_t vnot_v_i8m1 (vint8m1_t op1, size_t vl);
vint8m2_t vnot_v_i8m2 (vint8m2_t op1, size_t vl);
vint8m4_t vnot_v_i8m4 (vint8m4_t op1, size_t vl);
vint8m8_t vnot_v_i8m8 (vint8m8_t op1, size_t vl);
vint16mf4_t vnot_v_i16mf4 (vint16mf4_t op1, size_t vl);
vint16mf2_t vnot_v_i16mf2 (vint16mf2_t op1, size_t vl);
vint16m1_t vnot_v_i16m1 (vint16m1_t op1, size_t vl);
vint16m2_t vnot_v_i16m2 (vint16m2_t op1, size_t vl);
vint16m4_t vnot_v_i16m4 (vint16m4_t op1, size_t vl);
vint16m8_t vnot_v_i16m8 (vint16m8_t op1, size_t vl);
vint32mf2_t vnot_v_i32mf2 (vint32mf2_t op1, size_t vl);
vint32m1_t vnot_v_i32m1 (vint32m1_t op1, size_t vl);
vint32m2_t vnot_v_i32m2 (vint32m2_t op1, size_t vl);
vint32m4_t vnot_v_i32m4 (vint32m4_t op1, size_t vl);
vint32m8_t vnot_v_i32m8 (vint32m8_t op1, size_t vl);
vint64m1_t vnot_v_i64m1 (vint64m1_t op1, size_t vl);
vint64m2_t vnot_v_i64m2 (vint64m2_t op1, size_t vl);
vint64m4_t vnot_v_i64m4 (vint64m4_t op1, size_t vl);
vint64m8_t vnot_v_i64m8 (vint64m8_t op1, size_t vl);
vuint8mf8_t vnot_v_u8mf8 (vuint8mf8_t op1, size_t vl);
vuint8mf4_t vnot_v_u8mf4 (vuint8mf4_t op1, size_t vl);
vuint8mf2_t vnot_v_u8mf2 (vuint8mf2_t op1, size_t vl);
vuint8m1_t vnot_v_u8m1 (vuint8m1_t op1, size_t vl);
vuint8m2_t vnot_v_u8m2 (vuint8m2_t op1, size_t vl);
vuint8m4_t vnot_v_u8m4 (vuint8m4_t op1, size_t vl);
vuint8m8_t vnot_v_u8m8 (vuint8m8_t op1, size_t vl);
vuint16mf4_t vnot_v_u16mf4 (vuint16mf4_t op1, size_t vl);
vuint16mf2_t vnot_v_u16mf2 (vuint16mf2_t op1, size_t vl);
vuint16m1_t vnot_v_u16m1 (vuint16m1_t op1, size_t vl);
vuint16m2_t vnot_v_u16m2 (vuint16m2_t op1, size_t vl);
vuint16m4_t vnot_v_u16m4 (vuint16m4_t op1, size_t vl);
vuint16m8_t vnot_v_u16m8 (vuint16m8_t op1, size_t vl);
vuint32mf2_t vnot_v_u32mf2 (vuint32mf2_t op1, size_t vl);
vuint32m1_t vnot_v_u32m1 (vuint32m1_t op1, size_t vl);
vuint32m2_t vnot_v_u32m2 (vuint32m2_t op1, size_t vl);
vuint32m4_t vnot_v_u32m4 (vuint32m4_t op1, size_t vl);
vuint32m8_t vnot_v_u32m8 (vuint32m8_t op1, size_t vl);
vuint64m1_t vnot_v_u64m1 (vuint64m1_t op1, size_t vl);
vuint64m2_t vnot_v_u64m2 (vuint64m2_t op1, size_t vl);
vuint64m4_t vnot_v_u64m4 (vuint64m4_t op1, size_t vl);
vuint64m8_t vnot_v_u64m8 (vuint64m8_t op1, size_t vl);
// masked functions
vint8mf8_t vnot_v_i8mf8_m (vbool64_t mask, vint8mf8_t maskedoff,
    vint8mf8_t op1, size_t vl);
vint8mf4_t vnot_v_i8mf4_m (vbool32_t mask, vint8mf4_t maskedoff,
    vint8mf4_t op1, size_t vl);
```

```
vint8mf2_t vnot_v_i8mf2_m (vbool16_t mask, vint8mf2_t maskedoff,
    vint8mf2_t op1, size_t vl);
vint8m1_t vnot_v_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, size_t vl);
vint8m2_t vnot_v_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, size_t vl);
vint8m4_t vnot_v_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, size_t vl);
vint8m8_t vnot_v_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, size_t vl);
vint16mf4_t vnot_v_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, size_t vl);
vint16mf2_t vnot_v_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, size_t vl);
vint16m1_t vnot_v_i16m1_m (vbool16_t mask, vint16m1_t maskedoff,
    vint16m1_t op1, size_t vl);
vint16m2_t vnot_v_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, size_t vl);
vint16m4_t vnot_v_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, size_t vl);
vint16m8_t vnot_v_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, size_t vl);
vint32mf2_t vnot_v_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, size_t vl);
vint32m1_t vnot_v_i32m1_m (vbool32_t mask, vint32m1_t maskedoff,
    vint32m1_t op1, size_t vl);
vint32m2_t vnot_v_i32m2_m (vbool16_t mask, vint32m2_t maskedoff,
    vint32m2_t op1, size_t vl);
vint32m4_t vnot_v_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, size_t vl);
vint32m8_t vnot_v_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, size_t vl);
vint64m1_t vnot_v_i64m1_m (vbool64_t mask, vint64m1_t maskedoff,
    vint64m1_t op1, size_t vl);
vint64m2_t vnot_v_i64m2_m (vbool32_t mask, vint64m2_t maskedoff,
    vint64m2_t op1, size_t vl);
vint64m4_t vnot_v_i64m4_m (vbool16_t mask, vint64m4_t maskedoff,
    vint64m4_t op1, size_t vl);
vint64m8_t vnot_v_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, size_t vl);
vuint8mf8_t vnot_v_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, size_t vl);
vuint8mf4_t vnot_v_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, size_t vl);
vuint8mf2_t vnot_v_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, size_t vl);
```

```
vuint8m1_t vnot_v_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, size_t vl);
vuint8m2_t vnot_v_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, size_t vl);
vuint8m4_t vnot_v_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, size_t vl);
vuint8m8_t vnot_v_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, size_t vl);
vuint16mf4_t vnot_v_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, size_t vl);
vuint16mf2_t vnot_v_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, size_t vl);
vuint16m1_t vnot_v_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, size_t vl);
vuint16m2_t vnot_v_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, size_t vl);
vuint16m4_t vnot_v_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, size_t vl);
vuint16m8_t vnot_v_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, size_t vl);
vuint32mf2_t vnot_v_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, size_t vl);
vuint32m1_t vnot_v_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, size_t vl);
vuint32m2_t vnot_v_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, size_t vl);
vuint32m4_t vnot_v_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, size_t vl);
vuint32m8_t vnot_v_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, size_t vl);
vuint64m1_t vnot_v_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, size_t vl);
vuint64m2_t vnot_v_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, size_t vl);
vuint64m4_t vnot_v_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, size_t vl);
vuint64m8_t vnot_v_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, size_t vl);
```

Vector Single-Width Bit Shift Functions:

Prototypes:

```
vint8mf8_t vsll_vv_i8mf8 (vint8mf8_t op1, vuint8mf8_t shift,
    size_t vl);
```

```
vint8mf8_t vsll_vx_i8mf8 (vint8mf8_t op1, size_t shift, size_t
    vl);
vint8mf4_t vsll_vv_i8mf4 (vint8mf4_t op1, vuint8mf4_t shift,
    size_t vl);
vint8mf4_t vsll_vx_i8mf4 (vint8mf4_t op1, size_t shift, size_t
    vl);
vint8mf2_t vsll_vv_i8mf2 (vint8mf2_t op1, vuint8mf2_t shift,
    size_t vl);
vint8mf2_t vsll_vx_i8mf2 (vint8mf2_t op1, size_t shift, size_t
    vl);
vint8m1_t vsll_vv_i8m1 (vint8m1_t op1, vuint8m1_t shift, size_t
    vl);
vint8m1_t vsll_vx_i8m1 (vint8m1_t op1, size_t shift, size_t vl);
vint8m2_t vsll_vv_i8m2 (vint8m2_t op1, vuint8m2_t shift, size_t
    vl);
vint8m2_t vsll_vx_i8m2 (vint8m2_t op1, size_t shift, size_t vl);
vint8m4_t vsll_vv_i8m4 (vint8m4_t op1, vuint8m4_t shift, size_t
    vl);
vint8m4_t vsll_vx_i8m4 (vint8m4_t op1, size_t shift, size_t vl);
vint8m8_t vsll_vv_i8m8 (vint8m8_t op1, vuint8m8_t shift, size_t
    vl);
vint8m8_t vsll_vx_i8m8 (vint8m8_t op1, size_t shift, size_t vl);
vint16mf4_t vsll_vv_i16mf4 (vint16mf4_t op1, vuint16mf4_t shift,
    size_t vl);
vint16mf4_t vsll_vx_i16mf4 (vint16mf4_t op1, size_t shift,
    size_t vl);
vint16mf2_t vsll_vv_i16mf2 (vint16mf2_t op1, vuint16mf2_t shift,
    size_t vl);
vint16mf2_t vsll_vx_i16mf2 (vint16mf2_t op1, size_t shift,
    size_t vl);
vint16m1_t vsll_vv_i16m1 (vint16m1_t op1, vuint16m1_t shift,
    size_t vl);
vint16m1_t vsll_vx_i16m1 (vint16m1_t op1, size_t shift, size_t
    vl);
vint16m2_t vsll_vv_i16m2 (vint16m2_t op1, vuint16m2_t shift,
    size_t vl);
vint16m2_t vsll_vx_i16m2 (vint16m2_t op1, size_t shift, size_t
    vl);
vint16m4_t vsll_vv_i16m4 (vint16m4_t op1, vuint16m4_t shift,
    size_t vl);
vint16m4_t vsll_vx_i16m4 (vint16m4_t op1, size_t shift, size_t
    vl);
vint16m8_t vsll_vv_i16m8 (vint16m8_t op1, vuint16m8_t shift,
    size_t vl);
vint16m8_t vsll_vx_i16m8 (vint16m8_t op1, size_t shift, size_t
    vl);
```

```
vint32mf2_t vsll_vv_i32mf2 (vint32mf2_t op1, vuint32mf2_t shift,
    size_t vl);
vint32mf2_t vsll_vx_i32mf2 (vint32mf2_t op1, size_t shift,
    size_t vl);
vint32m1_t vsll_vv_i32m1 (vint32m1_t op1, vuint32m1_t shift,
    size_t vl);
vint32m1_t vsll_vx_i32m1 (vint32m1_t op1, size_t shift, size_t
    vl);
vint32m2_t vsll_vv_i32m2 (vint32m2_t op1, vuint32m2_t shift,
    size_t vl);
vint32m2_t vsll_vx_i32m2 (vint32m2_t op1, size_t shift, size_t
    vl);
vint32m4_t vsll_vv_i32m4 (vint32m4_t op1, vuint32m4_t shift,
    size_t vl);
vint32m4_t vsll_vx_i32m4 (vint32m4_t op1, size_t shift, size_t
    vl);
vint32m8_t vsll_vv_i32m8 (vint32m8_t op1, vuint32m8_t shift,
    size_t vl);
vint32m8_t vsll_vx_i32m8 (vint32m8_t op1, size_t shift, size_t
    vl);
vint64m1_t vsll_vv_i64m1 (vint64m1_t op1, vuint64m1_t shift,
    size_t vl);
vint64m1_t vsll_vx_i64m1 (vint64m1_t op1, size_t shift, size_t
    vl);
vint64m2_t vsll_vv_i64m2 (vint64m2_t op1, vuint64m2_t shift,
    size_t vl);
vint64m2_t vsll_vx_i64m2 (vint64m2_t op1, size_t shift, size_t
    vl);
vint64m4_t vsll_vv_i64m4 (vint64m4_t op1, vuint64m4_t shift,
    size_t vl);
vint64m4_t vsll_vx_i64m4 (vint64m4_t op1, size_t shift, size_t
    vl);
vint64m8_t vsll_vv_i64m8 (vint64m8_t op1, vuint64m8_t shift,
    size_t vl);
vint64m8_t vsll_vx_i64m8 (vint64m8_t op1, size_t shift, size_t
    vl);
vuint8mf8_t vsll_vv_u8mf8 (vuint8mf8_t op1, vuint8mf8_t shift,
    size_t vl);
vuint8mf8_t vsll_vx_u8mf8 (vuint8mf8_t op1, size_t shift, size_t
    vl);
vuint8mf4_t vsll_vv_u8mf4 (vuint8mf4_t op1, vuint8mf4_t shift,
    size_t vl);
vuint8mf4_t vsll_vx_u8mf4 (vuint8mf4_t op1, size_t shift, size_t
    vl);
vuint8mf2_t vsll_vv_u8mf2 (vuint8mf2_t op1, vuint8mf2_t shift,
    size_t vl);
```

```
vuint8mf2_t vsll_vx_u8mf2 (vuint8mf2_t op1, size_t shift, size_t
    vl);
vuint8m1_t vsll_vv_u8m1 (vuint8m1_t op1, vuint8m1_t shift,
    size_t vl);
vuint8m1_t vsll_vx_u8m1 (vuint8m1_t op1, size_t shift, size_t
    vl);
vuint8m2_t vsll_vv_u8m2 (vuint8m2_t op1, vuint8m2_t shift,
    size_t vl);
vuint8m2_t vsll_vx_u8m2 (vuint8m2_t op1, size_t shift, size_t
    vl);
vuint8m4_t vsll_vv_u8m4 (vuint8m4_t op1, vuint8m4_t shift,
    size_t vl);
vuint8m4_t vsll_vx_u8m4 (vuint8m4_t op1, size_t shift, size_t
    vl);
vuint8m8_t vsll_vv_u8m8 (vuint8m8_t op1, vuint8m8_t shift,
    size_t vl);
vuint8m8_t vsll_vx_u8m8 (vuint8m8_t op1, size_t shift, size_t
    vl);
vuint16mf4_t vsll_vv_u16mf4 (vuint16mf4_t op1, vuint16mf4_t
    shift, size_t vl);
vuint16mf4_t vsll_vx_u16mf4 (vuint16mf4_t op1, size_t shift,
    size_t vl);
vuint16mf2_t vsll_vv_u16mf2 (vuint16mf2_t op1, vuint16mf2_t
    shift, size_t vl);
vuint16mf2_t vsll_vx_u16mf2 (vuint16mf2_t op1, size_t shift,
    size_t vl);
vuint16m1_t vsll_vv_u16m1 (vuint16m1_t op1, vuint16m1_t shift,
    size_t vl);
vuint16m1_t vsll_vx_u16m1 (vuint16m1_t op1, size_t shift, size_t
    vl);
vuint16m2_t vsll_vv_u16m2 (vuint16m2_t op1, vuint16m2_t shift,
    size_t vl);
vuint16m2_t vsll_vx_u16m2 (vuint16m2_t op1, size_t shift, size_t
    vl);
vuint16m4_t vsll_vv_u16m4 (vuint16m4_t op1, vuint16m4_t shift,
    size_t vl);
vuint16m4_t vsll_vx_u16m4 (vuint16m4_t op1, size_t shift, size_t
    vl);
vuint16m8_t vsll_vv_u16m8 (vuint16m8_t op1, vuint16m8_t shift,
    size_t vl);
vuint16m8_t vsll_vx_u16m8 (vuint16m8_t op1, size_t shift, size_t
    vl);
vuint32mf2_t vsll_vv_u32mf2 (vuint32mf2_t op1, vuint32mf2_t
    shift, size_t vl);
vuint32mf2_t vsll_vx_u32mf2 (vuint32mf2_t op1, size_t shift,
    size_t vl);
```

```
vuint32m1_t vsll_vv_u32m1 (vuint32m1_t op1, vuint32m1_t shift,
    size_t vl);
vuint32m1_t vsll_vx_u32m1 (vuint32m1_t op1, size_t shift, size_t
    vl);
vuint32m2_t vsll_vv_u32m2 (vuint32m2_t op1, vuint32m2_t shift,
    size_t vl);
vuint32m2_t vsll_vx_u32m2 (vuint32m2_t op1, size_t shift, size_t
    vl);
vuint32m4_t vsll_vv_u32m4 (vuint32m4_t op1, vuint32m4_t shift,
    size_t vl);
vuint32m4_t vsll_vx_u32m4 (vuint32m4_t op1, size_t shift, size_t
    vl);
vuint32m8_t vsll_vv_u32m8 (vuint32m8_t op1, vuint32m8_t shift,
    size_t vl);
vuint32m8_t vsll_vx_u32m8 (vuint32m8_t op1, size_t shift, size_t
    vl);
vuint64m1_t vsll_vv_u64m1 (vuint64m1_t op1, vuint64m1_t shift,
    size_t vl);
vuint64m1_t vsll_vx_u64m1 (vuint64m1_t op1, size_t shift, size_t
    vl);
vuint64m2_t vsll_vv_u64m2 (vuint64m2_t op1, vuint64m2_t shift,
    size_t vl);
vuint64m2_t vsll_vx_u64m2 (vuint64m2_t op1, size_t shift, size_t
    vl);
vuint64m4_t vsll_vv_u64m4 (vuint64m4_t op1, vuint64m4_t shift,
    size_t vl);
vuint64m4_t vsll_vx_u64m4 (vuint64m4_t op1, size_t shift, size_t
    vl);
vuint64m8_t vsll_vv_u64m8 (vuint64m8_t op1, vuint64m8_t shift,
    size_t vl);
vuint64m8_t vsll_vx_u64m8 (vuint64m8_t op1, size_t shift, size_t
    vl);
vuint8mf8_t vsrl_vv_u8mf8 (vuint8mf8_t op1, vuint8mf8_t shift,
    size_t vl);
vuint8mf8_t vsrl_vx_u8mf8 (vuint8mf8_t op1, size_t shift, size_t
    vl);
vuint8mf4_t vsrl_vv_u8mf4 (vuint8mf4_t op1, vuint8mf4_t shift,
    size_t vl);
vuint8mf4_t vsrl_vx_u8mf4 (vuint8mf4_t op1, size_t shift, size_t
    vl);
vuint8mf2_t vsrl_vv_u8mf2 (vuint8mf2_t op1, vuint8mf2_t shift,
    size_t vl);
vuint8mf2_t vsrl_vx_u8mf2 (vuint8mf2_t op1, size_t shift, size_t
    vl);
vuint8m1_t vsrl_vv_u8m1 (vuint8m1_t op1, vuint8m1_t shift,
    size_t vl);
```

```
vuint8m1_t vsrl_vx_u8m1 (vuint8m1_t op1, size_t shift, size_t
    vl);
vuint8m2_t vsrl_vv_u8m2 (vuint8m2_t op1, vuint8m2_t shift,
    size_t vl);
vuint8m2_t vsrl_vx_u8m2 (vuint8m2_t op1, size_t shift, size_t
    vl);
vuint8m4_t vsrl_vv_u8m4 (vuint8m4_t op1, vuint8m4_t shift,
    size_t vl);
vuint8m4_t vsrl_vx_u8m4 (vuint8m4_t op1, size_t shift, size_t
    vl);
vuint8m8_t vsrl_vv_u8m8 (vuint8m8_t op1, vuint8m8_t shift,
    size_t vl);
vuint8m8_t vsrl_vx_u8m8 (vuint8m8_t op1, size_t shift, size_t
    vl);
vuint16mf4_t vsrl_vv_u16mf4 (vuint16mf4_t op1, vuint16mf4_t
    shift, size_t vl);
vuint16mf4_t vsrl_vx_u16mf4 (vuint16mf4_t op1, size_t shift,
    size_t vl);
vuint16mf2_t vsrl_vv_u16mf2 (vuint16mf2_t op1, vuint16mf2_t
    shift, size_t vl);
vuint16mf2_t vsrl_vx_u16mf2 (vuint16mf2_t op1, size_t shift,
    size_t vl);
vuint16m1_t vsrl_vv_u16m1 (vuint16m1_t op1, vuint16m1_t shift,
    size_t vl);
vuint16m1_t vsrl_vx_u16m1 (vuint16m1_t op1, size_t shift, size_t
    vl);
vuint16m2_t vsrl_vv_u16m2 (vuint16m2_t op1, vuint16m2_t shift,
    size_t vl);
vuint16m2_t vsrl_vx_u16m2 (vuint16m2_t op1, size_t shift, size_t
    vl);
vuint16m4_t vsrl_vv_u16m4 (vuint16m4_t op1, vuint16m4_t shift,
    size_t vl);
vuint16m4_t vsrl_vx_u16m4 (vuint16m4_t op1, size_t shift, size_t
    vl);
vuint16m8_t vsrl_vv_u16m8 (vuint16m8_t op1, vuint16m8_t shift,
    size_t vl);
vuint16m8_t vsrl_vx_u16m8 (vuint16m8_t op1, size_t shift, size_t
    vl);
vuint32mf2_t vsrl_vv_u32mf2 (vuint32mf2_t op1, vuint32mf2_t
    shift, size_t vl);
vuint32mf2_t vsrl_vx_u32mf2 (vuint32mf2_t op1, size_t shift,
    size_t vl);
vuint32m1_t vsrl_vv_u32m1 (vuint32m1_t op1, vuint32m1_t shift,
    size_t vl);
vuint32m1_t vsrl_vx_u32m1 (vuint32m1_t op1, size_t shift, size_t
    vl);
```

```
vuint32m2_t vsrl_vv_u32m2 (vuint32m2_t op1, vuint32m2_t shift,
    size_t vl);
vuint32m2_t vsrl_vx_u32m2 (vuint32m2_t op1, size_t shift, size_t
    vl);
vuint32m4_t vsrl_vv_u32m4 (vuint32m4_t op1, vuint32m4_t shift,
    size_t vl);
vuint32m4_t vsrl_vx_u32m4 (vuint32m4_t op1, size_t shift, size_t
    vl);
vuint32m8_t vsrl_vv_u32m8 (vuint32m8_t op1, vuint32m8_t shift,
    size_t vl);
vuint32m8_t vsrl_vx_u32m8 (vuint32m8_t op1, size_t shift, size_t
    vl);
vuint64m1_t vsrl_vv_u64m1 (vuint64m1_t op1, vuint64m1_t shift,
    size_t vl);
vuint64m1_t vsrl_vx_u64m1 (vuint64m1_t op1, size_t shift, size_t
    vl);
vuint64m2_t vsrl_vv_u64m2 (vuint64m2_t op1, vuint64m2_t shift,
    size_t vl);
vuint64m2_t vsrl_vx_u64m2 (vuint64m2_t op1, size_t shift, size_t
    vl);
vuint64m4_t vsrl_vv_u64m4 (vuint64m4_t op1, vuint64m4_t shift,
    size_t vl);
vuint64m4_t vsrl_vx_u64m4 (vuint64m4_t op1, size_t shift, size_t
    vl);
vuint64m8_t vsrl_vv_u64m8 (vuint64m8_t op1, vuint64m8_t shift,
    size_t vl);
vuint64m8_t vsrl_vx_u64m8 (vuint64m8_t op1, size_t shift, size_t
    vl);
vint8mf8_t vsra_vv_i8mf8 (vint8mf8_t op1, vuint8mf8_t shift,
    size_t vl);
vint8mf8_t vsra_vx_i8mf8 (vint8mf8_t op1, size_t shift, size_t
    vl);
vint8mf4_t vsra_vv_i8mf4 (vint8mf4_t op1, vuint8mf4_t shift,
    size_t vl);
vint8mf4_t vsra_vx_i8mf4 (vint8mf4_t op1, size_t shift, size_t
    vl);
vint8mf2_t vsra_vv_i8mf2 (vint8mf2_t op1, vuint8mf2_t shift,
    size_t vl);
vint8mf2_t vsra_vx_i8mf2 (vint8mf2_t op1, size_t shift, size_t
    vl);
vint8m1_t vsra_vv_i8m1 (vint8m1_t op1, vuint8m1_t shift, size_t
    vl);
vint8m1_t vsra_vx_i8m1 (vint8m1_t op1, size_t shift, size_t vl);
vint8m2_t vsra_vv_i8m2 (vint8m2_t op1, vuint8m2_t shift, size_t
    vl);
vint8m2_t vsra_vx_i8m2 (vint8m2_t op1, size_t shift, size_t vl);
```

```
vint8m4_t vsra_vv_i8m4 (vint8m4_t op1, vuint8m4_t shift, size_t
    vl);
vint8m4_t vsra_vx_i8m4 (vint8m4_t op1, size_t shift, size_t vl);
vint8m8_t vsra_vv_i8m8 (vint8m8_t op1, vuint8m8_t shift, size_t
    vl);
vint8m8_t vsra_vx_i8m8 (vint8m8_t op1, size_t shift, size_t vl);
vint16mf4_t vsra_vv_i16mf4 (vint16mf4_t op1, vuint16mf4_t shift,
    size_t vl);
vint16mf4_t vsra_vx_i16mf4 (vint16mf4_t op1, size_t shift,
    size_t vl);
vint16mf2_t vsra_vv_i16mf2 (vint16mf2_t op1, vuint16mf2_t shift,
    size_t vl);
vint16mf2_t vsra_vx_i16mf2 (vint16mf2_t op1, size_t shift,
    size_t vl);
vint16m1_t vsra_vv_i16m1 (vint16m1_t op1, vuint16m1_t shift,
    size_t vl);
vint16m1_t vsra_vx_i16m1 (vint16m1_t op1, size_t shift, size_t
    vl);
vint16m2_t vsra_vv_i16m2 (vint16m2_t op1, vuint16m2_t shift,
    size_t vl);
vint16m2_t vsra_vx_i16m2 (vint16m2_t op1, size_t shift, size_t
    vl);
vint16m4_t vsra_vv_i16m4 (vint16m4_t op1, vuint16m4_t shift,
    size_t vl);
vint16m4_t vsra_vx_i16m4 (vint16m4_t op1, size_t shift, size_t
    vl);
vint16m8_t vsra_vv_i16m8 (vint16m8_t op1, vuint16m8_t shift,
    size_t vl);
vint16m8_t vsra_vx_i16m8 (vint16m8_t op1, size_t shift, size_t
    vl);
vint32mf2_t vsra_vv_i32mf2 (vint32mf2_t op1, vuint32mf2_t shift,
    size_t vl);
vint32mf2_t vsra_vx_i32mf2 (vint32mf2_t op1, size_t shift,
    size_t vl);
vint32m1_t vsra_vv_i32m1 (vint32m1_t op1, vuint32m1_t shift,
    size_t vl);
vint32m1_t vsra_vx_i32m1 (vint32m1_t op1, size_t shift, size_t
    vl);
vint32m2_t vsra_vv_i32m2 (vint32m2_t op1, vuint32m2_t shift,
    size_t vl);
vint32m2_t vsra_vx_i32m2 (vint32m2_t op1, size_t shift, size_t
    vl);
vint32m4_t vsra_vv_i32m4 (vint32m4_t op1, vuint32m4_t shift,
    size_t vl);
vint32m4_t vsra_vx_i32m4 (vint32m4_t op1, size_t shift, size_t
    vl);
```

```
vint32m8_t vsra_vv_i32m8 (vint32m8_t op1, vuint32m8_t shift,
    size_t vl);
vint32m8_t vsra_vx_i32m8 (vint32m8_t op1, size_t shift, size_t
    vl);
vint64m1_t vsra_vv_i64m1 (vint64m1_t op1, vuint64m1_t shift,
    size_t vl);
vint64m1_t vsra_vx_i64m1 (vint64m1_t op1, size_t shift, size_t
    vl);
vint64m2_t vsra_vv_i64m2 (vint64m2_t op1, vuint64m2_t shift,
    size_t vl);
vint64m2_t vsra_vx_i64m2 (vint64m2_t op1, size_t shift, size_t
    vl);
vint64m4_t vsra_vv_i64m4 (vint64m4_t op1, vuint64m4_t shift,
    size_t vl);
vint64m4_t vsra_vx_i64m4 (vint64m4_t op1, size_t shift, size_t
    vl);
vint64m8_t vsra_vv_i64m8 (vint64m8_t op1, vuint64m8_t shift,
    size_t vl);
vint64m8_t vsra_vx_i64m8 (vint64m8_t op1, size_t shift, size_t
    vl);
// masked functions
vint8mf8_t vsll_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vuint8mf8_t shift, size_t vl);
vint8mf8_t vsll_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, size_t shift, size_t vl);
vint8mf4_t vsll_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vuint8mf4_t shift, size_t vl);
vint8mf4_t vsll_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, size_t shift, size_t vl);
vint8mf2_t vsll_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vuint8mf2_t shift, size_t vl);
vint8mf2_t vsll_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, size_t shift, size_t vl);
vint8m1_t vsll_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vuint8m1_t shift, size_t vl);
vint8m1_t vsll_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, size_t shift, size_t vl);
vint8m2_t vsll_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vuint8m2_t shift, size_t vl);
vint8m2_t vsll_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, size_t shift, size_t vl);
vint8m4_t vsll_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vuint8m4_t shift, size_t vl);
vint8m4_t vsll_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, size_t shift, size_t vl);
```

```
vint8m8_t vsll_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vuint8m8_t shift, size_t vl);
vint8m8_t vsll_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, size_t shift, size_t vl);
vint16mf4_t vsll_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vuint16mf4_t shift, size_t vl);
vint16mf4_t vsll_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, size_t shift, size_t vl);
vint16mf2_t vsll_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vuint16mf2_t shift, size_t vl);
vint16mf2_t vsll_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, size_t shift, size_t vl);
vint16m1_t vsll_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vuint16m1_t shift, size_t vl);
vint16m1_t vsll_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, size_t shift, size_t vl);
vint16m2_t vsll_vv_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, vuint16m2_t shift, size_t vl);
vint16m2_t vsll_vx_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, size_t shift, size_t vl);
vint16m4_t vsll_vv_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, vuint16m4_t shift, size_t vl);
vint16m4_t vsll_vx_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, size_t shift, size_t vl);
vint16m8_t vsll_vv_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, vuint16m8_t shift, size_t vl);
vint16m8_t vsll_vx_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, size_t shift, size_t vl);
vint32mf2_t vsll_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vuint32mf2_t shift, size_t vl);
vint32mf2_t vsll_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, size_t shift, size_t vl);
vint32m1_t vsll_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vuint32m1_t shift, size_t vl);
vint32m1_t vsll_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, size_t shift, size_t vl);
vint32m2_t vsll_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vuint32m2_t shift, size_t vl);
vint32m2_t vsll_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, size_t shift, size_t vl);
vint32m4_t vsll_vv_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, vuint32m4_t shift, size_t vl);
vint32m4_t vsll_vx_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, size_t shift, size_t vl);
vint32m8_t vsll_vv_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, vuint32m8_t shift, size_t vl);
```

```
vint32m8_t vsll_vx_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, size_t shift, size_t vl);
vint64m1_t vsll_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vuint64m1_t shift, size_t vl);
vint64m1_t vsll_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, size_t shift, size_t vl);
vint64m2_t vsll_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vuint64m2_t shift, size_t vl);
vint64m2_t vsll_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, size_t shift, size_t vl);
vint64m4_t vsll_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vuint64m4_t shift, size_t vl);
vint64m4_t vsll_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, size_t shift, size_t vl);
vint64m8_t vsll_vv_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, vuint64m8_t shift, size_t vl);
vint64m8_t vsll_vx_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, size_t shift, size_t vl);
vuint8mf8_t vsll_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t shift, size_t vl);
vuint8mf8_t vsll_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, size_t shift, size_t vl);
vuint8mf4_t vsll_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t shift, size_t vl);
vuint8mf4_t vsll_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, size_t shift, size_t vl);
vuint8mf2_t vsll_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t shift, size_t vl);
vuint8mf2_t vsll_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, size_t shift, size_t vl);
vuint8m1_t vsll_vv_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, vuint8m1_t shift, size_t vl);
vuint8m1_t vsll_vx_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, size_t shift, size_t vl);
vuint8m2_t vsll_vv_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, vuint8m2_t shift, size_t vl);
vuint8m2_t vsll_vx_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, size_t shift, size_t vl);
vuint8m4_t vsll_vv_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, vuint8m4_t shift, size_t vl);
vuint8m4_t vsll_vx_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, size_t shift, size_t vl);
vuint8m8_t vsll_vv_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, vuint8m8_t shift, size_t vl);
vuint8m8_t vsll_vx_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, size_t shift, size_t vl);
```

```
vuint16mf4_t vsll_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t shift, size_t vl);
vuint16mf4_t vsll_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, size_t shift, size_t vl);
vuint16mf2_t vsll_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t shift, size_t vl);
vuint16mf2_t vsll_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, size_t shift, size_t vl);
vuint16m1_t vsll_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t shift, size_t vl);
vuint16m1_t vsll_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, size_t shift, size_t vl);
vuint16m2_t vsll_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t shift, size_t vl);
vuint16m2_t vsll_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, size_t shift, size_t vl);
vuint16m4_t vsll_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t shift, size_t vl);
vuint16m4_t vsll_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, size_t shift, size_t vl);
vuint16m8_t vsll_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t shift, size_t vl);
vuint16m8_t vsll_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, size_t shift, size_t vl);
vuint32mf2_t vsll_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t shift, size_t vl);
vuint32mf2_t vsll_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, size_t shift, size_t vl);
vuint32m1_t vsll_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint32m1_t shift, size_t vl);
vuint32m1_t vsll_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, size_t shift, size_t vl);
vuint32m2_t vsll_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint32m2_t shift, size_t vl);
vuint32m2_t vsll_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, size_t shift, size_t vl);
vuint32m4_t vsll_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint32m4_t shift, size_t vl);
vuint32m4_t vsll_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, size_t shift, size_t vl);
vuint32m8_t vsll_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint32m8_t shift, size_t vl);
vuint32m8_t vsll_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, size_t shift, size_t vl);
vuint64m1_t vsll_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint64m1_t shift, size_t vl);
```

```
vuint64m1_t vsll_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, size_t shift, size_t vl);
vuint64m2_t vsll_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint64m2_t shift, size_t vl);
vuint64m2_t vsll_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, size_t shift, size_t vl);
vuint64m4_t vsll_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint64m4_t shift, size_t vl);
vuint64m4_t vsll_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, size_t shift, size_t vl);
vuint64m8_t vsll_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t shift, size_t vl);
vuint64m8_t vsll_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, size_t shift, size_t vl);
vuint8mf8_t vsrl_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t shift, size_t vl);
vuint8mf8_t vsrl_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, size_t shift, size_t vl);
vuint8mf4_t vsrl_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t shift, size_t vl);
vuint8mf4_t vsrl_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, size_t shift, size_t vl);
vuint8mf2_t vsrl_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t shift, size_t vl);
vuint8mf2_t vsrl_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, size_t shift, size_t vl);
vuint8m1_t vsrl_vv_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, vuint8m1_t shift, size_t vl);
vuint8m1_t vsrl_vx_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, size_t shift, size_t vl);
vuint8m2_t vsrl_vv_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, vuint8m2_t shift, size_t vl);
vuint8m2_t vsrl_vx_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, size_t shift, size_t vl);
vuint8m4_t vsrl_vv_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, vuint8m4_t shift, size_t vl);
vuint8m4_t vsrl_vx_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, size_t shift, size_t vl);
vuint8m8_t vsrl_vv_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, vuint8m8_t shift, size_t vl);
vuint8m8_t vsrl_vx_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, size_t shift, size_t vl);
vuint16mf4_t vsrl_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t shift, size_t vl);
vuint16mf4_t vsrl_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, size_t shift, size_t vl);
```

```
vuint16mf2_t vsrl_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t shift, size_t vl);
vuint16mf2_t vsrl_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, size_t shift, size_t vl);
vuint16m1_t vsrl_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t shift, size_t vl);
vuint16m1_t vsrl_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, size_t shift, size_t vl);
vuint16m2_t vsrl_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t shift, size_t vl);
vuint16m2_t vsrl_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, size_t shift, size_t vl);
vuint16m4_t vsrl_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t shift, size_t vl);
vuint16m4_t vsrl_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, size_t shift, size_t vl);
vuint16m8_t vsrl_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t shift, size_t vl);
vuint16m8_t vsrl_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, size_t shift, size_t vl);
vuint32mf2_t vsrl_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t shift, size_t vl);
vuint32mf2_t vsrl_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, size_t shift, size_t vl);
vuint32m1_t vsrl_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint32m1_t shift, size_t vl);
vuint32m1_t vsrl_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, size_t shift, size_t vl);
vuint32m2_t vsrl_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint32m2_t shift, size_t vl);
vuint32m2_t vsrl_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, size_t shift, size_t vl);
vuint32m4_t vsrl_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint32m4_t shift, size_t vl);
vuint32m4_t vsrl_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, size_t shift, size_t vl);
vuint32m8_t vsrl_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint32m8_t shift, size_t vl);
vuint32m8_t vsrl_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, size_t shift, size_t vl);
vuint64m1_t vsrl_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint64m1_t shift, size_t vl);
vuint64m1_t vsrl_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, size_t shift, size_t vl);
vuint64m2_t vsrl_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint64m2_t shift, size_t vl);
```

```
vuint64m2_t vsrl_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, size_t shift, size_t vl);
vuint64m4_t vsrl_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint64m4_t shift, size_t vl);
vuint64m4_t vsrl_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, size_t shift, size_t vl);
vuint64m8_t vsrl_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t shift, size_t vl);
vuint64m8_t vsrl_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, size_t shift, size_t vl);
vint8mf8_t vsra_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vuint8mf8_t shift, size_t vl);
vint8mf8_t vsra_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, size_t shift, size_t vl);
vint8mf4_t vsra_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vuint8mf4_t shift, size_t vl);
vint8mf4_t vsra_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, size_t shift, size_t vl);
vint8mf2_t vsra_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vuint8mf2_t shift, size_t vl);
vint8mf2_t vsra_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, size_t shift, size_t vl);
vint8m1_t vsra_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vuint8m1_t shift, size_t vl);
vint8m1_t vsra_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, size_t shift, size_t vl);
vint8m2_t vsra_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vuint8m2_t shift, size_t vl);
vint8m2_t vsra_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, size_t shift, size_t vl);
vint8m4_t vsra_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vuint8m4_t shift, size_t vl);
vint8m4_t vsra_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, size_t shift, size_t vl);
vint8m8_t vsra_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vuint8m8_t shift, size_t vl);
vint8m8_t vsra_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, size_t shift, size_t vl);
vint16mf4_t vsra_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vuint16mf4_t shift, size_t vl);
vint16mf4_t vsra_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, size_t shift, size_t vl);
vint16mf2_t vsra_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vuint16mf2_t shift, size_t vl);
vint16mf2_t vsra_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, size_t shift, size_t vl);
```

```
vint16m1_t vsra_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vuint16m1_t shift, size_t vl);
vint16m1_t vsra_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, size_t shift, size_t vl);
vint16m2_t vsra_vv_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, vuint16m2_t shift, size_t vl);
vint16m2_t vsra_vx_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, size_t shift, size_t vl);
vint16m4_t vsra_vv_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, vuint16m4_t shift, size_t vl);
vint16m4_t vsra_vx_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, size_t shift, size_t vl);
vint16m8_t vsra_vv_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, vuint16m8_t shift, size_t vl);
vint16m8_t vsra_vx_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, size_t shift, size_t vl);
vint32mf2_t vsra_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vuint32mf2_t shift, size_t vl);
vint32mf2_t vsra_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, size_t shift, size_t vl);
vint32m1_t vsra_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vuint32m1_t shift, size_t vl);
vint32m1_t vsra_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, size_t shift, size_t vl);
vint32m2_t vsra_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vuint32m2_t shift, size_t vl);
vint32m2_t vsra_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, size_t shift, size_t vl);
vint32m4_t vsra_vv_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, vuint32m4_t shift, size_t vl);
vint32m4_t vsra_vx_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, size_t shift, size_t vl);
vint32m8_t vsra_vv_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, vuint32m8_t shift, size_t vl);
vint32m8_t vsra_vx_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, size_t shift, size_t vl);
vint64m1_t vsra_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vuint64m1_t shift, size_t vl);
vint64m1_t vsra_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, size_t shift, size_t vl);
vint64m2_t vsra_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vuint64m2_t shift, size_t vl);
vint64m2_t vsra_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, size_t shift, size_t vl);
vint64m4_t vsra_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vuint64m4_t shift, size_t vl);
```

```
vint64m4_t vsra_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, size_t shift, size_t vl);
vint64m8_t vsra_vv_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, vuint64m8_t shift, size_t vl);
vint64m8_t vsra_vx_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, size_t shift, size_t vl);
```

Vector Narrowing Integer Right Shift Functions:

Prototypes:

```
vuint8mf8_t vnsrl_wv_u8mf8 (vuint16mf4_t op1, vuint8mf8_t shift,
    size_t vl);
vuint8mf8_t vnsrl_wx_u8mf8 (vuint16mf4_t op1, size_t shift,
    size_t vl);
vuint8mf4_t vnsrl_wv_u8mf4 (vuint16mf2_t op1, vuint8mf4_t shift,
    size_t vl);
vuint8mf4_t vnsrl_wx_u8mf4 (vuint16mf2_t op1, size_t shift,
    size_t vl);
vuint8mf2_t vnsrl_wv_u8mf2 (vuint16m1_t op1, vuint8mf2_t shift,
    size_t vl);
vuint8mf2_t vnsrl_wx_u8mf2 (vuint16m1_t op1, size_t shift,
    size_t vl);
vuint8m1_t vnsrl_wv_u8m1 (vuint16m2_t op1, vuint8m1_t shift,
    size_t vl);
vuint8m1_t vnsrl_wx_u8m1 (vuint16m2_t op1, size_t shift, size_t
    vl);
vuint8m2_t vnsrl_wv_u8m2 (vuint16m4_t op1, vuint8m2_t shift,
    size_t vl);
vuint8m2_t vnsrl_wx_u8m2 (vuint16m4_t op1, size_t shift, size_t
    vl);
vuint8m4_t vnsrl_wv_u8m4 (vuint16m8_t op1, vuint8m4_t shift,
    size_t vl);
vuint8m4_t vnsrl_wx_u8m4 (vuint16m8_t op1, size_t shift, size_t
    vl);
vuint16mf4_t vnsrl_wv_u16mf4 (vuint32mf2_t op1, vuint16mf4_t
    shift, size_t vl);
vuint16mf4_t vnsrl_wx_u16mf4 (vuint32mf2_t op1, size_t shift,
    size_t vl);
vuint16mf2_t vnsrl_wv_u16mf2 (vuint32m1_t op1, vuint16mf2_t
    shift, size_t vl);
vuint16mf2_t vnsrl_wx_u16mf2 (vuint32m1_t op1, size_t shift,
    size_t vl);
vuint16m1_t vnsrl_wv_u16m1 (vuint32m2_t op1, vuint16m1_t shift,
    size_t vl);
```

```
vuint16m1_t vnsrl_wx_u16m1 (vuint32m2_t op1, size_t shift,
    size_t vl);
vuint16m2_t vnsrl_wv_u16m2 (vuint32m4_t op1, vuint16m2_t shift,
    size_t vl);
vuint16m2_t vnsrl_wx_u16m2 (vuint32m4_t op1, size_t shift,
    size_t vl);
vuint16m4_t vnsrl_wv_u16m4 (vuint32m8_t op1, vuint16m4_t shift,
    size_t vl);
vuint16m4_t vnsrl_wx_u16m4 (vuint32m8_t op1, size_t shift,
    size_t vl);
vuint32mf2_t vnsrl_wv_u32mf2 (vuint64m1_t op1, vuint32mf2_t
    shift, size_t vl);
vuint32mf2_t vnsrl_wx_u32mf2 (vuint64m1_t op1, size_t shift,
    size_t vl);
vuint32m1_t vnsrl_wv_u32m1 (vuint64m2_t op1, vuint32m1_t shift,
    size_t vl);
vuint32m1_t vnsrl_wx_u32m1 (vuint64m2_t op1, size_t shift,
    size_t vl);
vuint32m2_t vnsrl_wv_u32m2 (vuint64m4_t op1, vuint32m2_t shift,
    size_t vl);
vuint32m2_t vnsrl_wx_u32m2 (vuint64m4_t op1, size_t shift,
    size_t vl);
vuint32m4_t vnsrl_wv_u32m4 (vuint64m8_t op1, vuint32m4_t shift,
    size_t vl);
vuint32m4_t vnsrl_wx_u32m4 (vuint64m8_t op1, size_t shift,
    size_t vl);
vint8mf8_t vnsra_wv_i8mf8 (vint16mf4_t op1, vuint8mf8_t shift,
    size_t vl);
vint8mf8_t vnsra_wx_i8mf8 (vint16mf4_t op1, size_t shift, size_t
    vl);
vint8mf4_t vnsra_wv_i8mf4 (vint16mf2_t op1, vuint8mf4_t shift,
    size_t vl);
vint8mf4_t vnsra_wx_i8mf4 (vint16mf2_t op1, size_t shift, size_t
    vl);
vint8mf2_t vnsra_wv_i8mf2 (vint16m1_t op1, vuint8mf2_t shift,
    size_t vl);
vint8mf2_t vnsra_wx_i8mf2 (vint16m1_t op1, size_t shift, size_t
    vl);
vint8m1_t vnsra_wv_i8m1 (vint16m2_t op1, vuint8m1_t shift,
    size_t vl);
vint8m1_t vnsra_wx_i8m1 (vint16m2_t op1, size_t shift, size_t
    vl);
vint8m2_t vnsra_wv_i8m2 (vint16m4_t op1, vuint8m2_t shift,
    size_t vl);
vint8m2_t vnsra_wx_i8m2 (vint16m4_t op1, size_t shift, size_t
    vl);
```

```
vint8m4_t vnsra_wv_i8m4 (vint16m8_t op1, vuint8m4_t shift,
    size_t vl);
vint8m4_t vnsra_wx_i8m4 (vint16m8_t op1, size_t shift, size_t
    vl);
vint16mf4_t vnsra_wv_i16mf4 (vint32mf2_t op1, vuint16mf4_t
    shift, size_t vl);
vint16mf4_t vnsra_wx_i16mf4 (vint32mf2_t op1, size_t shift,
    size_t vl);
vint16mf2_t vnsra_wv_i16mf2 (vint32m1_t op1, vuint16mf2_t shift,
    size_t vl);
vint16mf2_t vnsra_wx_i16mf2 (vint32m1_t op1, size_t shift,
    size_t vl);
vint16m1_t vnsra_wv_i16m1 (vint32m2_t op1, vuint16m1_t shift,
    size_t vl);
vint16m1_t vnsra_wx_i16m1 (vint32m2_t op1, size_t shift, size_t
    vl);
vint16m2_t vnsra_wv_i16m2 (vint32m4_t op1, vuint16m2_t shift,
    size_t vl);
vint16m2_t vnsra_wx_i16m2 (vint32m4_t op1, size_t shift, size_t
    vl);
vint16m4_t vnsra_wv_i16m4 (vint32m8_t op1, vuint16m4_t shift,
    size_t vl);
vint16m4_t vnsra_wx_i16m4 (vint32m8_t op1, size_t shift, size_t
    vl);
vint32mf2_t vnsra_wv_i32mf2 (vint64m1_t op1, vuint32mf2_t shift,
    size_t vl);
vint32mf2_t vnsra_wx_i32mf2 (vint64m1_t op1, size_t shift,
    size_t vl);
vint32m1_t vnsra_wv_i32m1 (vint64m2_t op1, vuint32m1_t shift,
    size_t vl);
vint32m1_t vnsra_wx_i32m1 (vint64m2_t op1, size_t shift, size_t
    vl);
vint32m2_t vnsra_wv_i32m2 (vint64m4_t op1, vuint32m2_t shift,
    size_t vl);
vint32m2_t vnsra_wx_i32m2 (vint64m4_t op1, size_t shift, size_t
    vl);
vint32m4_t vnsra_wv_i32m4 (vint64m8_t op1, vuint32m4_t shift,
    size_t vl);
vint32m4_t vnsra_wx_i32m4 (vint64m8_t op1, size_t shift, size_t
    vl);
// masked functions
vuint8mf8_t vnsrl_wv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint16mf4_t op1, vuint8mf8_t shift, size_t vl);
vuint8mf8_t vnsrl_wx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint16mf4_t op1, size_t shift, size_t vl);
```

```
vuint8mf4_t vnsrl_wv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint16mf2_t op1, vuint8mf4_t shift, size_t vl);
vuint8mf4_t vnsrl_wx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint16mf2_t op1, size_t shift, size_t vl);
vuint8mf2_t vnsrl_wv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint16m1_t op1, vuint8mf2_t shift, size_t vl);
vuint8mf2_t vnsrl_wx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint16m1_t op1, size_t shift, size_t vl);
vuint8m1_t vnsrl_wv_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint16m2_t op1, vuint8m1_t shift, size_t vl);
vuint8m1_t vnsrl_wx_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint16m2_t op1, size_t shift, size_t vl);
vuint8m2_t vnsrl_wv_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint16m4_t op1, vuint8m2_t shift, size_t vl);
vuint8m2_t vnsrl_wx_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint16m4_t op1, size_t shift, size_t vl);
vuint8m4_t vnsrl_wv_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint16m8_t op1, vuint8m4_t shift, size_t vl);
vuint8m4_t vnsrl_wx_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint16m8_t op1, size_t shift, size_t vl);
vuint16mf4_t vnsrl_wv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint32mf2_t op1, vuint16mf4_t shift, size_t vl);
vuint16mf4_t vnsrl_wx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint32mf2_t op1, size_t shift, size_t vl);
vuint16mf2_t vnsrl_wv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint32m1_t op1, vuint16mf2_t shift, size_t vl);
vuint16mf2_t vnsrl_wx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint32m1_t op1, size_t shift, size_t vl);
vuint16m1_t vnsrl_wv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint32m2_t op1, vuint16m1_t shift, size_t vl);
vuint16m1_t vnsrl_wx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint32m2_t op1, size_t shift, size_t vl);
vuint16m2_t vnsrl_wv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint32m4_t op1, vuint16m2_t shift, size_t vl);
vuint16m2_t vnsrl_wx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint32m4_t op1, size_t shift, size_t vl);
vuint16m4_t vnsrl_wv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint32m8_t op1, vuint16m4_t shift, size_t vl);
vuint16m4_t vnsrl_wx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint32m8_t op1, size_t shift, size_t vl);
vuint32mf2_t vnsrl_wv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint64m1_t op1, vuint32mf2_t shift, size_t vl);
vuint32mf2_t vnsrl_wx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint64m1_t op1, size_t shift, size_t vl);
vuint32m1_t vnsrl_wv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint64m2_t op1, vuint32m1_t shift, size_t vl);
```

541

```
vuint32m1_t vnsrl_wx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint64m2_t op1, size_t shift, size_t vl);
vuint32m2_t vnsrl_wv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint64m4_t op1, vuint32m2_t shift, size_t vl);
vuint32m2_t vnsrl_wx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint64m4_t op1, size_t shift, size_t vl);
vuint32m4_t vnsrl_wv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint64m8_t op1, vuint32m4_t shift, size_t vl);
vuint32m4_t vnsrl_wx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint64m8_t op1, size_t shift, size_t vl);
vint8mf8_t vnsra_wv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint16mf4_t op1, vuint8mf8_t shift, size_t vl);
vint8mf8_t vnsra_wx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint16mf4_t op1, size_t shift, size_t vl);
vint8mf4_t vnsra_wv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint16mf2_t op1, vuint8mf4_t shift, size_t vl);
vint8mf4_t vnsra_wx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint16mf2_t op1, size_t shift, size_t vl);
vint8mf2_t vnsra_wv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint16m1_t op1, vuint8mf2_t shift, size_t vl);
vint8mf2_t vnsra_wx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint16m1_t op1, size_t shift, size_t vl);
vint8m1_t vnsra_wv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint16m2_t op1, vuint8m1_t shift, size_t vl);
vint8m1_t vnsra_wx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint16m2_t op1, size_t shift, size_t vl);
vint8m2_t vnsra_wv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint16m4_t op1, vuint8m2_t shift, size_t vl);
vint8m2_t vnsra_wx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint16m4_t op1, size_t shift, size_t vl);
vint8m4_t vnsra_wv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint16m8_t op1, vuint8m4_t shift, size_t vl);
vint8m4_t vnsra_wx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint16m8_t op1, size_t shift, size_t vl);
vint16mf4_t vnsra_wv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint32mf2_t op1, vuint16mf4_t shift, size_t vl);
vint16mf4_t vnsra_wx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint32mf2_t op1, size_t shift, size_t vl);
vint16mf2_t vnsra_wv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint32m1_t op1, vuint16mf2_t shift, size_t vl);
vint16mf2_t vnsra_wx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint32m1_t op1, size_t shift, size_t vl);
vint16m1_t vnsra_wv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint32m2_t op1, vuint16m1_t shift, size_t vl);
vint16m1_t vnsra_wx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint32m2_t op1, size_t shift, size_t vl);
```

```
vint16m2_t vnsra_wv_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint32m4_t op1, vuint16m2_t shift, size_t vl);
vint16m2_t vnsra_wx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint32m4_t op1, size_t shift, size_t vl);
vint16m4_t vnsra_wv_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint32m8_t op1, vuint16m4_t shift, size_t vl);
vint16m4_t vnsra_wx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint32m8_t op1, size_t shift, size_t vl);
vint32mf2_t vnsra_wv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint64m1_t op1, vuint32mf2_t shift, size_t vl);
vint32mf2_t vnsra_wx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint64m1_t op1, size_t shift, size_t vl);
vint32m1_t vnsra_wv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint64m2_t op1, vuint32m1_t shift, size_t vl);
vint32m1_t vnsra_wx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint64m2_t op1, size_t shift, size_t vl);
vint32m2_t vnsra_wv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint64m4_t op1, vuint32m2_t shift, size_t vl);
vint32m2_t vnsra_wx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint64m4_t op1, size_t shift, size_t vl);
vint32m4_t vnsra_wv_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint64m8_t op1, vuint32m4_t shift, size_t vl);
vint32m4_t vnsra_wx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint64m8_t op1, size_t shift, size_t vl);
```

Vector Integer Comparison Functions:

Prototypes:

```
vbool64_t vmseq_vv_i8mf8_b64 (vint8mf8_t op1, vint8mf8_t op2,
    size_t vl);
vbool64_t vmseq_vx_i8mf8_b64 (vint8mf8_t op1, int8_t op2, size_t
    vl);
vbool32_t vmseq_vv_i8mf4_b32 (vint8mf4_t op1, vint8mf4_t op2,
    size_t vl);
vbool32_t vmseq_vx_i8mf4_b32 (vint8mf4_t op1, int8_t op2, size_t
    vl);
vbool16_t vmseq_vv_i8mf2_b16 (vint8mf2_t op1, vint8mf2_t op2,
    size_t vl);
vbool16_t vmseq_vx_i8mf2_b16 (vint8mf2_t op1, int8_t op2, size_t
    vl);
vbool8_t vmseq_vv_i8m1_b8 (vint8m1_t op1, vint8m1_t op2, size_t
    vl);
vbool8_t vmseq_vx_i8m1_b8 (vint8m1_t op1, int8_t op2, size_t vl);
vbool4_t vmseq_vv_i8m2_b4 (vint8m2_t op1, vint8m2_t op2, size_t
    vl);
```

```
vbool4_t vmseq_vx_i8m2_b4 (vint8m2_t op1, int8_t op2, size_t vl);
vbool2_t vmseq_vv_i8m4_b2 (vint8m4_t op1, vint8m4_t op2, size_t
    vl);
vbool2_t vmseq_vx_i8m4_b2 (vint8m4_t op1, int8_t op2, size_t vl);
vbool1_t vmseq_vv_i8m8_b1 (vint8m8_t op1, vint8m8_t op2, size_t
    vl);
vbool1_t vmseq_vx_i8m8_b1 (vint8m8_t op1, int8_t op2, size_t vl);
vbool64_t vmseq_vv_i16mf4_b64 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vbool64_t vmseq_vx_i16mf4_b64 (vint16mf4_t op1, int16_t op2,
    size_t vl);
vbool32_t vmseq_vv_i16mf2_b32 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vbool32_t vmseq_vx_i16mf2_b32 (vint16mf2_t op1, int16_t op2,
    size_t vl);
vbool16_t vmseq_vv_i16m1_b16 (vint16m1_t op1, vint16m1_t op2,
    size_t vl);
vbool16_t vmseq_vx_i16m1_b16 (vint16m1_t op1, int16_t op2,
    size_t vl);
vbool8_t vmseq_vv_i16m2_b8 (vint16m2_t op1, vint16m2_t op2,
    size_t vl);
vbool8_t vmseq_vx_i16m2_b8 (vint16m2_t op1, int16_t op2, size_t
    vl);
vbool4_t vmseq_vv_i16m4_b4 (vint16m4_t op1, vint16m4_t op2,
    size_t vl);
vbool4_t vmseq_vx_i16m4_b4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vbool2_t vmseq_vv_i16m8_b2 (vint16m8_t op1, vint16m8_t op2,
    size_t vl);
vbool2_t vmseq_vx_i16m8_b2 (vint16m8_t op1, int16_t op2, size_t
    vl);
vbool64_t vmseq_vv_i32mf2_b64 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vbool64_t vmseq_vx_i32mf2_b64 (vint32mf2_t op1, int32_t op2,
    size_t vl);
vbool32_t vmseq_vv_i32m1_b32 (vint32m1_t op1, vint32m1_t op2,
    size_t vl);
vbool32_t vmseq_vx_i32m1_b32 (vint32m1_t op1, int32_t op2,
    size_t vl);
vbool16_t vmseq_vv_i32m2_b16 (vint32m2_t op1, vint32m2_t op2,
    size_t vl);
vbool16_t vmseq_vx_i32m2_b16 (vint32m2_t op1, int32_t op2,
    size_t vl);
vbool8_t vmseq_vv_i32m4_b8 (vint32m4_t op1, vint32m4_t op2,
    size_t vl);
```

```
vbool8_t vmseq_vx_i32m4_b8 (vint32m4_t op1, int32_t op2, size_t
    vl);
vbool4_t vmseq_vv_i32m8_b4 (vint32m8_t op1, vint32m8_t op2,
    size_t vl);
vbool4_t vmseq_vx_i32m8_b4 (vint32m8_t op1, int32_t op2, size_t
    vl);
vbool64_t vmseq_vv_i64m1_b64 (vint64m1_t op1, vint64m1_t op2,
    size_t vl);
vbool64_t vmseq_vx_i64m1_b64 (vint64m1_t op1, int64_t op2,
    size_t vl);
vbool32_t vmseq_vv_i64m2_b32 (vint64m2_t op1, vint64m2_t op2,
    size_t vl);
vbool32_t vmseq_vx_i64m2_b32 (vint64m2_t op1, int64_t op2,
    size_t vl);
vbool16_t vmseq_vv_i64m4_b16 (vint64m4_t op1, vint64m4_t op2,
    size_t vl);
vbool16_t vmseq_vx_i64m4_b16 (vint64m4_t op1, int64_t op2,
    size_t vl);
vbool8_t vmseq_vv_i64m8_b8 (vint64m8_t op1, vint64m8_t op2,
    size_t vl);
vbool8_t vmseq_vx_i64m8_b8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vbool64_t vmseq_vv_u8mf8_b64 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vbool64_t vmseq_vx_u8mf8_b64 (vuint8mf8_t op1, uint8_t op2,
    size_t vl);
vbool32_t vmseq_vv_u8mf4_b32 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vbool32_t vmseq_vx_u8mf4_b32 (vuint8mf4_t op1, uint8_t op2,
    size_t vl);
vbool16_t vmseq_vv_u8mf2_b16 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vbool16_t vmseq_vx_u8mf2_b16 (vuint8mf2_t op1, uint8_t op2,
    size_t vl);
vbool8_t vmseq_vv_u8m1_b8 (vuint8m1_t op1, vuint8m1_t op2,
    size_t vl);
vbool8_t vmseq_vx_u8m1_b8 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vbool4_t vmseq_vv_u8m2_b4 (vuint8m2_t op1, vuint8m2_t op2,
    size_t vl);
vbool4_t vmseq_vx_u8m2_b4 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vbool2_t vmseq_vv_u8m4_b2 (vuint8m4_t op1, vuint8m4_t op2,
    size_t vl);
vbool2_t vmseq_vx_u8m4_b2 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
```

```
vbool1_t vmseq_vv_u8m8_b1 (vuint8m8_t op1, vuint8m8_t op2,
    size_t vl);
vbool1_t vmseq_vx_u8m8_b1 (vuint8m8_t op1, uint8_t op2, size_t
    vl);
vbool64_t vmseq_vv_u16mf4_b64 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vbool64_t vmseq_vx_u16mf4_b64 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vbool32_t vmseq_vv_u16mf2_b32 (vuint16mf2_t op1, vuint16mf2_t
    op2, size_t vl);
vbool32_t vmseq_vx_u16mf2_b32 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vbool16_t vmseq_vv_u16m1_b16 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vbool16_t vmseq_vx_u16m1_b16 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vbool8_t vmseq_vv_u16m2_b8 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vbool8_t vmseq_vx_u16m2_b8 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vbool4_t vmseq_vv_u16m4_b4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vbool4_t vmseq_vx_u16m4_b4 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
vbool2_t vmseq_vv_u16m8_b2 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vbool2_t vmseq_vx_u16m8_b2 (vuint16m8_t op1, uint16_t op2,
    size_t vl);
vbool64_t vmseq_vv_u32mf2_b64 (vuint32mf2_t op1, vuint32mf2_t
    op2, size_t vl);
vbool64_t vmseq_vx_u32mf2_b64 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vbool32_t vmseq_vv_u32m1_b32 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vbool32_t vmseq_vx_u32m1_b32 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vbool16_t vmseq_vv_u32m2_b16 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vbool16_t vmseq_vx_u32m2_b16 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vbool8_t vmseq_vv_u32m4_b8 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vbool8_t vmseq_vx_u32m4_b8 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
vbool4_t vmseq_vv_u32m8_b4 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
```

```
vbool4_t vmseq_vx_u32m8_b4 (vuint32m8_t op1, uint32_t op2,
    size_t vl);
vbool64_t vmseq_vv_u64m1_b64 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vbool64_t vmseq_vx_u64m1_b64 (vuint64m1_t op1, uint64_t op2,
    size_t vl);
vbool32_t vmseq_vv_u64m2_b32 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vbool32_t vmseq_vx_u64m2_b32 (vuint64m2_t op1, uint64_t op2,
    size_t vl);
vbool16_t vmseq_vv_u64m4_b16 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vbool16_t vmseq_vx_u64m4_b16 (vuint64m4_t op1, uint64_t op2,
    size_t vl);
vbool8_t vmseq_vv_u64m8_b8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vbool8_t vmseq_vx_u64m8_b8 (vuint64m8_t op1, uint64_t op2,
    size_t vl);
vbool64_t vmsne_vv_i8mf8_b64 (vint8mf8_t op1, vint8mf8_t op2,
    size_t vl);
vbool64_t vmsne_vx_i8mf8_b64 (vint8mf8_t op1, int8_t op2, size_t
    vl);
vbool32_t vmsne_vv_i8mf4_b32 (vint8mf4_t op1, vint8mf4_t op2,
    size_t vl);
vbool32_t vmsne_vx_i8mf4_b32 (vint8mf4_t op1, int8_t op2, size_t
    vl);
vbool16_t vmsne_vv_i8mf2_b16 (vint8mf2_t op1, vint8mf2_t op2,
    size_t vl);
vbool16_t vmsne_vx_i8mf2_b16 (vint8mf2_t op1, int8_t op2, size_t
    vl);
vbool8_t vmsne_vv_i8m1_b8 (vint8m1_t op1, vint8m1_t op2, size_t
    vl);
vbool8_t vmsne_vx_i8m1_b8 (vint8m1_t op1, int8_t op2, size_t vl);
vbool4_t vmsne_vv_i8m2_b4 (vint8m2_t op1, vint8m2_t op2, size_t
    vl);
vbool4_t vmsne_vx_i8m2_b4 (vint8m2_t op1, int8_t op2, size_t vl);
vbool2_t vmsne_vv_i8m4_b2 (vint8m4_t op1, vint8m4_t op2, size_t
    vl);
vbool2_t vmsne_vx_i8m4_b2 (vint8m4_t op1, int8_t op2, size_t vl);
vbool1_t vmsne_vv_i8m8_b1 (vint8m8_t op1, vint8m8_t op2, size_t
    vl);
vbool1_t vmsne_vx_i8m8_b1 (vint8m8_t op1, int8_t op2, size_t vl);
vbool64_t vmsne_vv_i16mf4_b64 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vbool64_t vmsne_vx_i16mf4_b64 (vint16mf4_t op1, int16_t op2,
    size_t vl);
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547

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vbool32_t vmsne_vv_i16mf2_b32 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vbool32_t vmsne_vx_i16mf2_b32 (vint16mf2_t op1, int16_t op2,
    size_t vl);
vbool16_t vmsne_vv_i16m1_b16 (vint16m1_t op1, vint16m1_t op2,
    size_t vl);
vbool16_t vmsne_vx_i16m1_b16 (vint16m1_t op1, int16_t op2,
    size_t vl);
vbool8_t vmsne_vv_i16m2_b8 (vint16m2_t op1, vint16m2_t op2,
    size_t vl);
vbool8_t vmsne_vx_i16m2_b8 (vint16m2_t op1, int16_t op2, size_t
    vl);
vbool4_t vmsne_vv_i16m4_b4 (vint16m4_t op1, vint16m4_t op2,
    size_t vl);
vbool4_t vmsne_vx_i16m4_b4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vbool2_t vmsne_vv_i16m8_b2 (vint16m8_t op1, vint16m8_t op2,
    size_t vl);
vbool2_t vmsne_vx_i16m8_b2 (vint16m8_t op1, int16_t op2, size_t
    vl);
vbool64_t vmsne_vv_i32mf2_b64 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vbool64_t vmsne_vx_i32mf2_b64 (vint32mf2_t op1, int32_t op2,
    size_t vl);
vbool32_t vmsne_vv_i32m1_b32 (vint32m1_t op1, vint32m1_t op2,
    size_t vl);
vbool32_t vmsne_vx_i32m1_b32 (vint32m1_t op1, int32_t op2,
    size_t vl);
vbool16_t vmsne_vv_i32m2_b16 (vint32m2_t op1, vint32m2_t op2,
    size_t vl);
vbool16_t vmsne_vx_i32m2_b16 (vint32m2_t op1, int32_t op2,
    size_t vl);
vbool8_t vmsne_vv_i32m4_b8 (vint32m4_t op1, vint32m4_t op2,
    size_t vl);
vbool8_t vmsne_vx_i32m4_b8 (vint32m4_t op1, int32_t op2, size_t
    vl);
vbool4_t vmsne_vv_i32m8_b4 (vint32m8_t op1, vint32m8_t op2,
    size_t vl);
vbool4_t vmsne_vx_i32m8_b4 (vint32m8_t op1, int32_t op2, size_t
    vl);
vbool64_t vmsne_vv_i64m1_b64 (vint64m1_t op1, vint64m1_t op2,
    size_t vl);
vbool64_t vmsne_vx_i64m1_b64 (vint64m1_t op1, int64_t op2,
    size_t vl);
vbool32_t vmsne_vv_i64m2_b32 (vint64m2_t op1, vint64m2_t op2,
    size_t vl);
```

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vbool32_t vmsne_vx_i64m2_b32 (vint64m2_t op1, int64_t op2,
    size_t vl);
vbool16_t vmsne_vv_i64m4_b16 (vint64m4_t op1, vint64m4_t op2,
    size_t vl);
vbool16_t vmsne_vx_i64m4_b16 (vint64m4_t op1, int64_t op2,
    size_t vl);
vbool8_t vmsne_vv_i64m8_b8 (vint64m8_t op1, vint64m8_t op2,
    size_t vl);
vbool8_t vmsne_vx_i64m8_b8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vbool64_t vmsne_vv_u8mf8_b64 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vbool64_t vmsne_vx_u8mf8_b64 (vuint8mf8_t op1, uint8_t op2,
    size_t vl);
vbool32_t vmsne_vv_u8mf4_b32 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vbool32_t vmsne_vx_u8mf4_b32 (vuint8mf4_t op1, uint8_t op2,
    size_t vl);
vbool16_t vmsne_vv_u8mf2_b16 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vbool16_t vmsne_vx_u8mf2_b16 (vuint8mf2_t op1, uint8_t op2,
    size_t vl);
vbool8_t vmsne_vv_u8m1_b8 (vuint8m1_t op1, vuint8m1_t op2,
    size_t vl);
vbool8_t vmsne_vx_u8m1_b8 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vbool4_t vmsne_vv_u8m2_b4 (vuint8m2_t op1, vuint8m2_t op2,
    size_t vl);
vbool4_t vmsne_vx_u8m2_b4 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vbool2_t vmsne_vv_u8m4_b2 (vuint8m4_t op1, vuint8m4_t op2,
    size_t vl);
vbool2_t vmsne_vx_u8m4_b2 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
vbool1_t vmsne_vv_u8m8_b1 (vuint8m8_t op1, vuint8m8_t op2,
    size_t vl);
vbool1_t vmsne_vx_u8m8_b1 (vuint8m8_t op1, uint8_t op2, size_t
    vl);
vbool64_t vmsne_vv_u16mf4_b64 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vbool64_t vmsne_vx_u16mf4_b64 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vbool32_t vmsne_vv_u16mf2_b32 (vuint16mf2_t op1, vuint16mf2_t
    op2, size_t vl);
vbool32_t vmsne_vx_u16mf2_b32 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
```

```
vbool16_t vmsne_vv_u16m1_b16 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vbool16_t vmsne_vx_u16m1_b16 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vbool8_t vmsne_vv_u16m2_b8 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vbool8_t vmsne_vx_u16m2_b8 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vbool4_t vmsne_vv_u16m4_b4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vbool4_t vmsne_vx_u16m4_b4 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
vbool2_t vmsne_vv_u16m8_b2 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vbool2_t vmsne_vx_u16m8_b2 (vuint16m8_t op1, uint16_t op2,
    size_t vl);
vbool64_t vmsne_vv_u32mf2_b64 (vuint32mf2_t op1, vuint32mf2_t
    op2, size_t vl);
vbool64_t vmsne_vx_u32mf2_b64 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vbool32_t vmsne_vv_u32m1_b32 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vbool32_t vmsne_vx_u32m1_b32 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vbool16_t vmsne_vv_u32m2_b16 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vbool16_t vmsne_vx_u32m2_b16 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vbool8_t vmsne_vv_u32m4_b8 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vbool8_t vmsne_vx_u32m4_b8 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
vbool4_t vmsne_vv_u32m8_b4 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vbool4_t vmsne_vx_u32m8_b4 (vuint32m8_t op1, uint32_t op2,
    size_t vl);
vbool64_t vmsne_vv_u64m1_b64 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vbool64_t vmsne_vx_u64m1_b64 (vuint64m1_t op1, uint64_t op2,
    size_t vl);
vbool32_t vmsne_vv_u64m2_b32 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vbool32_t vmsne_vx_u64m2_b32 (vuint64m2_t op1, uint64_t op2,
    size_t vl);
vbool16_t vmsne_vv_u64m4_b16 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
```

```
vbool16_t vmsne_vx_u64m4_b16 (vuint64m4_t op1, uint64_t op2,
    size_t vl);
vbool8_t vmsne_vv_u64m8_b8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vbool8_t vmsne_vx_u64m8_b8 (vuint64m8_t op1, uint64_t op2,
    size_t vl);
vbool64_t vmslt_vv_i8mf8_b64 (vint8mf8_t op1, vint8mf8_t op2,
    size_t vl);
vbool64_t vmslt_vx_i8mf8_b64 (vint8mf8_t op1, int8_t op2, size_t
    vl);
vbool32_t vmslt_vv_i8mf4_b32 (vint8mf4_t op1, vint8mf4_t op2,
    size_t vl);
vbool32_t vmslt_vx_i8mf4_b32 (vint8mf4_t op1, int8_t op2, size_t
    vl);
vbool16_t vmslt_vv_i8mf2_b16 (vint8mf2_t op1, vint8mf2_t op2,
    size_t vl);
vbool16_t vmslt_vx_i8mf2_b16 (vint8mf2_t op1, int8_t op2, size_t
    vl);
vbool8_t vmslt_vv_i8m1_b8 (vint8m1_t op1, vint8m1_t op2, size_t
    vl);
vbool8_t vmslt_vx_i8m1_b8 (vint8m1_t op1, int8_t op2, size_t vl);
vbool4_t vmslt_vv_i8m2_b4 (vint8m2_t op1, vint8m2_t op2, size_t
    vl);
vbool4_t vmslt_vx_i8m2_b4 (vint8m2_t op1, int8_t op2, size_t vl);
vbool2_t vmslt_vv_i8m4_b2 (vint8m4_t op1, vint8m4_t op2, size_t
    vl);
vbool2_t vmslt_vx_i8m4_b2 (vint8m4_t op1, int8_t op2, size_t vl);
vbool1_t vmslt_vv_i8m8_b1 (vint8m8_t op1, vint8m8_t op2, size_t
    vl);
vbool1_t vmslt_vx_i8m8_b1 (vint8m8_t op1, int8_t op2, size_t vl);
vbool64_t vmslt_vv_i16mf4_b64 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vbool64_t vmslt_vx_i16mf4_b64 (vint16mf4_t op1, int16_t op2,
    size_t vl);
vbool32_t vmslt_vv_i16mf2_b32 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vbool32_t vmslt_vx_i16mf2_b32 (vint16mf2_t op1, int16_t op2,
    size_t vl);
vbool16_t vmslt_vv_i16m1_b16 (vint16m1_t op1, vint16m1_t op2,
    size_t vl);
vbool16_t vmslt_vx_i16m1_b16 (vint16m1_t op1, int16_t op2,
    size_t vl);
vbool8_t vmslt_vv_i16m2_b8 (vint16m2_t op1, vint16m2_t op2,
    size_t vl);
vbool8_t vmslt_vx_i16m2_b8 (vint16m2_t op1, int16_t op2, size_t
    vl);
```

```
vbool4_t vmslt_vv_i16m4_b4 (vint16m4_t op1, vint16m4_t op2,
    size_t vl);
vbool4_t vmslt_vx_i16m4_b4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vbool2_t vmslt_vv_i16m8_b2 (vint16m8_t op1, vint16m8_t op2,
    size_t vl);
vbool2_t vmslt_vx_i16m8_b2 (vint16m8_t op1, int16_t op2, size_t
    vl);
vbool64_t vmslt_vv_i32mf2_b64 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vbool64_t vmslt_vx_i32mf2_b64 (vint32mf2_t op1, int32_t op2,
    size_t vl);
vbool32_t vmslt_vv_i32m1_b32 (vint32m1_t op1, vint32m1_t op2,
    size_t vl);
vbool32_t vmslt_vx_i32m1_b32 (vint32m1_t op1, int32_t op2,
    size_t vl);
vbool16_t vmslt_vv_i32m2_b16 (vint32m2_t op1, vint32m2_t op2,
    size_t vl);
vbool16_t vmslt_vx_i32m2_b16 (vint32m2_t op1, int32_t op2,
    size_t vl);
vbool8_t vmslt_vv_i32m4_b8 (vint32m4_t op1, vint32m4_t op2,
    size_t vl);
vbool8_t vmslt_vx_i32m4_b8 (vint32m4_t op1, int32_t op2, size_t
    vl);
vbool4_t vmslt_vv_i32m8_b4 (vint32m8_t op1, vint32m8_t op2,
    size_t vl);
vbool4_t vmslt_vx_i32m8_b4 (vint32m8_t op1, int32_t op2, size_t
    vl);
vbool64_t vmslt_vv_i64m1_b64 (vint64m1_t op1, vint64m1_t op2,
    size_t vl);
vbool64_t vmslt_vx_i64m1_b64 (vint64m1_t op1, int64_t op2,
    size_t vl);
vbool32_t vmslt_vv_i64m2_b32 (vint64m2_t op1, vint64m2_t op2,
    size_t vl);
vbool32_t vmslt_vx_i64m2_b32 (vint64m2_t op1, int64_t op2,
    size_t vl);
vbool16_t vmslt_vv_i64m4_b16 (vint64m4_t op1, vint64m4_t op2,
    size_t vl);
vbool16_t vmslt_vx_i64m4_b16 (vint64m4_t op1, int64_t op2,
    size_t vl);
vbool8_t vmslt_vv_i64m8_b8 (vint64m8_t op1, vint64m8_t op2,
    size_t vl);
vbool8_t vmslt_vx_i64m8_b8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vbool64_t vmsltu_vv_u8mf8_b64 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
```

```
vbool64_t vmsltu_vx_u8mf8_b64 (vuint8mf8_t op1, uint8_t op2,
    size_t vl);
vbool32_t vmsltu_vv_u8mf4_b32 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vbool32_t vmsltu_vx_u8mf4_b32 (vuint8mf4_t op1, uint8_t op2,
    size_t vl);
vbool16_t vmsltu_vv_u8mf2_b16 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vbool16_t vmsltu_vx_u8mf2_b16 (vuint8mf2_t op1, uint8_t op2,
    size_t vl);
vbool8_t vmsltu_vv_u8m1_b8 (vuint8m1_t op1, vuint8m1_t op2,
    size_t vl);
vbool8_t vmsltu_vx_u8m1_b8 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vbool4_t vmsltu_vv_u8m2_b4 (vuint8m2_t op1, vuint8m2_t op2,
    size_t vl);
vbool4_t vmsltu_vx_u8m2_b4 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vbool2_t vmsltu_vv_u8m4_b2 (vuint8m4_t op1, vuint8m4_t op2,
    size_t vl);
vbool2_t vmsltu_vx_u8m4_b2 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
vbool1_t vmsltu_vv_u8m8_b1 (vuint8m8_t op1, vuint8m8_t op2,
    size_t vl);
vbool1_t vmsltu_vx_u8m8_b1 (vuint8m8_t op1, uint8_t op2, size_t
    vl);
vbool64_t vmsltu_vv_u16mf4_b64 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vbool64_t vmsltu_vx_u16mf4_b64 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vbool32_t vmsltu_vv_u16mf2_b32 (vuint16mf2_t op1, vuint16mf2_t
    op2, size_t vl);
vbool32_t vmsltu_vx_u16mf2_b32 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vbool16_t vmsltu_vv_u16m1_b16 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vbool16_t vmsltu_vx_u16m1_b16 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vbool8_t vmsltu_vv_u16m2_b8 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vbool8_t vmsltu_vx_u16m2_b8 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vbool4_t vmsltu_vv_u16m4_b4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vbool4_t vmsltu_vx_u16m4_b4 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
```

```
vbool2_t vmsltu_vv_u16m8_b2 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vbool2_t vmsltu_vx_u16m8_b2 (vuint16m8_t op1, uint16_t op2,
    size_t vl);
vbool64_t vmsltu_vv_u32mf2_b64 (vuint32mf2_t op1, vuint32mf2_t
    op2, size_t vl);
vbool64_t vmsltu_vx_u32mf2_b64 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vbool32_t vmsltu_vv_u32m1_b32 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vbool32_t vmsltu_vx_u32m1_b32 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vbool16_t vmsltu_vv_u32m2_b16 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vbool16_t vmsltu_vx_u32m2_b16 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vbool8_t vmsltu_vv_u32m4_b8 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vbool8_t vmsltu_vx_u32m4_b8 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
vbool4_t vmsltu_vv_u32m8_b4 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vbool4_t vmsltu_vx_u32m8_b4 (vuint32m8_t op1, uint32_t op2,
    size_t vl);
vbool64_t vmsltu_vv_u64m1_b64 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vbool64_t vmsltu_vx_u64m1_b64 (vuint64m1_t op1, uint64_t op2,
    size_t vl);
vbool32_t vmsltu_vv_u64m2_b32 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vbool32_t vmsltu_vx_u64m2_b32 (vuint64m2_t op1, uint64_t op2,
    size_t vl);
vbool16_t vmsltu_vv_u64m4_b16 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vbool16_t vmsltu_vx_u64m4_b16 (vuint64m4_t op1, uint64_t op2,
    size_t vl);
vbool8_t vmsltu_vv_u64m8_b8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vbool8_t vmsltu_vx_u64m8_b8 (vuint64m8_t op1, uint64_t op2,
    size_t vl);
vbool64_t vmsle_vv_i8mf8_b64 (vint8mf8_t op1, vint8mf8_t op2,
    size_t vl);
vbool64_t vmsle_vx_i8mf8_b64 (vint8mf8_t op1, int8_t op2, size_t
    vl);
vbool32_t vmsle_vv_i8mf4_b32 (vint8mf4_t op1, vint8mf4_t op2,
    size_t vl);
```

```
vbool32_t vmsle_vx_i8mf4_b32 (vint8mf4_t op1, int8_t op2, size_t
    vl);
vbool16_t vmsle_vv_i8mf2_b16 (vint8mf2_t op1, vint8mf2_t op2,
    size_t vl);
vbool16_t vmsle_vx_i8mf2_b16 (vint8mf2_t op1, int8_t op2, size_t
    vl);
vbool8_t vmsle_vv_i8m1_b8 (vint8m1_t op1, vint8m1_t op2, size_t
    vl);
vbool8_t vmsle_vx_i8m1_b8 (vint8m1_t op1, int8_t op2, size_t vl);
vbool4_t vmsle_vv_i8m2_b4 (vint8m2_t op1, vint8m2_t op2, size_t
    vl);
vbool4_t vmsle_vx_i8m2_b4 (vint8m2_t op1, int8_t op2, size_t vl);
vbool2_t vmsle_vv_i8m4_b2 (vint8m4_t op1, vint8m4_t op2, size_t
    vl);
vbool2_t vmsle_vx_i8m4_b2 (vint8m4_t op1, int8_t op2, size_t vl);
vbool1_t vmsle_vv_i8m8_b1 (vint8m8_t op1, vint8m8_t op2, size_t
    vl);
vbool1_t vmsle_vx_i8m8_b1 (vint8m8_t op1, int8_t op2, size_t vl);
vbool64_t vmsle_vv_i16mf4_b64 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vbool64_t vmsle_vx_i16mf4_b64 (vint16mf4_t op1, int16_t op2,
    size_t vl);
vbool32_t vmsle_vv_i16mf2_b32 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vbool32_t vmsle_vx_i16mf2_b32 (vint16mf2_t op1, int16_t op2,
    size_t vl);
vbool16_t vmsle_vv_i16m1_b16 (vint16m1_t op1, vint16m1_t op2,
    size_t vl);
vbool16_t vmsle_vx_i16m1_b16 (vint16m1_t op1, int16_t op2,
    size_t vl);
vbool8_t vmsle_vv_i16m2_b8 (vint16m2_t op1, vint16m2_t op2,
    size_t vl);
vbool8_t vmsle_vx_i16m2_b8 (vint16m2_t op1, int16_t op2, size_t
    vl);
vbool4_t vmsle_vv_i16m4_b4 (vint16m4_t op1, vint16m4_t op2,
    size_t vl);
vbool4_t vmsle_vx_i16m4_b4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vbool2_t vmsle_vv_i16m8_b2 (vint16m8_t op1, vint16m8_t op2,
    size_t vl);
vbool2_t vmsle_vx_i16m8_b2 (vint16m8_t op1, int16_t op2, size_t
    vl);
vbool64_t vmsle_vv_i32mf2_b64 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vbool64_t vmsle_vx_i32mf2_b64 (vint32mf2_t op1, int32_t op2,
    size_t vl);
```

```
vbool32_t vmsle_vv_i32m1_b32 (vint32m1_t op1, vint32m1_t op2,
    size_t vl);
vbool32_t vmsle_vx_i32m1_b32 (vint32m1_t op1, int32_t op2,
    size_t vl);
vbool16_t vmsle_vv_i32m2_b16 (vint32m2_t op1, vint32m2_t op2,
    size_t vl);
vbool16_t vmsle_vx_i32m2_b16 (vint32m2_t op1, int32_t op2,
    size_t vl);
vbool8_t vmsle_vv_i32m4_b8 (vint32m4_t op1, vint32m4_t op2,
    size_t vl);
vbool8_t vmsle_vx_i32m4_b8 (vint32m4_t op1, int32_t op2, size_t
    vl);
vbool4_t vmsle_vv_i32m8_b4 (vint32m8_t op1, vint32m8_t op2,
    size_t vl);
vbool4_t vmsle_vx_i32m8_b4 (vint32m8_t op1, int32_t op2, size_t
    vl);
vbool64_t vmsle_vv_i64m1_b64 (vint64m1_t op1, vint64m1_t op2,
    size_t vl);
vbool64_t vmsle_vx_i64m1_b64 (vint64m1_t op1, int64_t op2,
    size_t vl);
vbool32_t vmsle_vv_i64m2_b32 (vint64m2_t op1, vint64m2_t op2,
    size_t vl);
vbool32_t vmsle_vx_i64m2_b32 (vint64m2_t op1, int64_t op2,
    size_t vl);
vbool16_t vmsle_vv_i64m4_b16 (vint64m4_t op1, vint64m4_t op2,
    size_t vl);
vbool16_t vmsle_vx_i64m4_b16 (vint64m4_t op1, int64_t op2,
    size_t vl);
vbool8_t vmsle_vv_i64m8_b8 (vint64m8_t op1, vint64m8_t op2,
    size_t vl);
vbool8_t vmsle_vx_i64m8_b8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vbool64_t vmsleu_vv_u8mf8_b64 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vbool64_t vmsleu_vx_u8mf8_b64 (vuint8mf8_t op1, uint8_t op2,
    size_t vl);
vbool32_t vmsleu_vv_u8mf4_b32 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vbool32_t vmsleu_vx_u8mf4_b32 (vuint8mf4_t op1, uint8_t op2,
    size_t vl);
vbool16_t vmsleu_vv_u8mf2_b16 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vbool16_t vmsleu_vx_u8mf2_b16 (vuint8mf2_t op1, uint8_t op2,
    size_t vl);
vbool8_t vmsleu_vv_u8m1_b8 (vuint8m1_t op1, vuint8m1_t op2,
    size_t vl);
```

```
vbool8_t vmsleu_vx_u8m1_b8 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vbool4_t vmsleu_vv_u8m2_b4 (vuint8m2_t op1, vuint8m2_t op2,
    size_t vl);
vbool4_t vmsleu_vx_u8m2_b4 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vbool2_t vmsleu_vv_u8m4_b2 (vuint8m4_t op1, vuint8m4_t op2,
    size_t vl);
vbool2_t vmsleu_vx_u8m4_b2 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
vbool1_t vmsleu_vv_u8m8_b1 (vuint8m8_t op1, vuint8m8_t op2,
    size_t vl);
vbool1_t vmsleu_vx_u8m8_b1 (vuint8m8_t op1, uint8_t op2, size_t
    vl);
vbool64_t vmsleu_vv_u16mf4_b64 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vbool64_t vmsleu_vx_u16mf4_b64 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vbool32_t vmsleu_vv_u16mf2_b32 (vuint16mf2_t op1, vuint16mf2_t
    op2, size_t vl);
vbool32_t vmsleu_vx_u16mf2_b32 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vbool16_t vmsleu_vv_u16m1_b16 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vbool16_t vmsleu_vx_u16m1_b16 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vbool8_t vmsleu_vv_u16m2_b8 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vbool8_t vmsleu_vx_u16m2_b8 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vbool4_t vmsleu_vv_u16m4_b4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vbool4_t vmsleu_vx_u16m4_b4 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
vbool2_t vmsleu_vv_u16m8_b2 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vbool2_t vmsleu_vx_u16m8_b2 (vuint16m8_t op1, uint16_t op2,
    size_t vl);
vbool64_t vmsleu_vv_u32mf2_b64 (vuint32mf2_t op1, vuint32mf2_t
    op2, size_t vl);
vbool64_t vmsleu_vx_u32mf2_b64 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vbool32_t vmsleu_vv_u32m1_b32 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vbool32_t vmsleu_vx_u32m1_b32 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
```

```
vbool16_t vmsleu_vv_u32m2_b16 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vbool16_t vmsleu_vx_u32m2_b16 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vbool8_t vmsleu_vv_u32m4_b8 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vbool8_t vmsleu_vx_u32m4_b8 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
vbool4_t vmsleu_vv_u32m8_b4 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vbool4_t vmsleu_vx_u32m8_b4 (vuint32m8_t op1, uint32_t op2,
    size_t vl);
vbool64_t vmsleu_vv_u64m1_b64 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vbool64_t vmsleu_vx_u64m1_b64 (vuint64m1_t op1, uint64_t op2,
    size_t vl);
vbool32_t vmsleu_vv_u64m2_b32 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vbool32_t vmsleu_vx_u64m2_b32 (vuint64m2_t op1, uint64_t op2,
    size_t vl);
vbool16_t vmsleu_vv_u64m4_b16 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vbool16_t vmsleu_vx_u64m4_b16 (vuint64m4_t op1, uint64_t op2,
    size_t vl);
vbool8_t vmsleu_vv_u64m8_b8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vbool8_t vmsleu_vx_u64m8_b8 (vuint64m8_t op1, uint64_t op2,
    size_t vl);
vbool64_t vmsgt_vv_i8mf8_b64 (vint8mf8_t op1, vint8mf8_t op2,
    size_t vl);
vbool64_t vmsgt_vx_i8mf8_b64 (vint8mf8_t op1, int8_t op2, size_t
    vl);
vbool32_t vmsgt_vv_i8mf4_b32 (vint8mf4_t op1, vint8mf4_t op2,
    size_t vl);
vbool32_t vmsgt_vx_i8mf4_b32 (vint8mf4_t op1, int8_t op2, size_t
    vl);
vbool16_t vmsgt_vv_i8mf2_b16 (vint8mf2_t op1, vint8mf2_t op2,
    size_t vl);
vbool16_t vmsgt_vx_i8mf2_b16 (vint8mf2_t op1, int8_t op2, size_t
    vl);
vbool8_t vmsgt_vv_i8m1_b8 (vint8m1_t op1, vint8m1_t op2, size_t
    vl);
vbool8_t vmsgt_vx_i8m1_b8 (vint8m1_t op1, int8_t op2, size_t vl);
vbool4_t vmsgt_vv_i8m2_b4 (vint8m2_t op1, vint8m2_t op2, size_t
    vl);
vbool4_t vmsgt_vx_i8m2_b4 (vint8m2_t op1, int8_t op2, size_t vl);
```

```
vbool2_t vmsgt_vv_i8m4_b2 (vint8m4_t op1, vint8m4_t op2, size_t
    vl);
vbool2_t vmsgt_vx_i8m4_b2 (vint8m4_t op1, int8_t op2, size_t vl);
vbool1_t vmsgt_vv_i8m8_b1 (vint8m8_t op1, vint8m8_t op2, size_t
    vl);
vbool1_t vmsgt_vx_i8m8_b1 (vint8m8_t op1, int8_t op2, size_t vl);
vbool64_t vmsgt_vv_i16mf4_b64 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vbool64_t vmsgt_vx_i16mf4_b64 (vint16mf4_t op1, int16_t op2,
    size_t vl);
vbool32_t vmsgt_vv_i16mf2_b32 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vbool32_t vmsgt_vx_i16mf2_b32 (vint16mf2_t op1, int16_t op2,
    size_t vl);
vbool16_t vmsgt_vv_i16m1_b16 (vint16m1_t op1, vint16m1_t op2,
    size_t vl);
vbool16_t vmsgt_vx_i16m1_b16 (vint16m1_t op1, int16_t op2,
    size_t vl);
vbool8_t vmsgt_vv_i16m2_b8 (vint16m2_t op1, vint16m2_t op2,
    size_t vl);
vbool8_t vmsgt_vx_i16m2_b8 (vint16m2_t op1, int16_t op2, size_t
    vl);
vbool4_t vmsgt_vv_i16m4_b4 (vint16m4_t op1, vint16m4_t op2,
    size_t vl);
vbool4_t vmsgt_vx_i16m4_b4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vbool2_t vmsgt_vv_i16m8_b2 (vint16m8_t op1, vint16m8_t op2,
    size_t vl);
vbool2_t vmsgt_vx_i16m8_b2 (vint16m8_t op1, int16_t op2, size_t
    vl);
vbool64_t vmsgt_vv_i32mf2_b64 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vbool64_t vmsgt_vx_i32mf2_b64 (vint32mf2_t op1, int32_t op2,
    size_t vl);
vbool32_t vmsgt_vv_i32m1_b32 (vint32m1_t op1, vint32m1_t op2,
    size_t vl);
vbool32_t vmsgt_vx_i32m1_b32 (vint32m1_t op1, int32_t op2,
    size_t vl);
vbool16_t vmsgt_vv_i32m2_b16 (vint32m2_t op1, vint32m2_t op2,
    size_t vl);
vbool16_t vmsgt_vx_i32m2_b16 (vint32m2_t op1, int32_t op2,
    size_t vl);
vbool8_t vmsgt_vv_i32m4_b8 (vint32m4_t op1, vint32m4_t op2,
    size_t vl);
vbool8_t vmsgt_vx_i32m4_b8 (vint32m4_t op1, int32_t op2, size_t
    vl);
```

```
vbool4_t vmsgt_vv_i32m8_b4 (vint32m8_t op1, vint32m8_t op2,
    size_t vl);
vbool4_t vmsgt_vx_i32m8_b4 (vint32m8_t op1, int32_t op2, size_t
    vl);
vbool64_t vmsgt_vv_i64m1_b64 (vint64m1_t op1, vint64m1_t op2,
    size_t vl);
vbool64_t vmsgt_vx_i64m1_b64 (vint64m1_t op1, int64_t op2,
    size_t vl);
vbool32_t vmsgt_vv_i64m2_b32 (vint64m2_t op1, vint64m2_t op2,
    size_t vl);
vbool32_t vmsgt_vx_i64m2_b32 (vint64m2_t op1, int64_t op2,
    size_t vl);
vbool16_t vmsgt_vv_i64m4_b16 (vint64m4_t op1, vint64m4_t op2,
    size_t vl);
vbool16_t vmsgt_vx_i64m4_b16 (vint64m4_t op1, int64_t op2,
    size_t vl);
vbool8_t vmsgt_vv_i64m8_b8 (vint64m8_t op1, vint64m8_t op2,
    size_t vl);
vbool8_t vmsgt_vx_i64m8_b8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vbool64_t vmsgtu_vv_u8mf8_b64 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vbool64_t vmsgtu_vx_u8mf8_b64 (vuint8mf8_t op1, uint8_t op2,
    size_t vl);
vbool32_t vmsgtu_vv_u8mf4_b32 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vbool32_t vmsgtu_vx_u8mf4_b32 (vuint8mf4_t op1, uint8_t op2,
    size_t vl);
vbool16_t vmsgtu_vv_u8mf2_b16 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vbool16_t vmsgtu_vx_u8mf2_b16 (vuint8mf2_t op1, uint8_t op2,
    size_t vl);
vbool8_t vmsgtu_vv_u8m1_b8 (vuint8m1_t op1, vuint8m1_t op2,
    size_t vl);
vbool8_t vmsgtu_vx_u8m1_b8 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vbool4_t vmsgtu_vv_u8m2_b4 (vuint8m2_t op1, vuint8m2_t op2,
    size_t vl);
vbool4_t vmsgtu_vx_u8m2_b4 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vbool2_t vmsgtu_vv_u8m4_b2 (vuint8m4_t op1, vuint8m4_t op2,
    size_t vl);
vbool2_t vmsgtu_vx_u8m4_b2 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
vbool1_t vmsgtu_vv_u8m8_b1 (vuint8m8_t op1, vuint8m8_t op2,
    size_t vl);
```

```
vbool1_t vmsgtu_vx_u8m8_b1 (vuint8m8_t op1, uint8_t op2, size_t
    vl);
vbool64_t vmsgtu_vv_u16mf4_b64 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vbool64_t vmsgtu_vx_u16mf4_b64 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vbool32_t vmsgtu_vv_u16mf2_b32 (vuint16mf2_t op1, vuint16mf2_t
    op2, size_t vl);
vbool32_t vmsgtu_vx_u16mf2_b32 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vbool16_t vmsgtu_vv_u16m1_b16 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vbool16_t vmsgtu_vx_u16m1_b16 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vbool8_t vmsgtu_vv_u16m2_b8 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vbool8_t vmsgtu_vx_u16m2_b8 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vbool4_t vmsgtu_vv_u16m4_b4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vbool4_t vmsgtu_vx_u16m4_b4 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
vbool2_t vmsgtu_vv_u16m8_b2 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vbool2_t vmsgtu_vx_u16m8_b2 (vuint16m8_t op1, uint16_t op2,
    size_t vl);
vbool64_t vmsgtu_vv_u32mf2_b64 (vuint32mf2_t op1, vuint32mf2_t
    op2, size_t vl);
vbool64_t vmsgtu_vx_u32mf2_b64 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vbool32_t vmsgtu_vv_u32m1_b32 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vbool32_t vmsgtu_vx_u32m1_b32 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vbool16_t vmsgtu_vv_u32m2_b16 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vbool16_t vmsgtu_vx_u32m2_b16 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vbool8_t vmsgtu_vv_u32m4_b8 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vbool8_t vmsgtu_vx_u32m4_b8 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
vbool4_t vmsgtu_vv_u32m8_b4 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vbool4_t vmsgtu_vx_u32m8_b4 (vuint32m8_t op1, uint32_t op2,
    size_t vl);
```

```
vbool64_t vmsgtu_vv_u64m1_b64 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vbool64_t vmsgtu_vx_u64m1_b64 (vuint64m1_t op1, uint64_t op2,
    size_t vl);
vbool32_t vmsgtu_vv_u64m2_b32 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vbool32_t vmsgtu_vx_u64m2_b32 (vuint64m2_t op1, uint64_t op2,
    size_t vl);
vbool16_t vmsgtu_vv_u64m4_b16 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vbool16_t vmsgtu_vx_u64m4_b16 (vuint64m4_t op1, uint64_t op2,
    size_t vl);
vbool8_t vmsgtu_vv_u64m8_b8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vbool8_t vmsgtu_vx_u64m8_b8 (vuint64m8_t op1, uint64_t op2,
    size_t vl);
vbool64_t vmsge_vv_i8mf8_b64 (vint8mf8_t op1, vint8mf8_t op2,
    size_t vl);
vbool64_t vmsge_vx_i8mf8_b64 (vint8mf8_t op1, int8_t op2, size_t
    vl);
vbool32_t vmsge_vv_i8mf4_b32 (vint8mf4_t op1, vint8mf4_t op2,
    size_t vl);
vbool32_t vmsge_vx_i8mf4_b32 (vint8mf4_t op1, int8_t op2, size_t
    vl);
vbool16_t vmsge_vv_i8mf2_b16 (vint8mf2_t op1, vint8mf2_t op2,
    size_t vl);
vbool16_t vmsge_vx_i8mf2_b16 (vint8mf2_t op1, int8_t op2, size_t
    vl);
vbool8_t vmsge_vv_i8m1_b8 (vint8m1_t op1, vint8m1_t op2, size_t
    vl);
vbool8_t vmsge_vx_i8m1_b8 (vint8m1_t op1, int8_t op2, size_t vl);
vbool4_t vmsge_vv_i8m2_b4 (vint8m2_t op1, vint8m2_t op2, size_t
    vl);
vbool4_t vmsge_vx_i8m2_b4 (vint8m2_t op1, int8_t op2, size_t vl);
vbool2_t vmsge_vv_i8m4_b2 (vint8m4_t op1, vint8m4_t op2, size_t
    vl);
vbool2_t vmsge_vx_i8m4_b2 (vint8m4_t op1, int8_t op2, size_t vl);
vbool1_t vmsge_vv_i8m8_b1 (vint8m8_t op1, vint8m8_t op2, size_t
    vl);
vbool1_t vmsge_vx_i8m8_b1 (vint8m8_t op1, int8_t op2, size_t vl);
vbool64_t vmsge_vv_i16mf4_b64 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vbool64_t vmsge_vx_i16mf4_b64 (vint16mf4_t op1, int16_t op2,
    size_t vl);
vbool32_t vmsge_vv_i16mf2_b32 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
```

```
vbool32_t vmsge_vx_i16mf2_b32 (vint16mf2_t op1, int16_t op2,
    size_t vl);
vbool16_t vmsge_vv_i16m1_b16 (vint16m1_t op1, vint16m1_t op2,
    size_t vl);
vbool16_t vmsge_vx_i16m1_b16 (vint16m1_t op1, int16_t op2,
    size_t vl);
vbool8_t vmsge_vv_i16m2_b8 (vint16m2_t op1, vint16m2_t op2,
    size_t vl);
vbool8_t vmsge_vx_i16m2_b8 (vint16m2_t op1, int16_t op2, size_t
    vl);
vbool4_t vmsge_vv_i16m4_b4 (vint16m4_t op1, vint16m4_t op2,
    size_t vl);
vbool4_t vmsge_vx_i16m4_b4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vbool2_t vmsge_vv_i16m8_b2 (vint16m8_t op1, vint16m8_t op2,
    size_t vl);
vbool2_t vmsge_vx_i16m8_b2 (vint16m8_t op1, int16_t op2, size_t
    vl);
vbool64_t vmsge_vv_i32mf2_b64 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vbool64_t vmsge_vx_i32mf2_b64 (vint32mf2_t op1, int32_t op2,
    size_t vl);
vbool32_t vmsge_vv_i32m1_b32 (vint32m1_t op1, vint32m1_t op2,
    size_t vl);
vbool32_t vmsge_vx_i32m1_b32 (vint32m1_t op1, int32_t op2,
    size_t vl);
vbool16_t vmsge_vv_i32m2_b16 (vint32m2_t op1, vint32m2_t op2,
    size_t vl);
vbool16_t vmsge_vx_i32m2_b16 (vint32m2_t op1, int32_t op2,
    size_t vl);
vbool8_t vmsge_vv_i32m4_b8 (vint32m4_t op1, vint32m4_t op2,
    size_t vl);
vbool8_t vmsge_vx_i32m4_b8 (vint32m4_t op1, int32_t op2, size_t
    vl);
vbool4_t vmsge_vv_i32m8_b4 (vint32m8_t op1, vint32m8_t op2,
    size_t vl);
vbool4_t vmsge_vx_i32m8_b4 (vint32m8_t op1, int32_t op2, size_t
    vl);
vbool64_t vmsge_vv_i64m1_b64 (vint64m1_t op1, vint64m1_t op2,
    size_t vl);
vbool64_t vmsge_vx_i64m1_b64 (vint64m1_t op1, int64_t op2,
    size_t vl);
vbool32_t vmsge_vv_i64m2_b32 (vint64m2_t op1, vint64m2_t op2,
    size_t vl);
vbool32_t vmsge_vx_i64m2_b32 (vint64m2_t op1, int64_t op2,
    size_t vl);
```

```
vbool16_t vmsge_vv_i64m4_b16 (vint64m4_t op1, vint64m4_t op2,
    size_t vl);
vbool16_t vmsge_vx_i64m4_b16 (vint64m4_t op1, int64_t op2,
    size_t vl);
vbool8_t vmsge_vv_i64m8_b8 (vint64m8_t op1, vint64m8_t op2,
    size_t vl);
vbool8_t vmsge_vx_i64m8_b8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vbool64_t vmsgeu_vv_u8mf8_b64 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vbool64_t vmsgeu_vx_u8mf8_b64 (vuint8mf8_t op1, uint8_t op2,
    size_t vl);
vbool32_t vmsgeu_vv_u8mf4_b32 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vbool32_t vmsgeu_vx_u8mf4_b32 (vuint8mf4_t op1, uint8_t op2,
    size_t vl);
vbool16_t vmsgeu_vv_u8mf2_b16 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vbool16_t vmsgeu_vx_u8mf2_b16 (vuint8mf2_t op1, uint8_t op2,
    size_t vl);
vbool8_t vmsgeu_vv_u8m1_b8 (vuint8m1_t op1, vuint8m1_t op2,
    size_t vl);
vbool8_t vmsgeu_vx_u8m1_b8 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vbool4_t vmsgeu_vv_u8m2_b4 (vuint8m2_t op1, vuint8m2_t op2,
    size_t vl);
vbool4_t vmsgeu_vx_u8m2_b4 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vbool2_t vmsgeu_vv_u8m4_b2 (vuint8m4_t op1, vuint8m4_t op2,
    size_t vl);
vbool2_t vmsgeu_vx_u8m4_b2 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
vbool1_t vmsgeu_vv_u8m8_b1 (vuint8m8_t op1, vuint8m8_t op2,
    size_t vl);
vbool1_t vmsgeu_vx_u8m8_b1 (vuint8m8_t op1, uint8_t op2, size_t
    vl);
vbool64_t vmsgeu_vv_u16mf4_b64 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vbool64_t vmsgeu_vx_u16mf4_b64 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vbool32_t vmsgeu_vv_u16mf2_b32 (vuint16mf2_t op1, vuint16mf2_t
    op2, size_t vl);
vbool32_t vmsgeu_vx_u16mf2_b32 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vbool16_t vmsgeu_vv_u16m1_b16 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
```

```
vbool16_t vmsgeu_vx_u16m1_b16 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vbool8_t vmsgeu_vv_u16m2_b8 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vbool8_t vmsgeu_vx_u16m2_b8 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vbool4_t vmsgeu_vv_u16m4_b4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vbool4_t vmsgeu_vx_u16m4_b4 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
vbool2_t vmsgeu_vv_u16m8_b2 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vbool2_t vmsgeu_vx_u16m8_b2 (vuint16m8_t op1, uint16_t op2,
    size_t vl);
vbool64_t vmsgeu_vv_u32mf2_b64 (vuint32mf2_t op1, vuint32mf2_t
    op2, size_t vl);
vbool64_t vmsgeu_vx_u32mf2_b64 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vbool32_t vmsgeu_vv_u32m1_b32 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vbool32_t vmsgeu_vx_u32m1_b32 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vbool16_t vmsgeu_vv_u32m2_b16 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vbool16_t vmsgeu_vx_u32m2_b16 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vbool8_t vmsgeu_vv_u32m4_b8 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vbool8_t vmsgeu_vx_u32m4_b8 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
vbool4_t vmsgeu_vv_u32m8_b4 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vbool4_t vmsgeu_vx_u32m8_b4 (vuint32m8_t op1, uint32_t op2,
    size_t vl);
vbool64_t vmsgeu_vv_u64m1_b64 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vbool64_t vmsgeu_vx_u64m1_b64 (vuint64m1_t op1, uint64_t op2,
    size_t vl);
vbool32_t vmsgeu_vv_u64m2_b32 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vbool32_t vmsgeu_vx_u64m2_b32 (vuint64m2_t op1, uint64_t op2,
    size_t vl);
vbool16_t vmsgeu_vv_u64m4_b16 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vbool16_t vmsgeu_vx_u64m4_b16 (vuint64m4_t op1, uint64_t op2,
    size_t vl);
```

```
vbool8_t vmsgeu_vv_u64m8_b8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vbool8_t vmsgeu_vx_u64m8_b8 (vuint64m8_t op1, uint64_t op2,
    size_t vl);
// masked functions
vbool64_t vmseq_vv_i8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vbool64_t vmseq_vx_i8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vbool32_t vmseq_vv_i8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vbool32_t vmseq_vx_i8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vbool16_t vmseq_vv_i8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vbool16_t vmseq_vx_i8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vbool8_t vmseq_vv_i8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vbool8_t vmseq_vx_i8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vbool4_t vmseq_vv_i8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vbool4_t vmseq_vx_i8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vbool2_t vmseq_vv_i8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vbool2_t vmseq_vx_i8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vbool1_t vmseq_vv_i8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
vbool1_t vmseq_vx_i8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vbool64_t vmseq_vv_i16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vbool64_t vmseq_vx_i16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vbool32_t vmseq_vv_i16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vbool32_t vmseq_vx_i16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vbool16_t vmseq_vv_i16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vbool16_t vmseq_vx_i16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
```

```
vbool8_t vmseq_vv_i16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint16m2_t op1, vint16m2_t op2, size_t vl);
vbool8_t vmseq_vx_i16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint16m2_t op1, int16_t op2, size_t vl);
vbool4_t vmseq_vv_i16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint16m4_t op1, vint16m4_t op2, size_t vl);
vbool4_t vmseq_vx_i16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint16m4_t op1, int16_t op2, size_t vl);
vbool2_t vmseq_vv_i16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint16m8_t op1, vint16m8_t op2, size_t vl);
vbool2_t vmseq_vx_i16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint16m8_t op1, int16_t op2, size_t vl);
vbool64_t vmseq_vv_i32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vbool64_t vmseq_vx_i32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vbool32_t vmseq_vv_i32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vbool32_t vmseq_vx_i32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vbool16_t vmseq_vv_i32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vbool16_t vmseq_vx_i32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vbool8_t vmseq_vv_i32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint32m4_t op1, vint32m4_t op2, size_t vl);
vbool8_t vmseq_vx_i32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint32m4_t op1, int32_t op2, size_t vl);
vbool4_t vmseq_vv_i32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint32m8_t op1, vint32m8_t op2, size_t vl);
vbool4_t vmseq_vx_i32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint32m8_t op1, int32_t op2, size_t vl);
vbool64_t vmseq_vv_i64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vbool64_t vmseq_vx_i64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vbool32_t vmseq_vv_i64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vbool32_t vmseq_vx_i64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vbool16_t vmseq_vv_i64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vbool16_t vmseq_vx_i64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vbool8_t vmseq_vv_i64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint64m8_t op1, vint64m8_t op2, size_t vl);
```

```
vbool8_t vmseq_vx_i64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint64m8_t op1, int64_t op2, size_t vl);
vbool64_t vmseq_vv_u8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vbool64_t vmseq_vx_u8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vbool32_t vmseq_vv_u8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vbool32_t vmseq_vx_u8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vbool16_t vmseq_vv_u8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vbool16_t vmseq_vx_u8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vbool8_t vmseq_vv_u8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vbool8_t vmseq_vx_u8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint8m1_t op1, uint8_t op2, size_t vl);
vbool4_t vmseq_vv_u8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vbool4_t vmseq_vx_u8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint8m2_t op1, uint8_t op2, size_t vl);
vbool2_t vmseq_vv_u8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vbool2_t vmseq_vx_u8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vuint8m4_t op1, uint8_t op2, size_t vl);
vbool1_t vmseq_vv_u8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vbool1_t vmseq_vx_u8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vuint8m8_t op1, uint8_t op2, size_t vl);
vbool64_t vmseq_vv_u16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vbool64_t vmseq_vx_u16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vbool32_t vmseq_vv_u16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vbool32_t vmseq_vx_u16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vbool16_t vmseq_vv_u16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vbool16_t vmseq_vx_u16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vbool8_t vmseq_vv_u16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vbool8_t vmseq_vx_u16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint16m2_t op1, uint16_t op2, size_t vl);
```

```
vbool4_t vmseq_vv_u16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vbool4_t vmseq_vx_u16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint16m4_t op1, uint16_t op2, size_t vl);
vbool2_t vmseq_vv_u16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vbool2_t vmseq_vx_u16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vuint16m8_t op1, uint16_t op2, size_t vl);
vbool64_t vmseq_vv_u32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vbool64_t vmseq_vx_u32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vbool32_t vmseq_vv_u32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vbool32_t vmseq_vx_u32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vbool16_t vmseq_vv_u32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vbool16_t vmseq_vx_u32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vbool8_t vmseq_vv_u32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vbool8_t vmseq_vx_u32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint32m4_t op1, uint32_t op2, size_t vl);
vbool4_t vmseq_vv_u32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vbool4_t vmseq_vx_u32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint32m8_t op1, uint32_t op2, size_t vl);
vbool64_t vmseq_vv_u64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vbool64_t vmseq_vx_u64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
vbool32_t vmseq_vv_u64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vbool32_t vmseq_vx_u64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vbool16_t vmseq_vv_u64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vbool16_t vmseq_vx_u64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vbool8_t vmseq_vv_u64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vbool8_t vmseq_vx_u64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint64m8_t op1, uint64_t op2, size_t vl);
vbool64_t vmsne_vv_i8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
```

```
vbool64_t vmsne_vx_i8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vbool32_t vmsne_vv_i8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vbool32_t vmsne_vx_i8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vbool16_t vmsne_vv_i8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vbool16_t vmsne_vx_i8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vbool8_t vmsne_vv_i8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vbool8_t vmsne_vx_i8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vbool4_t vmsne_vv_i8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vbool4_t vmsne_vx_i8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vbool2_t vmsne_vv_i8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vbool2_t vmsne_vx_i8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vbool1_t vmsne_vv_i8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
vbool1_t vmsne_vx_i8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vbool64_t vmsne_vv_i16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vbool64_t vmsne_vx_i16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vbool32_t vmsne_vv_i16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vbool32_t vmsne_vx_i16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vbool16_t vmsne_vv_i16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vbool16_t vmsne_vx_i16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vbool8_t vmsne_vv_i16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint16m2_t op1, vint16m2_t op2, size_t vl);
vbool8_t vmsne_vx_i16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint16m2_t op1, int16_t op2, size_t vl);
vbool4_t vmsne_vv_i16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint16m4_t op1, vint16m4_t op2, size_t vl);
vbool4_t vmsne_vx_i16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint16m4_t op1, int16_t op2, size_t vl);
```

```
vbool2_t vmsne_vv_i16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint16m8_t op1, vint16m8_t op2, size_t vl);
vbool2_t vmsne_vx_i16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint16m8_t op1, int16_t op2, size_t vl);
vbool64_t vmsne_vv_i32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vbool64_t vmsne_vx_i32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vbool32_t vmsne_vv_i32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vbool32_t vmsne_vx_i32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vbool16_t vmsne_vv_i32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vbool16_t vmsne_vx_i32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vbool8_t vmsne_vv_i32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint32m4_t op1, vint32m4_t op2, size_t vl);
vbool8_t vmsne_vx_i32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint32m4_t op1, int32_t op2, size_t vl);
vbool4_t vmsne_vv_i32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint32m8_t op1, vint32m8_t op2, size_t vl);
vbool4_t vmsne_vx_i32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint32m8_t op1, int32_t op2, size_t vl);
vbool64_t vmsne_vv_i64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vbool64_t vmsne_vx_i64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vbool32_t vmsne_vv_i64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vbool32_t vmsne_vx_i64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vbool16_t vmsne_vv_i64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vbool16_t vmsne_vx_i64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vbool8_t vmsne_vv_i64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint64m8_t op1, vint64m8_t op2, size_t vl);
vbool8_t vmsne_vx_i64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint64m8_t op1, int64_t op2, size_t vl);
vbool64_t vmsne_vv_u8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vbool64_t vmsne_vx_u8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vbool32_t vmsne_vv_u8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
```

```
vbool32_t vmsne_vx_u8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vbool16_t vmsne_vv_u8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vbool16_t vmsne_vx_u8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vbool8_t vmsne_vv_u8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vbool8_t vmsne_vx_u8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint8m1_t op1, uint8_t op2, size_t vl);
vbool4_t vmsne_vv_u8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vbool4_t vmsne_vx_u8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint8m2_t op1, uint8_t op2, size_t vl);
vbool2_t vmsne_vv_u8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vbool2_t vmsne_vx_u8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vuint8m4_t op1, uint8_t op2, size_t vl);
vbool1_t vmsne_vv_u8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vbool1_t vmsne_vx_u8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vuint8m8_t op1, uint8_t op2, size_t vl);
vbool64_t vmsne_vv_u16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vbool64_t vmsne_vx_u16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vbool32_t vmsne_vv_u16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vbool32_t vmsne_vx_u16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vbool16_t vmsne_vv_u16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vbool16_t vmsne_vx_u16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vbool8_t vmsne_vv_u16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vbool8_t vmsne_vx_u16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint16m2_t op1, uint16_t op2, size_t vl);
vbool4_t vmsne_vv_u16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vbool4_t vmsne_vx_u16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint16m4_t op1, uint16_t op2, size_t vl);
vbool2_t vmsne_vv_u16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vbool2_t vmsne_vx_u16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vuint16m8_t op1, uint16_t op2, size_t vl);
```

```
vbool64_t vmsne_vv_u32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vbool64_t vmsne_vx_u32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vbool32_t vmsne_vv_u32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vbool32_t vmsne_vx_u32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vbool16_t vmsne_vv_u32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vbool16_t vmsne_vx_u32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vbool8_t vmsne_vv_u32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vbool8_t vmsne_vx_u32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint32m4_t op1, uint32_t op2, size_t vl);
vbool4_t vmsne_vv_u32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vbool4_t vmsne_vx_u32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint32m8_t op1, uint32_t op2, size_t vl);
vbool64_t vmsne_vv_u64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vbool64_t vmsne_vx_u64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
vbool32_t vmsne_vv_u64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vbool32_t vmsne_vx_u64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vbool16_t vmsne_vv_u64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vbool16_t vmsne_vx_u64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vbool8_t vmsne_vv_u64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vbool8_t vmsne_vx_u64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint64m8_t op1, uint64_t op2, size_t vl);
vbool64_t vmslt_vv_i8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vbool64_t vmslt_vx_i8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vbool32_t vmslt_vv_i8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vbool32_t vmslt_vx_i8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vbool16_t vmslt_vv_i8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
```

```
vbool16_t vmslt_vx_i8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vbool8_t vmslt_vv_i8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vbool8_t vmslt_vx_i8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vbool4_t vmslt_vv_i8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vbool4_t vmslt_vx_i8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vbool2_t vmslt_vv_i8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vbool2_t vmslt_vx_i8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vbool1_t vmslt_vv_i8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
vbool1_t vmslt_vx_i8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vbool64_t vmslt_vv_i16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vbool64_t vmslt_vx_i16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vbool32_t vmslt_vv_i16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vbool32_t vmslt_vx_i16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vbool16_t vmslt_vv_i16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vbool16_t vmslt_vx_i16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vbool8_t vmslt_vv_i16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint16m2_t op1, vint16m2_t op2, size_t vl);
vbool8_t vmslt_vx_i16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint16m2_t op1, int16_t op2, size_t vl);
vbool4_t vmslt_vv_i16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint16m4_t op1, vint16m4_t op2, size_t vl);
vbool4_t vmslt_vx_i16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint16m4_t op1, int16_t op2, size_t vl);
vbool2_t vmslt_vv_i16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint16m8_t op1, vint16m8_t op2, size_t vl);
vbool2_t vmslt_vx_i16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint16m8_t op1, int16_t op2, size_t vl);
vbool64_t vmslt_vv_i32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vbool64_t vmslt_vx_i32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
```

```
vbool32_t vmslt_vv_i32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vbool32_t vmslt_vx_i32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vbool16_t vmslt_vv_i32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vbool16_t vmslt_vx_i32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vbool8_t vmslt_vv_i32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint32m4_t op1, vint32m4_t op2, size_t vl);
vbool8_t vmslt_vx_i32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint32m4_t op1, int32_t op2, size_t vl);
vbool4_t vmslt_vv_i32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint32m8_t op1, vint32m8_t op2, size_t vl);
vbool4_t vmslt_vx_i32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint32m8_t op1, int32_t op2, size_t vl);
vbool64_t vmslt_vv_i64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vbool64_t vmslt_vx_i64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vbool32_t vmslt_vv_i64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vbool32_t vmslt_vx_i64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vbool16_t vmslt_vv_i64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vbool16_t vmslt_vx_i64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vbool8_t vmslt_vv_i64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint64m8_t op1, vint64m8_t op2, size_t vl);
vbool8_t vmslt_vx_i64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint64m8_t op1, int64_t op2, size_t vl);
vbool64_t vmsltu_vv_u8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vbool64_t vmsltu_vx_u8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vbool32_t vmsltu_vv_u8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vbool32_t vmsltu_vx_u8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vbool16_t vmsltu_vv_u8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vbool16_t vmsltu_vx_u8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vbool8_t vmsltu_vv_u8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint8m1_t op1, vuint8m1_t op2, size_t vl);
```

```
vbool8_t vmsltu_vx_u8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint8m1_t op1, uint8_t op2, size_t vl);
vbool4_t vmsltu_vv_u8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vbool4_t vmsltu_vx_u8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint8m2_t op1, uint8_t op2, size_t vl);
vbool2_t vmsltu_vv_u8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vbool2_t vmsltu_vx_u8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vuint8m4_t op1, uint8_t op2, size_t vl);
vbool1_t vmsltu_vv_u8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vbool1_t vmsltu_vx_u8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vuint8m8_t op1, uint8_t op2, size_t vl);
vbool64_t vmsltu_vv_u16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vbool64_t vmsltu_vx_u16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vbool32_t vmsltu_vv_u16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vbool32_t vmsltu_vx_u16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vbool16_t vmsltu_vv_u16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vbool16_t vmsltu_vx_u16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vbool8_t vmsltu_vv_u16m2_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vbool8_t vmsltu_vx_u16m2_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vbool4_t vmsltu_vv_u16m4_b4_m (vbool4_t mask, vbool4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vbool4_t vmsltu_vx_u16m4_b4_m (vbool4_t mask, vbool4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vbool2_t vmsltu_vv_u16m8_b2_m (vbool2_t mask, vbool2_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vbool2_t vmsltu_vx_u16m8_b2_m (vbool2_t mask, vbool2_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vbool64_t vmsltu_vv_u32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vbool64_t vmsltu_vx_u32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vbool32_t vmsltu_vv_u32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vbool32_t vmsltu_vx_u32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
```

```
vbool16_t vmsltu_vv_u32m2_b16_m (vbool16_t mask, vbool16_t
   maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vbool16_t vmsltu_vx_u32m2_b16_m (vbool16_t mask, vbool16_t
   maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vbool8_t vmsltu_vv_u32m4_b8_m (vbool8_t mask, vbool8_t
   maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vbool8_t vmsltu_vx_u32m4_b8_m (vbool8_t mask, vbool8_t
   maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vbool4_t vmsltu_vv_u32m8_b4_m (vbool4_t mask, vbool4_t
   maskedoff, vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vbool4_t vmsltu_vx_u32m8_b4_m (vbool4_t mask, vbool4_t
   maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vbool64_t vmsltu_vv_u64m1_b64_m (vbool64_t mask, vbool64_t
   maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vbool64_t vmsltu_vx_u64m1_b64_m (vbool64_t mask, vbool64_t
   maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
vbool32_t vmsltu_vv_u64m2_b32_m (vbool32_t mask, vbool32_t
   maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vbool32_t vmsltu_vx_u64m2_b32_m (vbool32_t mask, vbool32_t
   maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vbool16_t vmsltu_vv_u64m4_b16_m (vbool16_t mask, vbool16_t
   maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vbool16_t vmsltu_vx_u64m4_b16_m (vbool16_t mask, vbool16_t
   maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vbool8_t vmsltu_vv_u64m8_b8_m (vbool8_t mask, vbool8_t
   maskedoff, vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vbool8_t vmsltu_vx_u64m8_b8_m (vbool8_t mask, vbool8_t
   maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
vbool64_t vmsle_vv_i8mf8_b64_m (vbool64_t mask, vbool64_t
   maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vbool64_t vmsle_vx_i8mf8_b64_m (vbool64_t mask, vbool64_t
   maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vbool32_t vmsle_vv_i8mf4_b32_m (vbool32_t mask, vbool32_t
   maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vbool32_t vmsle_vx_i8mf4_b32_m (vbool32_t mask, vbool32_t
   maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vbool16_t vmsle_vv_i8mf2_b16_m (vbool16_t mask, vbool16_t
   maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vbool16_t vmsle_vx_i8mf2_b16_m (vbool16_t mask, vbool16_t
   maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vbool8_t vmsle_vv_i8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
   vint8m1_t op1, vint8m1_t op2, size_t vl);
vbool8_t vmsle_vx_i8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
   vint8m1_t op1, int8_t op2, size_t vl);
vbool4_t vmsle_vv_i8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
   vint8m2_t op1, vint8m2_t op2, size_t vl);
```

```
vbool4_t vmsle_vx_i8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vbool2_t vmsle_vv_i8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vbool2_t vmsle_vx_i8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vbool1_t vmsle_vv_i8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
vbool1_t vmsle_vx_i8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vbool64_t vmsle_vv_i16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vbool64_t vmsle_vx_i16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vbool32_t vmsle_vv_i16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vbool32_t vmsle_vx_i16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vbool16_t vmsle_vv_i16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vbool16_t vmsle_vx_i16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vbool8_t vmsle_vv_i16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint16m2_t op1, vint16m2_t op2, size_t vl);
vbool8_t vmsle_vx_i16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint16m2_t op1, int16_t op2, size_t vl);
vbool4_t vmsle_vv_i16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint16m4_t op1, vint16m4_t op2, size_t vl);
vbool4_t vmsle_vx_i16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint16m4_t op1, int16_t op2, size_t vl);
vbool2_t vmsle_vv_i16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint16m8_t op1, vint16m8_t op2, size_t vl);
vbool2_t vmsle_vx_i16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint16m8_t op1, int16_t op2, size_t vl);
vbool64_t vmsle_vv_i32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vbool64_t vmsle_vx_i32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vbool32_t vmsle_vv_i32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vbool32_t vmsle_vx_i32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vbool16_t vmsle_vv_i32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vbool16_t vmsle_vx_i32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
```

```
vbool8_t vmsle_vv_i32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint32m4_t op1, vint32m4_t op2, size_t vl);
vbool8_t vmsle_vx_i32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint32m4_t op1, int32_t op2, size_t vl);
vbool4_t vmsle_vv_i32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint32m8_t op1, vint32m8_t op2, size_t vl);
vbool4_t vmsle_vx_i32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint32m8_t op1, int32_t op2, size_t vl);
vbool64_t vmsle_vv_i64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vbool64_t vmsle_vx_i64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vbool32_t vmsle_vv_i64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vbool32_t vmsle_vx_i64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vbool16_t vmsle_vv_i64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vbool16_t vmsle_vx_i64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vbool8_t vmsle_vv_i64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint64m8_t op1, vint64m8_t op2, size_t vl);
vbool8_t vmsle_vx_i64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint64m8_t op1, int64_t op2, size_t vl);
vbool64_t vmsleu_vv_u8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vbool64_t vmsleu_vx_u8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vbool32_t vmsleu_vv_u8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vbool32_t vmsleu_vx_u8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vbool16_t vmsleu_vv_u8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vbool16_t vmsleu_vx_u8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vbool8_t vmsleu_vv_u8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vbool8_t vmsleu_vx_u8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint8m1_t op1, uint8_t op2, size_t vl);
vbool4_t vmsleu_vv_u8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vbool4_t vmsleu_vx_u8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint8m2_t op1, uint8_t op2, size_t vl);
vbool2_t vmsleu_vv_u8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vuint8m4_t op1, vuint8m4_t op2, size_t vl);
```

```
vbool2_t vmsleu_vx_u8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vuint8m4_t op1, uint8_t op2, size_t vl);
vbool1_t vmsleu_vv_u8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vbool1_t vmsleu_vx_u8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vuint8m8_t op1, uint8_t op2, size_t vl);
vbool64_t vmsleu_vv_u16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vbool64_t vmsleu_vx_u16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vbool32_t vmsleu_vv_u16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vbool32_t vmsleu_vx_u16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vbool16_t vmsleu_vv_u16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vbool16_t vmsleu_vx_u16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vbool8_t vmsleu_vv_u16m2_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vbool8_t vmsleu_vx_u16m2_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vbool4_t vmsleu_vv_u16m4_b4_m (vbool4_t mask, vbool4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vbool4_t vmsleu_vx_u16m4_b4_m (vbool4_t mask, vbool4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vbool2_t vmsleu_vv_u16m8_b2_m (vbool2_t mask, vbool2_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vbool2_t vmsleu_vx_u16m8_b2_m (vbool2_t mask, vbool2_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vbool64_t vmsleu_vv_u32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vbool64_t vmsleu_vx_u32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vbool32_t vmsleu_vv_u32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vbool32_t vmsleu_vx_u32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vbool16_t vmsleu_vv_u32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vbool16_t vmsleu_vx_u32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vbool8_t vmsleu_vv_u32m4_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vbool8_t vmsleu_vx_u32m4_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
```

```
vbool4_t vmsleu_vv_u32m8_b4_m (vbool4_t mask, vbool4_t
    maskedoff, vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vbool4_t vmsleu_vx_u32m8_b4_m (vbool4_t mask, vbool4_t
    maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vbool64_t vmsleu_vv_u64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vbool64_t vmsleu_vx_u64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
vbool32_t vmsleu_vv_u64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vbool32_t vmsleu_vx_u64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vbool16_t vmsleu_vv_u64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vbool16_t vmsleu_vx_u64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vbool8_t vmsleu_vv_u64m8_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vbool8_t vmsleu_vx_u64m8_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
vbool64_t vmsgt_vv_i8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vbool64_t vmsgt_vx_i8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vbool32_t vmsgt_vv_i8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vbool32_t vmsgt_vx_i8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vbool16_t vmsgt_vv_i8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vbool16_t vmsgt_vx_i8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vbool8_t vmsgt_vv_i8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vbool8_t vmsgt_vx_i8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vbool4_t vmsgt_vv_i8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vbool4_t vmsgt_vx_i8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vbool2_t vmsgt_vv_i8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vbool2_t vmsgt_vx_i8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vbool1_t vmsgt_vv_i8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
```

```
vbool1_t vmsgt_vx_i8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vbool64_t vmsgt_vv_i16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vbool64_t vmsgt_vx_i16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vbool32_t vmsgt_vv_i16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vbool32_t vmsgt_vx_i16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vbool16_t vmsgt_vv_i16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vbool16_t vmsgt_vx_i16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vbool8_t vmsgt_vv_i16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint16m2_t op1, vint16m2_t op2, size_t vl);
vbool8_t vmsgt_vx_i16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint16m2_t op1, int16_t op2, size_t vl);
vbool4_t vmsgt_vv_i16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint16m4_t op1, vint16m4_t op2, size_t vl);
vbool4_t vmsgt_vx_i16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint16m4_t op1, int16_t op2, size_t vl);
vbool2_t vmsgt_vv_i16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint16m8_t op1, vint16m8_t op2, size_t vl);
vbool2_t vmsgt_vx_i16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint16m8_t op1, int16_t op2, size_t vl);
vbool64_t vmsgt_vv_i32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vbool64_t vmsgt_vx_i32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vbool32_t vmsgt_vv_i32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vbool32_t vmsgt_vx_i32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vbool16_t vmsgt_vv_i32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vbool16_t vmsgt_vx_i32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vbool8_t vmsgt_vv_i32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint32m4_t op1, vint32m4_t op2, size_t vl);
vbool8_t vmsgt_vx_i32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint32m4_t op1, int32_t op2, size_t vl);
vbool4_t vmsgt_vv_i32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint32m8_t op1, vint32m8_t op2, size_t vl);
vbool4_t vmsgt_vx_i32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint32m8_t op1, int32_t op2, size_t vl);
```

```
vbool64_t vmsgt_vv_i64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vbool64_t vmsgt_vx_i64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vbool32_t vmsgt_vv_i64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vbool32_t vmsgt_vx_i64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vbool16_t vmsgt_vv_i64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vbool16_t vmsgt_vx_i64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vbool8_t vmsgt_vv_i64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint64m8_t op1, vint64m8_t op2, size_t vl);
vbool8_t vmsgt_vx_i64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint64m8_t op1, int64_t op2, size_t vl);
vbool64_t vmsgtu_vv_u8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vbool64_t vmsgtu_vx_u8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vbool32_t vmsgtu_vv_u8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vbool32_t vmsgtu_vx_u8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vbool16_t vmsgtu_vv_u8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vbool16_t vmsgtu_vx_u8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vbool8_t vmsgtu_vv_u8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vbool8_t vmsgtu_vx_u8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint8m1_t op1, uint8_t op2, size_t vl);
vbool4_t vmsgtu_vv_u8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vbool4_t vmsgtu_vx_u8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint8m2_t op1, uint8_t op2, size_t vl);
vbool2_t vmsgtu_vv_u8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vbool2_t vmsgtu_vx_u8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vuint8m4_t op1, uint8_t op2, size_t vl);
vbool1_t vmsgtu_vv_u8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vbool1_t vmsgtu_vx_u8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vuint8m8_t op1, uint8_t op2, size_t vl);
vbool64_t vmsgtu_vv_u16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
```

583

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vbool64_t vmsgtu_vx_u16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vbool32_t vmsgtu_vv_u16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vbool32_t vmsgtu_vx_u16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vbool16_t vmsgtu_vv_u16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vbool16_t vmsgtu_vx_u16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vbool8_t vmsgtu_vv_u16m2_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vbool8_t vmsgtu_vx_u16m2_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vbool4_t vmsgtu_vv_u16m4_b4_m (vbool4_t mask, vbool4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vbool4_t vmsgtu_vx_u16m4_b4_m (vbool4_t mask, vbool4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vbool2_t vmsgtu_vv_u16m8_b2_m (vbool2_t mask, vbool2_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vbool2_t vmsgtu_vx_u16m8_b2_m (vbool2_t mask, vbool2_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vbool64_t vmsgtu_vv_u32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vbool64_t vmsgtu_vx_u32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vbool32_t vmsgtu_vv_u32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vbool32_t vmsgtu_vx_u32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vbool16_t vmsgtu_vv_u32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vbool16_t vmsgtu_vx_u32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vbool8_t vmsgtu_vv_u32m4_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vbool8_t vmsgtu_vx_u32m4_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vbool4_t vmsgtu_vv_u32m8_b4_m (vbool4_t mask, vbool4_t
    maskedoff, vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vbool4_t vmsgtu_vx_u32m8_b4_m (vbool4_t mask, vbool4_t
    maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vbool64_t vmsgtu_vv_u64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vbool64_t vmsgtu_vx_u64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
```

```
vbool32_t vmsgtu_vv_u64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vbool32_t vmsgtu_vx_u64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vbool16_t vmsgtu_vv_u64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vbool16_t vmsgtu_vx_u64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vbool8_t vmsgtu_vv_u64m8_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vbool8_t vmsgtu_vx_u64m8_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
vbool64_t vmsge_vv_i8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vbool64_t vmsge_vx_i8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vbool32_t vmsge_vv_i8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vbool32_t vmsge_vx_i8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vbool16_t vmsge_vv_i8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vbool16_t vmsge_vx_i8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vbool8_t vmsge_vv_i8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vbool8_t vmsge_vx_i8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vbool4_t vmsge_vv_i8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vbool4_t vmsge_vx_i8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vbool2_t vmsge_vv_i8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vbool2_t vmsge_vx_i8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vbool1_t vmsge_vv_i8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
vbool1_t vmsge_vx_i8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vbool64_t vmsge_vv_i16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vbool64_t vmsge_vx_i16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vbool32_t vmsge_vv_i16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
```

```
vbool32_t vmsge_vx_i16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vbool16_t vmsge_vv_i16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vbool16_t vmsge_vx_i16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vbool8_t vmsge_vv_i16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint16m2_t op1, vint16m2_t op2, size_t vl);
vbool8_t vmsge_vx_i16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint16m2_t op1, int16_t op2, size_t vl);
vbool4_t vmsge_vv_i16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint16m4_t op1, vint16m4_t op2, size_t vl);
vbool4_t vmsge_vx_i16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint16m4_t op1, int16_t op2, size_t vl);
vbool2_t vmsge_vv_i16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint16m8_t op1, vint16m8_t op2, size_t vl);
vbool2_t vmsge_vx_i16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vint16m8_t op1, int16_t op2, size_t vl);
vbool64_t vmsge_vv_i32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vbool64_t vmsge_vx_i32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vbool32_t vmsge_vv_i32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vbool32_t vmsge_vx_i32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vbool16_t vmsge_vv_i32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vbool16_t vmsge_vx_i32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vbool8_t vmsge_vv_i32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint32m4_t op1, vint32m4_t op2, size_t vl);
vbool8_t vmsge_vx_i32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint32m4_t op1, int32_t op2, size_t vl);
vbool4_t vmsge_vv_i32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint32m8_t op1, vint32m8_t op2, size_t vl);
vbool4_t vmsge_vx_i32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vint32m8_t op1, int32_t op2, size_t vl);
vbool64_t vmsge_vv_i64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vbool64_t vmsge_vx_i64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vbool32_t vmsge_vv_i64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vbool32_t vmsge_vx_i64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
```

```
vbool16_t vmsge_vv_i64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vbool16_t vmsge_vx_i64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vbool8_t vmsge_vv_i64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint64m8_t op1, vint64m8_t op2, size_t vl);
vbool8_t vmsge_vx_i64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vint64m8_t op1, int64_t op2, size_t vl);
vbool64_t vmsgeu_vv_u8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vbool64_t vmsgeu_vx_u8mf8_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vbool32_t vmsgeu_vv_u8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vbool32_t vmsgeu_vx_u8mf4_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vbool16_t vmsgeu_vv_u8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vbool16_t vmsgeu_vx_u8mf2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vbool8_t vmsgeu_vv_u8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vbool8_t vmsgeu_vx_u8m1_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vuint8m1_t op1, uint8_t op2, size_t vl);
vbool4_t vmsgeu_vv_u8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vbool4_t vmsgeu_vx_u8m2_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vuint8m2_t op1, uint8_t op2, size_t vl);
vbool2_t vmsgeu_vv_u8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vbool2_t vmsgeu_vx_u8m4_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vuint8m4_t op1, uint8_t op2, size_t vl);
vbool1_t vmsgeu_vv_u8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vbool1_t vmsgeu_vx_u8m8_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vuint8m8_t op1, uint8_t op2, size_t vl);
vbool64_t vmsgeu_vv_u16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vbool64_t vmsgeu_vx_u16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vbool32_t vmsgeu_vv_u16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vbool32_t vmsgeu_vx_u16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vbool16_t vmsgeu_vv_u16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
```

```
vbool16_t vmsgeu_vx_u16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
```

```
vbool16_t vmsgeu_vx_u16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vbool8_t vmsgeu_vv_u16m2_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vbool8_t vmsgeu_vx_u16m2_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vbool4_t vmsgeu_vv_u16m4_b4_m (vbool4_t mask, vbool4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vbool4_t vmsgeu_vx_u16m4_b4_m (vbool4_t mask, vbool4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vbool2_t vmsgeu_vv_u16m8_b2_m (vbool2_t mask, vbool2_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vbool2_t vmsgeu_vx_u16m8_b2_m (vbool2_t mask, vbool2_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vbool64_t vmsgeu_vv_u32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vbool64_t vmsgeu_vx_u32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vbool32_t vmsgeu_vv_u32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vbool32_t vmsgeu_vx_u32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vbool16_t vmsgeu_vv_u32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vbool16_t vmsgeu_vx_u32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vbool8_t vmsgeu_vv_u32m4_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vbool8_t vmsgeu_vx_u32m4_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vbool4_t vmsgeu_vv_u32m8_b4_m (vbool4_t mask, vbool4_t
    maskedoff, vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vbool4_t vmsgeu_vx_u32m8_b4_m (vbool4_t mask, vbool4_t
    maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vbool64_t vmsgeu_vv_u64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vbool64_t vmsgeu_vx_u64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
vbool32_t vmsgeu_vv_u64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vbool32_t vmsgeu_vx_u64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vbool16_t vmsgeu_vv_u64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vbool16_t vmsgeu_vx_u64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
```

```
vbool8_t vmsgeu_vv_u64m8_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vbool8_t vmsgeu_vx_u64m8_b8_m (vbool8_t mask, vbool8_t
    maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
```

Vector Integer Min/Max Functions:

Prototypes:

```
vint8mf8_t vmin_vv_i8mf8 (vint8mf8_t op1, vint8mf8_t op2, size_t
    vl);
vint8mf8_t vmin_vx_i8mf8 (vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vmin_vv_i8mf4 (vint8mf4_t op1, vint8mf4_t op2, size_t
    vl);
vint8mf4_t vmin_vx_i8mf4 (vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vmin_vv_i8mf2 (vint8mf2_t op1, vint8mf2_t op2, size_t
    vl);
vint8mf2_t vmin_vx_i8mf2 (vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vmin_vv_i8m1 (vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vmin_vx_i8m1 (vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vmin_vv_i8m2 (vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vmin_vx_i8m2 (vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vmin_vv_i8m4 (vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vmin_vx_i8m4 (vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vmin_vv_i8m8 (vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vmin_vx_i8m8 (vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vmin_vv_i16mf4 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vint16mf4_t vmin_vx_i16mf4 (vint16mf4_t op1, int16_t op2, size_t
    vl);
vint16mf2_t vmin_vv_i16mf2 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vint16mf2_t vmin_vx_i16mf2 (vint16mf2_t op1, int16_t op2, size_t
    vl);
vint16m1_t vmin_vv_i16m1 (vint16m1_t op1, vint16m1_t op2, size_t
    vl);
vint16m1_t vmin_vx_i16m1 (vint16m1_t op1, int16_t op2, size_t
    vl);
vint16m2_t vmin_vv_i16m2 (vint16m2_t op1, vint16m2_t op2, size_t
    vl);
vint16m2_t vmin_vx_i16m2 (vint16m2_t op1, int16_t op2, size_t
    vl);
vint16m4_t vmin_vv_i16m4 (vint16m4_t op1, vint16m4_t op2, size_t
    vl);
vint16m4_t vmin_vx_i16m4 (vint16m4_t op1, int16_t op2, size_t
    vl);
```

589

```
vint16m8_t vmin_vv_i16m8 (vint16m8_t op1, vint16m8_t op2, size_t
    vl);
vint16m8_t vmin_vx_i16m8 (vint16m8_t op1, int16_t op2, size_t
    vl);
vint32mf2_t vmin_vv_i32mf2 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vint32mf2_t vmin_vx_i32mf2 (vint32mf2_t op1, int32_t op2, size_t
    vl);
vint32m1_t vmin_vv_i32m1 (vint32m1_t op1, vint32m1_t op2, size_t
    vl);
vint32m1_t vmin_vx_i32m1 (vint32m1_t op1, int32_t op2, size_t
    vl);
vint32m2_t vmin_vv_i32m2 (vint32m2_t op1, vint32m2_t op2, size_t
    vl);
vint32m2_t vmin_vx_i32m2 (vint32m2_t op1, int32_t op2, size_t
    vl);
vint32m4_t vmin_vv_i32m4 (vint32m4_t op1, vint32m4_t op2, size_t
    vl);
vint32m4_t vmin_vx_i32m4 (vint32m4_t op1, int32_t op2, size_t
    vl);
vint32m8_t vmin_vv_i32m8 (vint32m8_t op1, vint32m8_t op2, size_t
    vl);
vint32m8_t vmin_vx_i32m8 (vint32m8_t op1, int32_t op2, size_t
    vl);
vint64m1_t vmin_vv_i64m1 (vint64m1_t op1, vint64m1_t op2, size_t
    vl);
vint64m1_t vmin_vx_i64m1 (vint64m1_t op1, int64_t op2, size_t
    vl);
vint64m2_t vmin_vv_i64m2 (vint64m2_t op1, vint64m2_t op2, size_t
    vl);
vint64m2_t vmin_vx_i64m2 (vint64m2_t op1, int64_t op2, size_t
    vl);
vint64m4_t vmin_vv_i64m4 (vint64m4_t op1, vint64m4_t op2, size_t
    vl);
vint64m4_t vmin_vx_i64m4 (vint64m4_t op1, int64_t op2, size_t
    vl);
vint64m8_t vmin_vv_i64m8 (vint64m8_t op1, vint64m8_t op2, size_t
    vl);
vint64m8_t vmin_vx_i64m8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vuint8mf8_t vminu_vv_u8mf8 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vuint8mf8_t vminu_vx_u8mf8 (vuint8mf8_t op1, uint8_t op2, size_t
    vl);
vuint8mf4_t vminu_vv_u8mf4 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
```

```
vuint8mf4_t vminu_vx_u8mf4 (vuint8mf4_t op1, uint8_t op2, size_t
    vl);
vuint8mf2_t vminu_vv_u8mf2 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vuint8mf2_t vminu_vx_u8mf2 (vuint8mf2_t op1, uint8_t op2, size_t
    vl);
vuint8m1_t vminu_vv_u8m1 (vuint8m1_t op1, vuint8m1_t op2, size_t
    vl);
vuint8m1_t vminu_vx_u8m1 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vuint8m2_t vminu_vv_u8m2 (vuint8m2_t op1, vuint8m2_t op2, size_t
    vl);
vuint8m2_t vminu_vx_u8m2 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vuint8m4_t vminu_vv_u8m4 (vuint8m4_t op1, vuint8m4_t op2, size_t
    vl);
vuint8m4_t vminu_vx_u8m4 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
vuint8m8_t vminu_vv_u8m8 (vuint8m8_t op1, vuint8m8_t op2, size_t
    vl);
vuint8m8_t vminu_vx_u8m8 (vuint8m8_t op1, uint8_t op2, size_t
    vl);
vuint16mf4_t vminu_vv_u16mf4 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vuint16mf4_t vminu_vx_u16mf4 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vuint16mf2_t vminu_vv_u16mf2 (vuint16mf2_t op1, vuint16mf2_t
    op2, size_t vl);
vuint16mf2_t vminu_vx_u16mf2 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vuint16m1_t vminu_vv_u16m1 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vuint16m1_t vminu_vx_u16m1 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vuint16m2_t vminu_vv_u16m2 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vuint16m2_t vminu_vx_u16m2 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vuint16m4_t vminu_vv_u16m4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vuint16m4_t vminu_vx_u16m4 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
vuint16m8_t vminu_vv_u16m8 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vuint16m8_t vminu_vx_u16m8 (vuint16m8_t op1, uint16_t op2,
    size_t vl);
```

```
vuint32mf2_t vminu_vv_u32mf2 (vuint32mf2_t op1, vuint32mf2_t
    op2, size_t vl);
vuint32mf2_t vminu_vx_u32mf2 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vuint32m1_t vminu_vv_u32m1 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vuint32m1_t vminu_vx_u32m1 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vuint32m2_t vminu_vv_u32m2 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vuint32m2_t vminu_vx_u32m2 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vuint32m4_t vminu_vv_u32m4 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vuint32m4_t vminu_vx_u32m4 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
vuint32m8_t vminu_vv_u32m8 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vuint32m8_t vminu_vx_u32m8 (vuint32m8_t op1, uint32_t op2,
    size_t vl);
vuint64m1_t vminu_vv_u64m1 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vuint64m1_t vminu_vx_u64m1 (vuint64m1_t op1, uint64_t op2,
    size_t vl);
vuint64m2_t vminu_vv_u64m2 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vuint64m2_t vminu_vx_u64m2 (vuint64m2_t op1, uint64_t op2,
    size_t vl);
vuint64m4_t vminu_vv_u64m4 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vuint64m4_t vminu_vx_u64m4 (vuint64m4_t op1, uint64_t op2,
    size_t vl);
vuint64m8_t vminu_vv_u64m8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vuint64m8_t vminu_vx_u64m8 (vuint64m8_t op1, uint64_t op2,
    size_t vl);
vint8mf8_t vmax_vv_i8mf8 (vint8mf8_t op1, vint8mf8_t op2, size_t
    vl);
vint8mf8_t vmax_vx_i8mf8 (vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vmax_vv_i8mf4 (vint8mf4_t op1, vint8mf4_t op2, size_t
    vl);
vint8mf4_t vmax_vx_i8mf4 (vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vmax_vv_i8mf2 (vint8mf2_t op1, vint8mf2_t op2, size_t
    vl);
vint8mf2_t vmax_vx_i8mf2 (vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vmax_vv_i8m1 (vint8m1_t op1, vint8m1_t op2, size_t vl);
```

```
vint8m1_t vmax_vx_i8m1 (vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vmax_vv_i8m2 (vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vmax_vx_i8m2 (vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vmax_vv_i8m4 (vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vmax_vx_i8m4 (vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vmax_vv_i8m8 (vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vmax_vx_i8m8 (vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vmax_vv_i16mf4 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vint16mf4_t vmax_vx_i16mf4 (vint16mf4_t op1, int16_t op2, size_t
    vl);
vint16mf2_t vmax_vv_i16mf2 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vint16mf2_t vmax_vx_i16mf2 (vint16mf2_t op1, int16_t op2, size_t
    vl);
vint16m1_t vmax_vv_i16m1 (vint16m1_t op1, vint16m1_t op2, size_t
    vl);
vint16m1_t vmax_vx_i16m1 (vint16m1_t op1, int16_t op2, size_t
    vl);
vint16m2_t vmax_vv_i16m2 (vint16m2_t op1, vint16m2_t op2, size_t
    vl);
vint16m2_t vmax_vx_i16m2 (vint16m2_t op1, int16_t op2, size_t
    vl);
vint16m4_t vmax_vv_i16m4 (vint16m4_t op1, vint16m4_t op2, size_t
    vl);
vint16m4_t vmax_vx_i16m4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vint16m8_t vmax_vv_i16m8 (vint16m8_t op1, vint16m8_t op2, size_t
    vl);
vint16m8_t vmax_vx_i16m8 (vint16m8_t op1, int16_t op2, size_t
    vl);
vint32mf2_t vmax_vv_i32mf2 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vint32mf2_t vmax_vx_i32mf2 (vint32mf2_t op1, int32_t op2, size_t
    vl);
vint32m1_t vmax_vv_i32m1 (vint32m1_t op1, vint32m1_t op2, size_t
    vl);
vint32m1_t vmax_vx_i32m1 (vint32m1_t op1, int32_t op2, size_t
    vl);
vint32m2_t vmax_vv_i32m2 (vint32m2_t op1, vint32m2_t op2, size_t
    vl);
vint32m2_t vmax_vx_i32m2 (vint32m2_t op1, int32_t op2, size_t
    vl);
vint32m4_t vmax_vv_i32m4 (vint32m4_t op1, vint32m4_t op2, size_t
    vl);
```

```
vint32m4_t vmax_vx_i32m4 (vint32m4_t op1, int32_t op2, size_t
    vl);
vint32m8_t vmax_vv_i32m8 (vint32m8_t op1, vint32m8_t op2, size_t
    vl);
vint32m8_t vmax_vx_i32m8 (vint32m8_t op1, int32_t op2, size_t
    vl);
vint64m1_t vmax_vv_i64m1 (vint64m1_t op1, vint64m1_t op2, size_t
    vl);
vint64m1_t vmax_vx_i64m1 (vint64m1_t op1, int64_t op2, size_t
    vl);
vint64m2_t vmax_vv_i64m2 (vint64m2_t op1, vint64m2_t op2, size_t
    vl);
vint64m2_t vmax_vx_i64m2 (vint64m2_t op1, int64_t op2, size_t
    vl);
vint64m4_t vmax_vv_i64m4 (vint64m4_t op1, vint64m4_t op2, size_t
    vl);
vint64m4_t vmax_vx_i64m4 (vint64m4_t op1, int64_t op2, size_t
    vl);
vint64m8_t vmax_vv_i64m8 (vint64m8_t op1, vint64m8_t op2, size_t
    vl);
vint64m8_t vmax_vx_i64m8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vuint8mf8_t vmaxu_vv_u8mf8 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vuint8mf8_t vmaxu_vx_u8mf8 (vuint8mf8_t op1, uint8_t op2, size_t
    vl);
vuint8mf4_t vmaxu_vv_u8mf4 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vuint8mf4_t vmaxu_vx_u8mf4 (vuint8mf4_t op1, uint8_t op2, size_t
    vl);
vuint8mf2_t vmaxu_vv_u8mf2 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vuint8mf2_t vmaxu_vx_u8mf2 (vuint8mf2_t op1, uint8_t op2, size_t
    vl);
vuint8m1_t vmaxu_vv_u8m1 (vuint8m1_t op1, vuint8m1_t op2, size_t
    vl);
vuint8m1_t vmaxu_vx_u8m1 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vuint8m2_t vmaxu_vv_u8m2 (vuint8m2_t op1, vuint8m2_t op2, size_t
    vl);
vuint8m2_t vmaxu_vx_u8m2 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vuint8m4_t vmaxu_vv_u8m4 (vuint8m4_t op1, vuint8m4_t op2, size_t
    vl);
vuint8m4_t vmaxu_vx_u8m4 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
```

```
vuint8m8_t vmaxu_vv_u8m8 (vuint8m8_t op1, vuint8m8_t op2, size_t
    vl);
vuint8m8_t vmaxu_vx_u8m8 (vuint8m8_t op1, uint8_t op2, size_t
    vl);
vuint16mf4_t vmaxu_vv_u16mf4 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vuint16mf4_t vmaxu_vx_u16mf4 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vuint16mf2_t vmaxu_vv_u16mf2 (vuint16mf2_t op1, vuint16mf2_t
    op2, size_t vl);
vuint16mf2_t vmaxu_vx_u16mf2 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vuint16m1_t vmaxu_vv_u16m1 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vuint16m1_t vmaxu_vx_u16m1 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vuint16m2_t vmaxu_vv_u16m2 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vuint16m2_t vmaxu_vx_u16m2 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vuint16m4_t vmaxu_vv_u16m4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vuint16m4_t vmaxu_vx_u16m4 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
vuint16m8_t vmaxu_vv_u16m8 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vuint16m8_t vmaxu_vx_u16m8 (vuint16m8_t op1, uint16_t op2,
    size_t vl);
vuint32mf2_t vmaxu_vv_u32mf2 (vuint32mf2_t op1, vuint32mf2_t
    op2, size_t vl);
vuint32mf2_t vmaxu_vx_u32mf2 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vuint32m1_t vmaxu_vv_u32m1 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vuint32m1_t vmaxu_vx_u32m1 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vuint32m2_t vmaxu_vv_u32m2 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vuint32m2_t vmaxu_vx_u32m2 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vuint32m4_t vmaxu_vv_u32m4 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vuint32m4_t vmaxu_vx_u32m4 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
vuint32m8_t vmaxu_vv_u32m8 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
```

```
vuint32m8_t vmaxu_vx_u32m8 (vuint32m8_t op1, uint32_t op2,
    size_t vl);
vuint64m1_t vmaxu_vv_u64m1 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vuint64m1_t vmaxu_vx_u64m1 (vuint64m1_t op1, uint64_t op2,
    size_t vl);
vuint64m2_t vmaxu_vv_u64m2 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vuint64m2_t vmaxu_vx_u64m2 (vuint64m2_t op1, uint64_t op2,
    size_t vl);
vuint64m4_t vmaxu_vv_u64m4 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vuint64m4_t vmaxu_vx_u64m4 (vuint64m4_t op1, uint64_t op2,
    size_t vl);
vuint64m8_t vmaxu_vv_u64m8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vuint64m8_t vmaxu_vx_u64m8 (vuint64m8_t op1, uint64_t op2,
    size_t vl);
// masked functions
vint8mf8_t vmin_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vint8mf8_t vmin_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vmin_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint8mf4_t vmin_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vmin_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint8mf2_t vmin_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vmin_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vmin_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vmin_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vmin_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vmin_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vmin_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vmin_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
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596

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vint8m8_t vmin_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vmin_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vint16mf4_t vmin_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vint16mf2_t vmin_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vint16mf2_t vmin_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vint16m1_t vmin_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vint16m1_t vmin_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vint16m2_t vmin_vv_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, vint16m2_t op2, size_t vl);
vint16m2_t vmin_vx_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, int16_t op2, size_t vl);
vint16m4_t vmin_vv_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, vint16m4_t op2, size_t vl);
vint16m4_t vmin_vx_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, int16_t op2, size_t vl);
vint16m8_t vmin_vv_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, vint16m8_t op2, size_t vl);
vint16m8_t vmin_vx_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, int16_t op2, size_t vl);
vint32mf2_t vmin_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vint32mf2_t vmin_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vint32m1_t vmin_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vint32m1_t vmin_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vint32m2_t vmin_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vint32m2_t vmin_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vint32m4_t vmin_vv_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, vint32m4_t op2, size_t vl);
vint32m4_t vmin_vx_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, int32_t op2, size_t vl);
vint32m8_t vmin_vv_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, vint32m8_t op2, size_t vl);
vint32m8_t vmin_vx_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, int32_t op2, size_t vl);
```

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vint64m1_t vmin_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vint64m1_t vmin_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vint64m2_t vmin_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vint64m2_t vmin_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vint64m4_t vmin_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vint64m4_t vmin_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vint64m8_t vmin_vv_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, vint64m8_t op2, size_t vl);
vint64m8_t vmin_vx_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, int64_t op2, size_t vl);
vuint8mf8_t vminu_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vuint8mf8_t vminu_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vuint8mf4_t vminu_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vuint8mf4_t vminu_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vuint8mf2_t vminu_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vuint8mf2_t vminu_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vuint8m1_t vminu_vv_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vuint8m1_t vminu_vx_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vminu_vv_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vuint8m2_t vminu_vx_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vminu_vv_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vuint8m4_t vminu_vx_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vminu_vv_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vuint8m8_t vminu_vx_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vminu_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
```

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vuint16mf4_t vminu_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vuint16mf2_t vminu_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vuint16mf2_t vminu_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vuint16m1_t vminu_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vuint16m1_t vminu_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vuint16m2_t vminu_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vuint16m2_t vminu_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vuint16m4_t vminu_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vuint16m4_t vminu_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vuint16m8_t vminu_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vuint16m8_t vminu_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vuint32mf2_t vminu_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vuint32mf2_t vminu_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vuint32m1_t vminu_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vuint32m1_t vminu_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vuint32m2_t vminu_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vuint32m2_t vminu_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vuint32m4_t vminu_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vuint32m4_t vminu_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vuint32m8_t vminu_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vuint32m8_t vminu_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vuint64m1_t vminu_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vuint64m1_t vminu_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
```

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vuint64m2_t vminu_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vuint64m2_t vminu_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vuint64m4_t vminu_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vuint64m4_t vminu_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vuint64m8_t vminu_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vuint64m8_t vminu_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
vint8mf8_t vmax_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vint8mf8_t vmax_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vmax_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint8mf4_t vmax_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vmax_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint8mf2_t vmax_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vmax_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vmax_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vmax_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vmax_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vmax_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vmax_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vmax_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vmax_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vmax_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vint16mf4_t vmax_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vint16mf2_t vmax_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
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```
vint16mf2_t vmax_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vint16m1_t vmax_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vint16m1_t vmax_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vint16m2_t vmax_vv_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, vint16m2_t op2, size_t vl);
vint16m2_t vmax_vx_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, int16_t op2, size_t vl);
vint16m4_t vmax_vv_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, vint16m4_t op2, size_t vl);
vint16m4_t vmax_vx_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, int16_t op2, size_t vl);
vint16m8_t vmax_vv_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, vint16m8_t op2, size_t vl);
vint16m8_t vmax_vx_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, int16_t op2, size_t vl);
vint32mf2_t vmax_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vint32mf2_t vmax_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vint32m1_t vmax_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vint32m1_t vmax_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vint32m2_t vmax_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vint32m2_t vmax_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vint32m4_t vmax_vv_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, vint32m4_t op2, size_t vl);
vint32m4_t vmax_vx_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, int32_t op2, size_t vl);
vint32m8_t vmax_vv_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, vint32m8_t op2, size_t vl);
vint32m8_t vmax_vx_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, int32_t op2, size_t vl);
vint64m1_t vmax_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vint64m1_t vmax_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vint64m2_t vmax_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vint64m2_t vmax_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
```

```
vint64m4_t vmax_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vint64m4_t vmax_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vint64m8_t vmax_vv_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, vint64m8_t op2, size_t vl);
vint64m8_t vmax_vx_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, int64_t op2, size_t vl);
vuint8mf8_t vmaxu_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vuint8mf8_t vmaxu_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vuint8mf4_t vmaxu_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vuint8mf4_t vmaxu_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vuint8mf2_t vmaxu_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vuint8mf2_t vmaxu_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vuint8m1_t vmaxu_vv_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vuint8m1_t vmaxu_vx_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vmaxu_vv_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vuint8m2_t vmaxu_vx_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vmaxu_vv_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vuint8m4_t vmaxu_vx_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vmaxu_vv_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vuint8m8_t vmaxu_vx_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vmaxu_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vuint16mf4_t vmaxu_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vuint16mf2_t vmaxu_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vuint16mf2_t vmaxu_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vuint16m1_t vmaxu_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
```

```
vuint16m1_t vmaxu_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vuint16m2_t vmaxu_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vuint16m2_t vmaxu_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vuint16m4_t vmaxu_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vuint16m4_t vmaxu_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vuint16m8_t vmaxu_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vuint16m8_t vmaxu_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vuint32mf2_t vmaxu_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vuint32mf2_t vmaxu_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vuint32m1_t vmaxu_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vuint32m1_t vmaxu_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vuint32m2_t vmaxu_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vuint32m2_t vmaxu_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vuint32m4_t vmaxu_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vuint32m4_t vmaxu_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vuint32m8_t vmaxu_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vuint32m8_t vmaxu_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vuint64m1_t vmaxu_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vuint64m1_t vmaxu_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
vuint64m2_t vmaxu_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vuint64m2_t vmaxu_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vuint64m4_t vmaxu_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vuint64m4_t vmaxu_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
```

```
vuint64m8_t vmaxu_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vuint64m8_t vmaxu_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
```

Vector Single-Width Integer Multiply Functions:

Prototypes:

```
vint8mf8_t vmul_vv_i8mf8 (vint8mf8_t op1, vint8mf8_t op2, size_t
    vl);
vint8mf8_t vmul_vx_i8mf8 (vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vmul_vv_i8mf4 (vint8mf4_t op1, vint8mf4_t op2, size_t
    vl);
vint8mf4_t vmul_vx_i8mf4 (vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vmul_vv_i8mf2 (vint8mf2_t op1, vint8mf2_t op2, size_t
    vl);
vint8mf2_t vmul_vx_i8mf2 (vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vmul_vv_i8m1 (vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vmul_vx_i8m1 (vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vmul_vv_i8m2 (vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vmul_vx_i8m2 (vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vmul_vv_i8m4 (vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vmul_vx_i8m4 (vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vmul_vv_i8m8 (vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vmul_vx_i8m8 (vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vmul_vv_i16mf4 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vint16mf4_t vmul_vx_i16mf4 (vint16mf4_t op1, int16_t op2, size_t
    vl);
vint16mf2_t vmul_vv_i16mf2 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vint16mf2_t vmul_vx_i16mf2 (vint16mf2_t op1, int16_t op2, size_t
    vl);
vint16m1_t vmul_vv_i16m1 (vint16m1_t op1, vint16m1_t op2, size_t
    vl);
vint16m1_t vmul_vx_i16m1 (vint16m1_t op1, int16_t op2, size_t
    vl);
vint16m2_t vmul_vv_i16m2 (vint16m2_t op1, vint16m2_t op2, size_t
    vl);
vint16m2_t vmul_vx_i16m2 (vint16m2_t op1, int16_t op2, size_t
    vl);
vint16m4_t vmul_vv_i16m4 (vint16m4_t op1, vint16m4_t op2, size_t
    vl);
vint16m4_t vmul_vx_i16m4 (vint16m4_t op1, int16_t op2, size_t
    vl);
```

```
vint16m8_t vmul_vv_i16m8 (vint16m8_t op1, vint16m8_t op2, size_t
    vl);
vint16m8_t vmul_vx_i16m8 (vint16m8_t op1, int16_t op2, size_t
    vl);
vint32mf2_t vmul_vv_i32mf2 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vint32mf2_t vmul_vx_i32mf2 (vint32mf2_t op1, int32_t op2, size_t
    vl);
vint32m1_t vmul_vv_i32m1 (vint32m1_t op1, vint32m1_t op2, size_t
    vl);
vint32m1_t vmul_vx_i32m1 (vint32m1_t op1, int32_t op2, size_t
    vl);
vint32m2_t vmul_vv_i32m2 (vint32m2_t op1, vint32m2_t op2, size_t
    vl);
vint32m2_t vmul_vx_i32m2 (vint32m2_t op1, int32_t op2, size_t
    vl);
vint32m4_t vmul_vv_i32m4 (vint32m4_t op1, vint32m4_t op2, size_t
    vl);
vint32m4_t vmul_vx_i32m4 (vint32m4_t op1, int32_t op2, size_t
    vl);
vint32m8_t vmul_vv_i32m8 (vint32m8_t op1, vint32m8_t op2, size_t
    vl);
vint32m8_t vmul_vx_i32m8 (vint32m8_t op1, int32_t op2, size_t
    vl);
vint64m1_t vmul_vv_i64m1 (vint64m1_t op1, vint64m1_t op2, size_t
    vl);
vint64m1_t vmul_vx_i64m1 (vint64m1_t op1, int64_t op2, size_t
    vl);
vint64m2_t vmul_vv_i64m2 (vint64m2_t op1, vint64m2_t op2, size_t
    vl);
vint64m2_t vmul_vx_i64m2 (vint64m2_t op1, int64_t op2, size_t
    vl);
vint64m4_t vmul_vv_i64m4 (vint64m4_t op1, vint64m4_t op2, size_t
    vl);
vint64m4_t vmul_vx_i64m4 (vint64m4_t op1, int64_t op2, size_t
    vl);
vint64m8_t vmul_vv_i64m8 (vint64m8_t op1, vint64m8_t op2, size_t
    vl);
vint64m8_t vmul_vx_i64m8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vuint8mf8_t vmul_vv_u8mf8 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vuint8mf8_t vmul_vx_u8mf8 (vuint8mf8_t op1, uint8_t op2, size_t
    vl);
vuint8mf4_t vmul_vv_u8mf4 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
```

```
vuint8mf4_t vmul_vx_u8mf4 (vuint8mf4_t op1, uint8_t op2, size_t
    vl);
vuint8mf2_t vmul_vv_u8mf2 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vuint8mf2_t vmul_vx_u8mf2 (vuint8mf2_t op1, uint8_t op2, size_t
    vl);
vuint8m1_t vmul_vv_u8m1 (vuint8m1_t op1, vuint8m1_t op2, size_t
    vl);
vuint8m1_t vmul_vx_u8m1 (vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vmul_vv_u8m2 (vuint8m2_t op1, vuint8m2_t op2, size_t
    vl);
vuint8m2_t vmul_vx_u8m2 (vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vmul_vv_u8m4 (vuint8m4_t op1, vuint8m4_t op2, size_t
    vl);
vuint8m4_t vmul_vx_u8m4 (vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vmul_vv_u8m8 (vuint8m8_t op1, vuint8m8_t op2, size_t
    vl);
vuint8m8_t vmul_vx_u8m8 (vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vmul_vv_u16mf4 (vuint16mf4_t op1, vuint16mf4_t op2,
    size_t vl);
vuint16mf4_t vmul_vx_u16mf4 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vuint16mf2_t vmul_vv_u16mf2 (vuint16mf2_t op1, vuint16mf2_t op2,
    size_t vl);
vuint16mf2_t vmul_vx_u16mf2 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vuint16m1_t vmul_vv_u16m1 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vuint16m1_t vmul_vx_u16m1 (vuint16m1_t op1, uint16_t op2, size_t
    vl);
vuint16m2_t vmul_vv_u16m2 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vuint16m2_t vmul_vx_u16m2 (vuint16m2_t op1, uint16_t op2, size_t
    vl);
vuint16m4_t vmul_vv_u16m4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vuint16m4_t vmul_vx_u16m4 (vuint16m4_t op1, uint16_t op2, size_t
    vl);
vuint16m8_t vmul_vv_u16m8 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vuint16m8_t vmul_vx_u16m8 (vuint16m8_t op1, uint16_t op2, size_t
    vl);
vuint32mf2_t vmul_vv_u32mf2 (vuint32mf2_t op1, vuint32mf2_t op2,
    size_t vl);
vuint32mf2_t vmul_vx_u32mf2 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
```

```
vuint32m1_t vmul_vv_u32m1 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vuint32m1_t vmul_vx_u32m1 (vuint32m1_t op1, uint32_t op2, size_t
    vl);
vuint32m2_t vmul_vv_u32m2 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vuint32m2_t vmul_vx_u32m2 (vuint32m2_t op1, uint32_t op2, size_t
    vl);
vuint32m4_t vmul_vv_u32m4 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vuint32m4_t vmul_vx_u32m4 (vuint32m4_t op1, uint32_t op2, size_t
    vl);
vuint32m8_t vmul_vv_u32m8 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vuint32m8_t vmul_vx_u32m8 (vuint32m8_t op1, uint32_t op2, size_t
    vl);
vuint64m1_t vmul_vv_u64m1 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vuint64m1_t vmul_vx_u64m1 (vuint64m1_t op1, uint64_t op2, size_t
    vl);
vuint64m2_t vmul_vv_u64m2 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vuint64m2_t vmul_vx_u64m2 (vuint64m2_t op1, uint64_t op2, size_t
    vl);
vuint64m4_t vmul_vv_u64m4 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vuint64m4_t vmul_vx_u64m4 (vuint64m4_t op1, uint64_t op2, size_t
    vl);
vuint64m8_t vmul_vv_u64m8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vuint64m8_t vmul_vx_u64m8 (vuint64m8_t op1, uint64_t op2, size_t
    vl);
vint8mf8_t vmulh_vv_i8mf8 (vint8mf8_t op1, vint8mf8_t op2,
    size_t vl);
vint8mf8_t vmulh_vx_i8mf8 (vint8mf8_t op1, int8_t op2, size_t
    vl);
vint8mf4_t vmulh_vv_i8mf4 (vint8mf4_t op1, vint8mf4_t op2,
    size_t vl);
vint8mf4_t vmulh_vx_i8mf4 (vint8mf4_t op1, int8_t op2, size_t
    vl);
vint8mf2_t vmulh_vv_i8mf2 (vint8mf2_t op1, vint8mf2_t op2,
    size_t vl);
vint8mf2_t vmulh_vx_i8mf2 (vint8mf2_t op1, int8_t op2, size_t
    vl);
vint8m1_t vmulh_vv_i8m1 (vint8m1_t op1, vint8m1_t op2, size_t
    vl);
```

```
vint8m1_t vmulh_vx_i8m1 (vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vmulh_vv_i8m2 (vint8m2_t op1, vint8m2_t op2, size_t
    vl);
vint8m2_t vmulh_vx_i8m2 (vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vmulh_vv_i8m4 (vint8m4_t op1, vint8m4_t op2, size_t
    vl);
vint8m4_t vmulh_vx_i8m4 (vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vmulh_vv_i8m8 (vint8m8_t op1, vint8m8_t op2, size_t
    vl);
vint8m8_t vmulh_vx_i8m8 (vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vmulh_vv_i16mf4 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vint16mf4_t vmulh_vx_i16mf4 (vint16mf4_t op1, int16_t op2,
    size_t vl);
vint16mf2_t vmulh_vv_i16mf2 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vint16mf2_t vmulh_vx_i16mf2 (vint16mf2_t op1, int16_t op2,
    size_t vl);
vint16m1_t vmulh_vv_i16m1 (vint16m1_t op1, vint16m1_t op2,
    size_t vl);
vint16m1_t vmulh_vx_i16m1 (vint16m1_t op1, int16_t op2, size_t
    vl);
vint16m2_t vmulh_vv_i16m2 (vint16m2_t op1, vint16m2_t op2,
    size_t vl);
vint16m2_t vmulh_vx_i16m2 (vint16m2_t op1, int16_t op2, size_t
    vl);
vint16m4_t vmulh_vv_i16m4 (vint16m4_t op1, vint16m4_t op2,
    size_t vl);
vint16m4_t vmulh_vx_i16m4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vint16m8_t vmulh_vv_i16m8 (vint16m8_t op1, vint16m8_t op2,
    size_t vl);
vint16m8_t vmulh_vx_i16m8 (vint16m8_t op1, int16_t op2, size_t
    vl);
vint32mf2_t vmulh_vv_i32mf2 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vint32mf2_t vmulh_vx_i32mf2 (vint32mf2_t op1, int32_t op2,
    size_t vl);
vint32m1_t vmulh_vv_i32m1 (vint32m1_t op1, vint32m1_t op2,
    size_t vl);
vint32m1_t vmulh_vx_i32m1 (vint32m1_t op1, int32_t op2, size_t
    vl);
vint32m2_t vmulh_vv_i32m2 (vint32m2_t op1, vint32m2_t op2,
    size_t vl);
vint32m2_t vmulh_vx_i32m2 (vint32m2_t op1, int32_t op2, size_t
    vl);
```

```
vint32m4_t vmulh_vv_i32m4 (vint32m4_t op1, vint32m4_t op2,
    size_t vl);
vint32m4_t vmulh_vx_i32m4 (vint32m4_t op1, int32_t op2, size_t
    vl);
vint32m8_t vmulh_vv_i32m8 (vint32m8_t op1, vint32m8_t op2,
    size_t vl);
vint32m8_t vmulh_vx_i32m8 (vint32m8_t op1, int32_t op2, size_t
    vl);
vint64m1_t vmulh_vv_i64m1 (vint64m1_t op1, vint64m1_t op2,
    size_t vl);
vint64m1_t vmulh_vx_i64m1 (vint64m1_t op1, int64_t op2, size_t
    vl);
vint64m2_t vmulh_vv_i64m2 (vint64m2_t op1, vint64m2_t op2,
    size_t vl);
vint64m2_t vmulh_vx_i64m2 (vint64m2_t op1, int64_t op2, size_t
    vl);
vint64m4_t vmulh_vv_i64m4 (vint64m4_t op1, vint64m4_t op2,
    size_t vl);
vint64m4_t vmulh_vx_i64m4 (vint64m4_t op1, int64_t op2, size_t
    vl);
vint64m8_t vmulh_vv_i64m8 (vint64m8_t op1, vint64m8_t op2,
    size_t vl);
vint64m8_t vmulh_vx_i64m8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vuint8mf8_t vmulhu_vv_u8mf8 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vuint8mf8_t vmulhu_vx_u8mf8 (vuint8mf8_t op1, uint8_t op2,
    size_t vl);
vuint8mf4_t vmulhu_vv_u8mf4 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vuint8mf4_t vmulhu_vx_u8mf4 (vuint8mf4_t op1, uint8_t op2,
    size_t vl);
vuint8mf2_t vmulhu_vv_u8mf2 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vuint8mf2_t vmulhu_vx_u8mf2 (vuint8mf2_t op1, uint8_t op2,
    size_t vl);
vuint8m1_t vmulhu_vv_u8m1 (vuint8m1_t op1, vuint8m1_t op2,
    size_t vl);
vuint8m1_t vmulhu_vx_u8m1 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vuint8m2_t vmulhu_vv_u8m2 (vuint8m2_t op1, vuint8m2_t op2,
    size_t vl);
vuint8m2_t vmulhu_vx_u8m2 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vuint8m4_t vmulhu_vv_u8m4 (vuint8m4_t op1, vuint8m4_t op2,
    size_t vl);
```

```
vuint8m4_t vmulhu_vx_u8m4 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
vuint8m8_t vmulhu_vv_u8m8 (vuint8m8_t op1, vuint8m8_t op2,
    size_t vl);
vuint8m8_t vmulhu_vx_u8m8 (vuint8m8_t op1, uint8_t op2, size_t
    vl);
vuint16mf4_t vmulhu_vv_u16mf4 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vuint16mf4_t vmulhu_vx_u16mf4 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vuint16mf2_t vmulhu_vv_u16mf2 (vuint16mf2_t op1, vuint16mf2_t
    op2, size_t vl);
vuint16mf2_t vmulhu_vx_u16mf2 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vuint16m1_t vmulhu_vv_u16m1 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vuint16m1_t vmulhu_vx_u16m1 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vuint16m2_t vmulhu_vv_u16m2 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vuint16m2_t vmulhu_vx_u16m2 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vuint16m4_t vmulhu_vv_u16m4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vuint16m4_t vmulhu_vx_u16m4 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
vuint16m8_t vmulhu_vv_u16m8 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vuint16m8_t vmulhu_vx_u16m8 (vuint16m8_t op1, uint16_t op2,
    size_t vl);
vuint32mf2_t vmulhu_vv_u32mf2 (vuint32mf2_t op1, vuint32mf2_t
    op2, size_t vl);
vuint32mf2_t vmulhu_vx_u32mf2 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vuint32m1_t vmulhu_vv_u32m1 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vuint32m1_t vmulhu_vx_u32m1 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vuint32m2_t vmulhu_vv_u32m2 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vuint32m2_t vmulhu_vx_u32m2 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vuint32m4_t vmulhu_vv_u32m4 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vuint32m4_t vmulhu_vx_u32m4 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
```

```
vuint32m8_t vmulhu_vv_u32m8 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vuint32m8_t vmulhu_vx_u32m8 (vuint32m8_t op1, uint32_t op2,
    size_t vl);
vuint64m1_t vmulhu_vv_u64m1 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vuint64m1_t vmulhu_vx_u64m1 (vuint64m1_t op1, uint64_t op2,
    size_t vl);
vuint64m2_t vmulhu_vv_u64m2 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vuint64m2_t vmulhu_vx_u64m2 (vuint64m2_t op1, uint64_t op2,
    size_t vl);
vuint64m4_t vmulhu_vv_u64m4 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vuint64m4_t vmulhu_vx_u64m4 (vuint64m4_t op1, uint64_t op2,
    size_t vl);
vuint64m8_t vmulhu_vv_u64m8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vuint64m8_t vmulhu_vx_u64m8 (vuint64m8_t op1, uint64_t op2,
    size_t vl);
vint8mf8_t vmulhsu_vv_i8mf8 (vint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vint8mf8_t vmulhsu_vx_i8mf8 (vint8mf8_t op1, uint8_t op2, size_t
    vl);
vint8mf4_t vmulhsu_vv_i8mf4 (vint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vint8mf4_t vmulhsu_vx_i8mf4 (vint8mf4_t op1, uint8_t op2, size_t
    vl);
vint8mf2_t vmulhsu_vv_i8mf2 (vint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vint8mf2_t vmulhsu_vx_i8mf2 (vint8mf2_t op1, uint8_t op2, size_t
    vl);
vint8m1_t vmulhsu_vv_i8m1 (vint8m1_t op1, vuint8m1_t op2, size_t
    vl);
vint8m1_t vmulhsu_vx_i8m1 (vint8m1_t op1, uint8_t op2, size_t
    vl);
vint8m2_t vmulhsu_vv_i8m2 (vint8m2_t op1, vuint8m2_t op2, size_t
    vl);
vint8m2_t vmulhsu_vx_i8m2 (vint8m2_t op1, uint8_t op2, size_t
    vl);
vint8m4_t vmulhsu_vv_i8m4 (vint8m4_t op1, vuint8m4_t op2, size_t
    vl);
vint8m4_t vmulhsu_vx_i8m4 (vint8m4_t op1, uint8_t op2, size_t
    vl);
vint8m8_t vmulhsu_vv_i8m8 (vint8m8_t op1, vuint8m8_t op2, size_t
    vl);
```

```
vint8m8_t vmulhsu_vx_i8m8 (vint8m8_t op1, uint8_t op2, size_t
    vl);
vint16mf4_t vmulhsu_vv_i16mf4 (vint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vint16mf4_t vmulhsu_vx_i16mf4 (vint16mf4_t op1, uint16_t op2,
    size_t vl);
vint16mf2_t vmulhsu_vv_i16mf2 (vint16mf2_t op1, vuint16mf2_t
    op2, size_t vl);
vint16mf2_t vmulhsu_vx_i16mf2 (vint16mf2_t op1, uint16_t op2,
    size_t vl);
vint16m1_t vmulhsu_vv_i16m1 (vint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vint16m1_t vmulhsu_vx_i16m1 (vint16m1_t op1, uint16_t op2,
    size_t vl);
vint16m2_t vmulhsu_vv_i16m2 (vint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vint16m2_t vmulhsu_vx_i16m2 (vint16m2_t op1, uint16_t op2,
    size_t vl);
vint16m4_t vmulhsu_vv_i16m4 (vint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vint16m4_t vmulhsu_vx_i16m4 (vint16m4_t op1, uint16_t op2,
    size_t vl);
vint16m8_t vmulhsu_vv_i16m8 (vint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vint16m8_t vmulhsu_vx_i16m8 (vint16m8_t op1, uint16_t op2,
    size_t vl);
vint32mf2_t vmulhsu_vv_i32mf2 (vint32mf2_t op1, vuint32mf2_t
    op2, size_t vl);
vint32mf2_t vmulhsu_vx_i32mf2 (vint32mf2_t op1, uint32_t op2,
    size_t vl);
vint32m1_t vmulhsu_vv_i32m1 (vint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vint32m1_t vmulhsu_vx_i32m1 (vint32m1_t op1, uint32_t op2,
    size_t vl);
vint32m2_t vmulhsu_vv_i32m2 (vint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vint32m2_t vmulhsu_vx_i32m2 (vint32m2_t op1, uint32_t op2,
    size_t vl);
vint32m4_t vmulhsu_vv_i32m4 (vint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vint32m4_t vmulhsu_vx_i32m4 (vint32m4_t op1, uint32_t op2,
    size_t vl);
vint32m8_t vmulhsu_vv_i32m8 (vint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vint32m8_t vmulhsu_vx_i32m8 (vint32m8_t op1, uint32_t op2,
    size_t vl);
```

```
vint64m1_t vmulhsu_vv_i64m1 (vint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vint64m1_t vmulhsu_vx_i64m1 (vint64m1_t op1, uint64_t op2,
    size_t vl);
vint64m2_t vmulhsu_vv_i64m2 (vint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vint64m2_t vmulhsu_vx_i64m2 (vint64m2_t op1, uint64_t op2,
    size_t vl);
vint64m4_t vmulhsu_vv_i64m4 (vint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vint64m4_t vmulhsu_vx_i64m4 (vint64m4_t op1, uint64_t op2,
    size_t vl);
vint64m8_t vmulhsu_vv_i64m8 (vint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vint64m8_t vmulhsu_vx_i64m8 (vint64m8_t op1, uint64_t op2,
    size_t vl);
// masked functions
vint8mf8_t vmul_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vint8mf8_t vmul_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vmul_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint8mf4_t vmul_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vmul_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint8mf2_t vmul_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vmul_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vmul_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vmul_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vmul_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vmul_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vmul_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vmul_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vmul_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
```

```
vint16mf4_t vmul_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vint16mf4_t vmul_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vint16mf2_t vmul_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vint16mf2_t vmul_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vint16m1_t vmul_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vint16m1_t vmul_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vint16m2_t vmul_vv_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, vint16m2_t op2, size_t vl);
vint16m2_t vmul_vx_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, int16_t op2, size_t vl);
vint16m4_t vmul_vv_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, vint16m4_t op2, size_t vl);
vint16m4_t vmul_vx_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, int16_t op2, size_t vl);
vint16m8_t vmul_vv_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, vint16m8_t op2, size_t vl);
vint16m8_t vmul_vx_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, int16_t op2, size_t vl);
vint32mf2_t vmul_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vint32mf2_t vmul_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vint32m1_t vmul_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vint32m1_t vmul_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vint32m2_t vmul_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vint32m2_t vmul_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vint32m4_t vmul_vv_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, vint32m4_t op2, size_t vl);
vint32m4_t vmul_vx_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, int32_t op2, size_t vl);
vint32m8_t vmul_vv_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, vint32m8_t op2, size_t vl);
vint32m8_t vmul_vx_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, int32_t op2, size_t vl);
vint64m1_t vmul_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
```

```
vint64m1_t vmul_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vint64m2_t vmul_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vint64m2_t vmul_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vint64m4_t vmul_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vint64m4_t vmul_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vint64m8_t vmul_vv_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, vint64m8_t op2, size_t vl);
vint64m8_t vmul_vx_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, int64_t op2, size_t vl);
vuint8mf8_t vmul_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vuint8mf8_t vmul_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vuint8mf4_t vmul_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vuint8mf4_t vmul_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vuint8mf2_t vmul_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vuint8mf2_t vmul_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vuint8m1_t vmul_vv_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vuint8m1_t vmul_vx_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vmul_vv_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vuint8m2_t vmul_vx_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vmul_vv_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vuint8m4_t vmul_vx_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vmul_vv_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vuint8m8_t vmul_vx_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vmul_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vuint16mf4_t vmul_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
```

```
vuint16mf2_t vmul_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vuint16mf2_t vmul_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vuint16m1_t vmul_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vuint16m1_t vmul_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vuint16m2_t vmul_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vuint16m2_t vmul_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vuint16m4_t vmul_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vuint16m4_t vmul_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vuint16m8_t vmul_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vuint16m8_t vmul_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vuint32mf2_t vmul_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vuint32mf2_t vmul_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vuint32m1_t vmul_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vuint32m1_t vmul_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vuint32m2_t vmul_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vuint32m2_t vmul_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vuint32m4_t vmul_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vuint32m4_t vmul_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vuint32m8_t vmul_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vuint32m8_t vmul_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vuint64m1_t vmul_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vuint64m1_t vmul_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
vuint64m2_t vmul_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
```

```
vuint64m2_t vmul_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vuint64m4_t vmul_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vuint64m4_t vmul_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vuint64m8_t vmul_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vuint64m8_t vmul_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
vint8mf8_t vmulh_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vint8mf8_t vmulh_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vmulh_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint8mf4_t vmulh_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vmulh_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint8mf2_t vmulh_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vmulh_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vmulh_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vmulh_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vmulh_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vmulh_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vmulh_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vmulh_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vmulh_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vmulh_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vint16mf4_t vmulh_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vint16mf2_t vmulh_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vint16mf2_t vmulh_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
```

```
vint16m1_t vmulh_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vint16m1_t vmulh_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vint16m2_t vmulh_vv_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, vint16m2_t op2, size_t vl);
vint16m2_t vmulh_vx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, int16_t op2, size_t vl);
vint16m4_t vmulh_vv_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, vint16m4_t op2, size_t vl);
vint16m4_t vmulh_vx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, int16_t op2, size_t vl);
vint16m8_t vmulh_vv_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, vint16m8_t op2, size_t vl);
vint16m8_t vmulh_vx_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, int16_t op2, size_t vl);
vint32mf2_t vmulh_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vint32mf2_t vmulh_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vint32m1_t vmulh_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vint32m1_t vmulh_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vint32m2_t vmulh_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vint32m2_t vmulh_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vint32m4_t vmulh_vv_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, vint32m4_t op2, size_t vl);
vint32m4_t vmulh_vx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, int32_t op2, size_t vl);
vint32m8_t vmulh_vv_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, vint32m8_t op2, size_t vl);
vint32m8_t vmulh_vx_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, int32_t op2, size_t vl);
vint64m1_t vmulh_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vint64m1_t vmulh_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vint64m2_t vmulh_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vint64m2_t vmulh_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vint64m4_t vmulh_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
```

```
vint64m4_t vmulh_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vint64m8_t vmulh_vv_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, vint64m8_t op2, size_t vl);
vint64m8_t vmulh_vx_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, int64_t op2, size_t vl);
vuint8mf8_t vmulhu_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vuint8mf8_t vmulhu_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vuint8mf4_t vmulhu_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vuint8mf4_t vmulhu_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vuint8mf2_t vmulhu_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vuint8mf2_t vmulhu_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vuint8m1_t vmulhu_vv_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vuint8m1_t vmulhu_vx_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vmulhu_vv_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vuint8m2_t vmulhu_vx_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vmulhu_vv_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vuint8m4_t vmulhu_vx_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vmulhu_vv_u8m8_m (vbool1_t mask, vuint8m8_t
    maskedoff, vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vuint8m8_t vmulhu_vx_u8m8_m (vbool1_t mask, vuint8m8_t
    maskedoff, vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vmulhu_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vuint16mf4_t vmulhu_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vuint16mf2_t vmulhu_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vuint16mf2_t vmulhu_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vuint16m1_t vmulhu_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vuint16m1_t vmulhu_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
```

```
vuint16m2_t vmulhu_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vuint16m2_t vmulhu_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vuint16m4_t vmulhu_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vuint16m4_t vmulhu_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vuint16m8_t vmulhu_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vuint16m8_t vmulhu_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vuint32mf2_t vmulhu_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vuint32mf2_t vmulhu_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vuint32m1_t vmulhu_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vuint32m1_t vmulhu_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vuint32m2_t vmulhu_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vuint32m2_t vmulhu_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vuint32m4_t vmulhu_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vuint32m4_t vmulhu_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vuint32m8_t vmulhu_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vuint32m8_t vmulhu_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vuint64m1_t vmulhu_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vuint64m1_t vmulhu_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
vuint64m2_t vmulhu_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vuint64m2_t vmulhu_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vuint64m4_t vmulhu_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vuint64m4_t vmulhu_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vuint64m8_t vmulhu_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t op2, size_t vl);
```

```
vuint64m8_t vmulhu_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
vint8mf8_t vmulhsu_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vint8mf8_t vmulhsu_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, uint8_t op2, size_t vl);
vint8mf4_t vmulhsu_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vint8mf4_t vmulhsu_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, uint8_t op2, size_t vl);
vint8mf2_t vmulhsu_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vint8mf2_t vmulhsu_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, uint8_t op2, size_t vl);
vint8m1_t vmulhsu_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vuint8m1_t op2, size_t vl);
vint8m1_t vmulhsu_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, uint8_t op2, size_t vl);
vint8m2_t vmulhsu_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vuint8m2_t op2, size_t vl);
vint8m2_t vmulhsu_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, uint8_t op2, size_t vl);
vint8m4_t vmulhsu_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vuint8m4_t op2, size_t vl);
vint8m4_t vmulhsu_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, uint8_t op2, size_t vl);
vint8m8_t vmulhsu_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vuint8m8_t op2, size_t vl);
vint8m8_t vmulhsu_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, uint8_t op2, size_t vl);
vint16mf4_t vmulhsu_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vint16mf4_t vmulhsu_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, uint16_t op2, size_t vl);
vint16mf2_t vmulhsu_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vint16mf2_t vmulhsu_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, uint16_t op2, size_t vl);
vint16m1_t vmulhsu_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vuint16m1_t op2, size_t vl);
vint16m1_t vmulhsu_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, uint16_t op2, size_t vl);
vint16m2_t vmulhsu_vv_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, vuint16m2_t op2, size_t vl);
vint16m2_t vmulhsu_vx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, uint16_t op2, size_t vl);
```

```
vint16m4_t vmulhsu_vv_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, vuint16m4_t op2, size_t vl);
vint16m4_t vmulhsu_vx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, uint16_t op2, size_t vl);
vint16m8_t vmulhsu_vv_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, vuint16m8_t op2, size_t vl);
vint16m8_t vmulhsu_vx_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, uint16_t op2, size_t vl);
vint32mf2_t vmulhsu_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vint32mf2_t vmulhsu_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, uint32_t op2, size_t vl);
vint32m1_t vmulhsu_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vuint32m1_t op2, size_t vl);
vint32m1_t vmulhsu_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, uint32_t op2, size_t vl);
vint32m2_t vmulhsu_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vuint32m2_t op2, size_t vl);
vint32m2_t vmulhsu_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, uint32_t op2, size_t vl);
vint32m4_t vmulhsu_vv_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, vuint32m4_t op2, size_t vl);
vint32m4_t vmulhsu_vx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, uint32_t op2, size_t vl);
vint32m8_t vmulhsu_vv_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, vuint32m8_t op2, size_t vl);
vint32m8_t vmulhsu_vx_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, uint32_t op2, size_t vl);
vint64m1_t vmulhsu_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vuint64m1_t op2, size_t vl);
vint64m1_t vmulhsu_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, uint64_t op2, size_t vl);
vint64m2_t vmulhsu_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vuint64m2_t op2, size_t vl);
vint64m2_t vmulhsu_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, uint64_t op2, size_t vl);
vint64m4_t vmulhsu_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vuint64m4_t op2, size_t vl);
vint64m4_t vmulhsu_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, uint64_t op2, size_t vl);
vint64m8_t vmulhsu_vv_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, vuint64m8_t op2, size_t vl);
vint64m8_t vmulhsu_vx_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, uint64_t op2, size_t vl);
```

Vector Integer Divide Functions:

Prototypes:

```
vint8mf8_t vdiv_vv_i8mf8 (vint8mf8_t op1, vint8mf8_t op2, size_t
    vl);
vint8mf8_t vdiv_vx_i8mf8 (vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vdiv_vv_i8mf4 (vint8mf4_t op1, vint8mf4_t op2, size_t
    vl);
vint8mf4_t vdiv_vx_i8mf4 (vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vdiv_vv_i8mf2 (vint8mf2_t op1, vint8mf2_t op2, size_t
    vl);
vint8mf2_t vdiv_vx_i8mf2 (vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vdiv_vv_i8m1 (vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vdiv_vx_i8m1 (vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vdiv_vv_i8m2 (vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vdiv_vx_i8m2 (vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vdiv_vv_i8m4 (vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vdiv_vx_i8m4 (vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vdiv_vv_i8m8 (vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vdiv_vx_i8m8 (vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vdiv_vv_i16mf4 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vint16mf4_t vdiv_vx_i16mf4 (vint16mf4_t op1, int16_t op2, size_t
    vl);
vint16mf2_t vdiv_vv_i16mf2 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vint16mf2_t vdiv_vx_i16mf2 (vint16mf2_t op1, int16_t op2, size_t
    vl);
vint16m1_t vdiv_vv_i16m1 (vint16m1_t op1, vint16m1_t op2, size_t
    vl);
vint16m1_t vdiv_vx_i16m1 (vint16m1_t op1, int16_t op2, size_t
    vl);
vint16m2_t vdiv_vv_i16m2 (vint16m2_t op1, vint16m2_t op2, size_t
    vl);
vint16m2_t vdiv_vx_i16m2 (vint16m2_t op1, int16_t op2, size_t
    vl);
vint16m4_t vdiv_vv_i16m4 (vint16m4_t op1, vint16m4_t op2, size_t
    vl);
vint16m4_t vdiv_vx_i16m4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vint16m8_t vdiv_vv_i16m8 (vint16m8_t op1, vint16m8_t op2, size_t
    vl);
vint16m8_t vdiv_vx_i16m8 (vint16m8_t op1, int16_t op2, size_t
    vl);
vint32mf2_t vdiv_vv_i32mf2 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
```

```
vint32mf2_t vdiv_vx_i32mf2 (vint32mf2_t op1, int32_t op2, size_t
    vl);
vint32m1_t vdiv_vv_i32m1 (vint32m1_t op1, vint32m1_t op2, size_t
    vl);
vint32m1_t vdiv_vx_i32m1 (vint32m1_t op1, int32_t op2, size_t
    vl);
vint32m2_t vdiv_vv_i32m2 (vint32m2_t op1, vint32m2_t op2, size_t
    vl);
vint32m2_t vdiv_vx_i32m2 (vint32m2_t op1, int32_t op2, size_t
    vl);
vint32m4_t vdiv_vv_i32m4 (vint32m4_t op1, vint32m4_t op2, size_t
    vl);
vint32m4_t vdiv_vx_i32m4 (vint32m4_t op1, int32_t op2, size_t
    vl);
vint32m8_t vdiv_vv_i32m8 (vint32m8_t op1, vint32m8_t op2, size_t
    vl);
vint32m8_t vdiv_vx_i32m8 (vint32m8_t op1, int32_t op2, size_t
    vl);
vint64m1_t vdiv_vv_i64m1 (vint64m1_t op1, vint64m1_t op2, size_t
    vl);
vint64m1_t vdiv_vx_i64m1 (vint64m1_t op1, int64_t op2, size_t
    vl);
vint64m2_t vdiv_vv_i64m2 (vint64m2_t op1, vint64m2_t op2, size_t
    vl);
vint64m2_t vdiv_vx_i64m2 (vint64m2_t op1, int64_t op2, size_t
    vl);
vint64m4_t vdiv_vv_i64m4 (vint64m4_t op1, vint64m4_t op2, size_t
    vl);
vint64m4_t vdiv_vx_i64m4 (vint64m4_t op1, int64_t op2, size_t
    vl);
vint64m8_t vdiv_vv_i64m8 (vint64m8_t op1, vint64m8_t op2, size_t
    vl);
vint64m8_t vdiv_vx_i64m8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vuint8mf8_t vdivu_vv_u8mf8 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vuint8mf8_t vdivu_vx_u8mf8 (vuint8mf8_t op1, uint8_t op2, size_t
    vl);
vuint8mf4_t vdivu_vv_u8mf4 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vuint8mf4_t vdivu_vx_u8mf4 (vuint8mf4_t op1, uint8_t op2, size_t
    vl);
vuint8mf2_t vdivu_vv_u8mf2 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vuint8mf2_t vdivu_vx_u8mf2 (vuint8mf2_t op1, uint8_t op2, size_t
    vl);
```

```
vuint8m1_t vdivu_vv_u8m1 (vuint8m1_t op1, vuint8m1_t op2, size_t
    vl);
vuint8m1_t vdivu_vx_u8m1 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vuint8m2_t vdivu_vv_u8m2 (vuint8m2_t op1, vuint8m2_t op2, size_t
    vl);
vuint8m2_t vdivu_vx_u8m2 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vuint8m4_t vdivu_vv_u8m4 (vuint8m4_t op1, vuint8m4_t op2, size_t
    vl);
vuint8m4_t vdivu_vx_u8m4 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
vuint8m8_t vdivu_vv_u8m8 (vuint8m8_t op1, vuint8m8_t op2, size_t
    vl);
vuint8m8_t vdivu_vx_u8m8 (vuint8m8_t op1, uint8_t op2, size_t
    vl);
vuint16mf4_t vdivu_vv_u16mf4 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vuint16mf4_t vdivu_vx_u16mf4 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vuint16mf2_t vdivu_vv_u16mf2 (vuint16mf2_t op1, vuint16mf2_t
    op2, size_t vl);
vuint16mf2_t vdivu_vx_u16mf2 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vuint16m1_t vdivu_vv_u16m1 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vuint16m1_t vdivu_vx_u16m1 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vuint16m2_t vdivu_vv_u16m2 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vuint16m2_t vdivu_vx_u16m2 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vuint16m4_t vdivu_vv_u16m4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vuint16m4_t vdivu_vx_u16m4 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
vuint16m8_t vdivu_vv_u16m8 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vuint16m8_t vdivu_vx_u16m8 (vuint16m8_t op1, uint16_t op2,
    size_t vl);
vuint32mf2_t vdivu_vv_u32mf2 (vuint32mf2_t op1, vuint32mf2_t
    op2, size_t vl);
vuint32mf2_t vdivu_vx_u32mf2 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vuint32m1_t vdivu_vv_u32m1 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
```

```
vuint32m1_t vdivu_vx_u32m1 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vuint32m2_t vdivu_vv_u32m2 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vuint32m2_t vdivu_vx_u32m2 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vuint32m4_t vdivu_vv_u32m4 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vuint32m4_t vdivu_vx_u32m4 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
vuint32m8_t vdivu_vv_u32m8 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vuint32m8_t vdivu_vx_u32m8 (vuint32m8_t op1, uint32_t op2,
    size_t vl);
vuint64m1_t vdivu_vv_u64m1 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vuint64m1_t vdivu_vx_u64m1 (vuint64m1_t op1, uint64_t op2,
    size_t vl);
vuint64m2_t vdivu_vv_u64m2 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vuint64m2_t vdivu_vx_u64m2 (vuint64m2_t op1, uint64_t op2,
    size_t vl);
vuint64m4_t vdivu_vv_u64m4 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vuint64m4_t vdivu_vx_u64m4 (vuint64m4_t op1, uint64_t op2,
    size_t vl);
vuint64m8_t vdivu_vv_u64m8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vuint64m8_t vdivu_vx_u64m8 (vuint64m8_t op1, uint64_t op2,
    size_t vl);
vint8mf8_t vrem_vv_i8mf8 (vint8mf8_t op1, vint8mf8_t op2, size_t
    vl);
vint8mf8_t vrem_vx_i8mf8 (vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vrem_vv_i8mf4 (vint8mf4_t op1, vint8mf4_t op2, size_t
    vl);
vint8mf4_t vrem_vx_i8mf4 (vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vrem_vv_i8mf2 (vint8mf2_t op1, vint8mf2_t op2, size_t
    vl);
vint8mf2_t vrem_vx_i8mf2 (vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vrem_vv_i8m1 (vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vrem_vx_i8m1 (vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vrem_vv_i8m2 (vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vrem_vx_i8m2 (vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vrem_vv_i8m4 (vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vrem_vx_i8m4 (vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vrem_vv_i8m8 (vint8m8_t op1, vint8m8_t op2, size_t vl);
```

```
vint8m8_t vrem_vx_i8m8 (vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vrem_vv_i16mf4 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vint16mf4_t vrem_vx_i16mf4 (vint16mf4_t op1, int16_t op2, size_t
    vl);
vint16mf2_t vrem_vv_i16mf2 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vint16mf2_t vrem_vx_i16mf2 (vint16mf2_t op1, int16_t op2, size_t
    vl);
vint16m1_t vrem_vv_i16m1 (vint16m1_t op1, vint16m1_t op2, size_t
    vl);
vint16m1_t vrem_vx_i16m1 (vint16m1_t op1, int16_t op2, size_t
    vl);
vint16m2_t vrem_vv_i16m2 (vint16m2_t op1, vint16m2_t op2, size_t
    vl);
vint16m2_t vrem_vx_i16m2 (vint16m2_t op1, int16_t op2, size_t
    vl);
vint16m4_t vrem_vv_i16m4 (vint16m4_t op1, vint16m4_t op2, size_t
    vl);
vint16m4_t vrem_vx_i16m4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vint16m8_t vrem_vv_i16m8 (vint16m8_t op1, vint16m8_t op2, size_t
    vl);
vint16m8_t vrem_vx_i16m8 (vint16m8_t op1, int16_t op2, size_t
    vl);
vint32mf2_t vrem_vv_i32mf2 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vint32mf2_t vrem_vx_i32mf2 (vint32mf2_t op1, int32_t op2, size_t
    vl);
vint32m1_t vrem_vv_i32m1 (vint32m1_t op1, vint32m1_t op2, size_t
    vl);
vint32m1_t vrem_vx_i32m1 (vint32m1_t op1, int32_t op2, size_t
    vl);
vint32m2_t vrem_vv_i32m2 (vint32m2_t op1, vint32m2_t op2, size_t
    vl);
vint32m2_t vrem_vx_i32m2 (vint32m2_t op1, int32_t op2, size_t
    vl);
vint32m4_t vrem_vv_i32m4 (vint32m4_t op1, vint32m4_t op2, size_t
    vl);
vint32m4_t vrem_vx_i32m4 (vint32m4_t op1, int32_t op2, size_t
    vl);
vint32m8_t vrem_vv_i32m8 (vint32m8_t op1, vint32m8_t op2, size_t
    vl);
vint32m8_t vrem_vx_i32m8 (vint32m8_t op1, int32_t op2, size_t
    vl);
```

```
vint64m1_t vrem_vv_i64m1 (vint64m1_t op1, vint64m1_t op2, size_t
    vl);
vint64m1_t vrem_vx_i64m1 (vint64m1_t op1, int64_t op2, size_t
    vl);
vint64m2_t vrem_vv_i64m2 (vint64m2_t op1, vint64m2_t op2, size_t
    vl);
vint64m2_t vrem_vx_i64m2 (vint64m2_t op1, int64_t op2, size_t
    vl);
vint64m4_t vrem_vv_i64m4 (vint64m4_t op1, vint64m4_t op2, size_t
    vl);
vint64m4_t vrem_vx_i64m4 (vint64m4_t op1, int64_t op2, size_t
    vl);
vint64m8_t vrem_vv_i64m8 (vint64m8_t op1, vint64m8_t op2, size_t
    vl);
vint64m8_t vrem_vx_i64m8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vuint8mf8_t vremu_vv_u8mf8 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vuint8mf8_t vremu_vx_u8mf8 (vuint8mf8_t op1, uint8_t op2, size_t
    vl);
vuint8mf4_t vremu_vv_u8mf4 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vuint8mf4_t vremu_vx_u8mf4 (vuint8mf4_t op1, uint8_t op2, size_t
    vl);
vuint8mf2_t vremu_vv_u8mf2 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vuint8mf2_t vremu_vx_u8mf2 (vuint8mf2_t op1, uint8_t op2, size_t
    vl);
vuint8m1_t vremu_vv_u8m1 (vuint8m1_t op1, vuint8m1_t op2, size_t
    vl);
vuint8m1_t vremu_vx_u8m1 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vuint8m2_t vremu_vv_u8m2 (vuint8m2_t op1, vuint8m2_t op2, size_t
    vl);
vuint8m2_t vremu_vx_u8m2 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vuint8m4_t vremu_vv_u8m4 (vuint8m4_t op1, vuint8m4_t op2, size_t
    vl);
vuint8m4_t vremu_vx_u8m4 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
vuint8m8_t vremu_vv_u8m8 (vuint8m8_t op1, vuint8m8_t op2, size_t
    vl);
vuint8m8_t vremu_vx_u8m8 (vuint8m8_t op1, uint8_t op2, size_t
    vl);
vuint16mf4_t vremu_vv_u16mf4 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
```

```
vuint16mf4_t vremu_vx_u16mf4 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vuint16mf2_t vremu_vv_u16mf2 (vuint16mf2_t op1, vuint16mf2_t
    op2, size_t vl);
vuint16mf2_t vremu_vx_u16mf2 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vuint16m1_t vremu_vv_u16m1 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vuint16m1_t vremu_vx_u16m1 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vuint16m2_t vremu_vv_u16m2 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vuint16m2_t vremu_vx_u16m2 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vuint16m4_t vremu_vv_u16m4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vuint16m4_t vremu_vx_u16m4 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
vuint16m8_t vremu_vv_u16m8 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vuint16m8_t vremu_vx_u16m8 (vuint16m8_t op1, uint16_t op2,
    size_t vl);
vuint32mf2_t vremu_vv_u32mf2 (vuint32mf2_t op1, vuint32mf2_t
    op2, size_t vl);
vuint32mf2_t vremu_vx_u32mf2 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vuint32m1_t vremu_vv_u32m1 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vuint32m1_t vremu_vx_u32m1 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vuint32m2_t vremu_vv_u32m2 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vuint32m2_t vremu_vx_u32m2 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vuint32m4_t vremu_vv_u32m4 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vuint32m4_t vremu_vx_u32m4 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
vuint32m8_t vremu_vv_u32m8 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vuint32m8_t vremu_vx_u32m8 (vuint32m8_t op1, uint32_t op2,
    size_t vl);
vuint64m1_t vremu_vv_u64m1 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vuint64m1_t vremu_vx_u64m1 (vuint64m1_t op1, uint64_t op2,
    size_t vl);
```

```
vuint64m2_t vremu_vv_u64m2 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vuint64m2_t vremu_vx_u64m2 (vuint64m2_t op1, uint64_t op2,
    size_t vl);
vuint64m4_t vremu_vv_u64m4 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vuint64m4_t vremu_vx_u64m4 (vuint64m4_t op1, uint64_t op2,
    size_t vl);
vuint64m8_t vremu_vv_u64m8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vuint64m8_t vremu_vx_u64m8 (vuint64m8_t op1, uint64_t op2,
    size_t vl);
// masked functions
vint8mf8_t vdiv_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vint8mf8_t vdiv_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vdiv_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint8mf4_t vdiv_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vdiv_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint8mf2_t vdiv_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vdiv_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vdiv_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vdiv_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vdiv_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vdiv_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vdiv_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vdiv_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vdiv_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vdiv_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vint16mf4_t vdiv_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
```

630

```
vint16mf2_t vdiv_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vint16mf2_t vdiv_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vint16m1_t vdiv_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vint16m1_t vdiv_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vint16m2_t vdiv_vv_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, vint16m2_t op2, size_t vl);
vint16m2_t vdiv_vx_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, int16_t op2, size_t vl);
vint16m4_t vdiv_vv_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, vint16m4_t op2, size_t vl);
vint16m4_t vdiv_vx_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, int16_t op2, size_t vl);
vint16m8_t vdiv_vv_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, vint16m8_t op2, size_t vl);
vint16m8_t vdiv_vx_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, int16_t op2, size_t vl);
vint32mf2_t vdiv_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vint32mf2_t vdiv_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vint32m1_t vdiv_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vint32m1_t vdiv_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vint32m2_t vdiv_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vint32m2_t vdiv_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vint32m4_t vdiv_vv_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, vint32m4_t op2, size_t vl);
vint32m4_t vdiv_vx_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, int32_t op2, size_t vl);
vint32m8_t vdiv_vv_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, vint32m8_t op2, size_t vl);
vint32m8_t vdiv_vx_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, int32_t op2, size_t vl);
vint64m1_t vdiv_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vint64m1_t vdiv_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vint64m2_t vdiv_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
```

```
vint64m2_t vdiv_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vint64m4_t vdiv_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vint64m4_t vdiv_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vint64m8_t vdiv_vv_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, vint64m8_t op2, size_t vl);
vint64m8_t vdiv_vx_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, int64_t op2, size_t vl);
vuint8mf8_t vdivu_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vuint8mf8_t vdivu_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vuint8mf4_t vdivu_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vuint8mf4_t vdivu_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vuint8mf2_t vdivu_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vuint8mf2_t vdivu_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vuint8m1_t vdivu_vv_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vuint8m1_t vdivu_vx_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vdivu_vv_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vuint8m2_t vdivu_vx_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vdivu_vv_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vuint8m4_t vdivu_vx_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vdivu_vv_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vuint8m8_t vdivu_vx_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vdivu_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vuint16mf4_t vdivu_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vuint16mf2_t vdivu_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vuint16mf2_t vdivu_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
```

```
vuint16m1_t vdivu_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vuint16m1_t vdivu_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vuint16m2_t vdivu_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vuint16m2_t vdivu_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vuint16m4_t vdivu_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vuint16m4_t vdivu_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vuint16m8_t vdivu_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vuint16m8_t vdivu_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vuint32mf2_t vdivu_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vuint32mf2_t vdivu_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vuint32m1_t vdivu_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vuint32m1_t vdivu_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vuint32m2_t vdivu_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vuint32m2_t vdivu_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vuint32m4_t vdivu_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vuint32m4_t vdivu_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vuint32m8_t vdivu_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vuint32m8_t vdivu_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vuint64m1_t vdivu_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vuint64m1_t vdivu_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
vuint64m2_t vdivu_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vuint64m2_t vdivu_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vuint64m4_t vdivu_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
```

```
vuint64m4_t vdivu_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vuint64m8_t vdivu_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vuint64m8_t vdivu_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
vint8mf8_t vrem_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vint8mf8_t vrem_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vrem_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint8mf4_t vrem_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vrem_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint8mf2_t vrem_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vrem_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vrem_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vrem_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vrem_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vrem_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vrem_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vrem_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vrem_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vrem_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vint16mf4_t vrem_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vint16mf2_t vrem_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vint16mf2_t vrem_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vint16m1_t vrem_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vint16m1_t vrem_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
```

```
vint16m2_t vrem_vv_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, vint16m2_t op2, size_t vl);
vint16m2_t vrem_vx_i16m2_m (vbool8_t mask, vint16m2_t maskedoff,
    vint16m2_t op1, int16_t op2, size_t vl);
vint16m4_t vrem_vv_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, vint16m4_t op2, size_t vl);
vint16m4_t vrem_vx_i16m4_m (vbool4_t mask, vint16m4_t maskedoff,
    vint16m4_t op1, int16_t op2, size_t vl);
vint16m8_t vrem_vv_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, vint16m8_t op2, size_t vl);
vint16m8_t vrem_vx_i16m8_m (vbool2_t mask, vint16m8_t maskedoff,
    vint16m8_t op1, int16_t op2, size_t vl);
vint32mf2_t vrem_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vint32mf2_t vrem_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vint32m1_t vrem_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vint32m1_t vrem_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vint32m2_t vrem_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vint32m2_t vrem_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vint32m4_t vrem_vv_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, vint32m4_t op2, size_t vl);
vint32m4_t vrem_vx_i32m4_m (vbool8_t mask, vint32m4_t maskedoff,
    vint32m4_t op1, int32_t op2, size_t vl);
vint32m8_t vrem_vv_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, vint32m8_t op2, size_t vl);
vint32m8_t vrem_vx_i32m8_m (vbool4_t mask, vint32m8_t maskedoff,
    vint32m8_t op1, int32_t op2, size_t vl);
vint64m1_t vrem_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vint64m1_t vrem_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vint64m2_t vrem_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vint64m2_t vrem_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vint64m4_t vrem_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vint64m4_t vrem_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vint64m8_t vrem_vv_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, vint64m8_t op2, size_t vl);
```

```
vint64m8_t vrem_vx_i64m8_m (vbool8_t mask, vint64m8_t maskedoff,
    vint64m8_t op1, int64_t op2, size_t vl);
vuint8mf8_t vremu_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vuint8mf8_t vremu_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vuint8mf4_t vremu_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vuint8mf4_t vremu_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vuint8mf2_t vremu_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vuint8mf2_t vremu_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vuint8m1_t vremu_vv_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vuint8m1_t vremu_vx_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vremu_vv_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vuint8m2_t vremu_vx_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vremu_vv_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vuint8m4_t vremu_vx_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vremu_vv_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vuint8m8_t vremu_vx_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vremu_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vuint16mf4_t vremu_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vuint16mf2_t vremu_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vuint16mf2_t vremu_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vuint16m1_t vremu_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vuint16m1_t vremu_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vuint16m2_t vremu_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vuint16m2_t vremu_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
```

```
vuint16m4_t vremu_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vuint16m4_t vremu_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vuint16m8_t vremu_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vuint16m8_t vremu_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vuint32mf2_t vremu_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vuint32mf2_t vremu_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vuint32m1_t vremu_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vuint32m1_t vremu_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vuint32m2_t vremu_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vuint32m2_t vremu_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vuint32m4_t vremu_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vuint32m4_t vremu_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vuint32m8_t vremu_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vuint32m8_t vremu_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vuint64m1_t vremu_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vuint64m1_t vremu_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
vuint64m2_t vremu_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vuint64m2_t vremu_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vuint64m4_t vremu_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vuint64m4_t vremu_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vuint64m8_t vremu_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vuint64m8_t vremu_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
```

Vector Widening Integer Multiply Functions:

Prototypes:

```
vint16mf4_t vwmul_vv_i16mf4 (vint8mf8_t op1, vint8mf8_t op2,
    size_t vl);
vint16mf4_t vwmul_vx_i16mf4 (vint8mf8_t op1, int8_t op2, size_t
    vl);
vint16mf2_t vwmul_vv_i16mf2 (vint8mf4_t op1, vint8mf4_t op2,
    size_t vl);
vint16mf2_t vwmul_vx_i16mf2 (vint8mf4_t op1, int8_t op2, size_t
    vl);
vint16m1_t vwmul_vv_i16m1 (vint8mf2_t op1, vint8mf2_t op2,
    size_t vl);
vint16m1_t vwmul_vx_i16m1 (vint8mf2_t op1, int8_t op2, size_t
    vl);
vint16m2_t vwmul_vv_i16m2 (vint8m1_t op1, vint8m1_t op2, size_t
    vl);
vint16m2_t vwmul_vx_i16m2 (vint8m1_t op1, int8_t op2, size_t vl);
vint16m4_t vwmul_vv_i16m4 (vint8m2_t op1, vint8m2_t op2, size_t
    vl);
vint16m4_t vwmul_vx_i16m4 (vint8m2_t op1, int8_t op2, size_t vl);
vint16m8_t vwmul_vv_i16m8 (vint8m4_t op1, vint8m4_t op2, size_t
    vl);
vint16m8_t vwmul_vx_i16m8 (vint8m4_t op1, int8_t op2, size_t vl);
vint32mf2_t vwmul_vv_i32mf2 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vint32mf2_t vwmul_vx_i32mf2 (vint16mf4_t op1, int16_t op2,
    size_t vl);
vint32m1_t vwmul_vv_i32m1 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vint32m1_t vwmul_vx_i32m1 (vint16mf2_t op1, int16_t op2, size_t
    vl);
vint32m2_t vwmul_vv_i32m2 (vint16m1_t op1, vint16m1_t op2,
    size_t vl);
vint32m2_t vwmul_vx_i32m2 (vint16m1_t op1, int16_t op2, size_t
    vl);
vint32m4_t vwmul_vv_i32m4 (vint16m2_t op1, vint16m2_t op2,
    size_t vl);
vint32m4_t vwmul_vx_i32m4 (vint16m2_t op1, int16_t op2, size_t
    vl);
vint32m8_t vwmul_vv_i32m8 (vint16m4_t op1, vint16m4_t op2,
    size_t vl);
vint32m8_t vwmul_vx_i32m8 (vint16m4_t op1, int16_t op2, size_t
    vl);
vint64m1_t vwmul_vv_i64m1 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
```

```
vint64m1_t vwmul_vx_i64m1 (vint32mf2_t op1, int32_t op2, size_t
    vl);
vint64m2_t vwmul_vv_i64m2 (vint32m1_t op1, vint32m1_t op2,
    size_t vl);
vint64m2_t vwmul_vx_i64m2 (vint32m1_t op1, int32_t op2, size_t
    vl);
vint64m4_t vwmul_vv_i64m4 (vint32m2_t op1, vint32m2_t op2,
    size_t vl);
vint64m4_t vwmul_vx_i64m4 (vint32m2_t op1, int32_t op2, size_t
    vl);
vint64m8_t vwmul_vv_i64m8 (vint32m4_t op1, vint32m4_t op2,
    size_t vl);
vint64m8_t vwmul_vx_i64m8 (vint32m4_t op1, int32_t op2, size_t
    vl);
vuint16mf4_t vwmulu_vv_u16mf4 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vuint16mf4_t vwmulu_vx_u16mf4 (vuint8mf8_t op1, uint8_t op2,
    size_t vl);
vuint16mf2_t vwmulu_vv_u16mf2 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vuint16mf2_t vwmulu_vx_u16mf2 (vuint8mf4_t op1, uint8_t op2,
    size_t vl);
vuint16m1_t vwmulu_vv_u16m1 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vuint16m1_t vwmulu_vx_u16m1 (vuint8mf2_t op1, uint8_t op2,
    size_t vl);
vuint16m2_t vwmulu_vv_u16m2 (vuint8m1_t op1, vuint8m1_t op2,
    size_t vl);
vuint16m2_t vwmulu_vx_u16m2 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vuint16m4_t vwmulu_vv_u16m4 (vuint8m2_t op1, vuint8m2_t op2,
    size_t vl);
vuint16m4_t vwmulu_vx_u16m4 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vuint16m8_t vwmulu_vv_u16m8 (vuint8m4_t op1, vuint8m4_t op2,
    size_t vl);
vuint16m8_t vwmulu_vx_u16m8 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
vuint32mf2_t vwmulu_vv_u32mf2 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vuint32mf2_t vwmulu_vx_u32mf2 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vuint32m1_t vwmulu_vv_u32m1 (vuint16mf2_t op1, vuint16mf2_t op2,
    size_t vl);
vuint32m1_t vwmulu_vx_u32m1 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
```

```
vuint32m2_t vwmulu_vv_u32m2 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vuint32m2_t vwmulu_vx_u32m2 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vuint32m4_t vwmulu_vv_u32m4 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vuint32m4_t vwmulu_vx_u32m4 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vuint32m8_t vwmulu_vv_u32m8 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vuint32m8_t vwmulu_vx_u32m8 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
vuint64m1_t vwmulu_vv_u64m1 (vuint32mf2_t op1, vuint32mf2_t op2,
    size_t vl);
vuint64m1_t vwmulu_vx_u64m1 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vuint64m2_t vwmulu_vv_u64m2 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vuint64m2_t vwmulu_vx_u64m2 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vuint64m4_t vwmulu_vv_u64m4 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vuint64m4_t vwmulu_vx_u64m4 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vuint64m8_t vwmulu_vv_u64m8 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vuint64m8_t vwmulu_vx_u64m8 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
vint16mf4_t vwmulsu_vv_i16mf4 (vint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vint16mf4_t vwmulsu_vx_i16mf4 (vint8mf8_t op1, uint8_t op2,
    size_t vl);
vint16mf2_t vwmulsu_vv_i16mf2 (vint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vint16mf2_t vwmulsu_vx_i16mf2 (vint8mf4_t op1, uint8_t op2,
    size_t vl);
vint16m1_t vwmulsu_vv_i16m1 (vint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vint16m1_t vwmulsu_vx_i16m1 (vint8mf2_t op1, uint8_t op2, size_t
    vl);
vint16m2_t vwmulsu_vv_i16m2 (vint8m1_t op1, vuint8m1_t op2,
    size_t vl);
vint16m2_t vwmulsu_vx_i16m2 (vint8m1_t op1, uint8_t op2, size_t
    vl);
vint16m4_t vwmulsu_vv_i16m4 (vint8m2_t op1, vuint8m2_t op2,
    size_t vl);
```

```
vint16m4_t vwmulsu_vx_i16m4 (vint8m2_t op1, uint8_t op2, size_t
    vl);
vint16m8_t vwmulsu_vv_i16m8 (vint8m4_t op1, vuint8m4_t op2,
    size_t vl);
vint16m8_t vwmulsu_vx_i16m8 (vint8m4_t op1, uint8_t op2, size_t
    vl);
vint32mf2_t vwmulsu_vv_i32mf2 (vint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vint32mf2_t vwmulsu_vx_i32mf2 (vint16mf4_t op1, uint16_t op2,
    size_t vl);
vint32m1_t vwmulsu_vv_i32m1 (vint16mf2_t op1, vuint16mf2_t op2,
    size_t vl);
vint32m1_t vwmulsu_vx_i32m1 (vint16mf2_t op1, uint16_t op2,
    size_t vl);
vint32m2_t vwmulsu_vv_i32m2 (vint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vint32m2_t vwmulsu_vx_i32m2 (vint16m1_t op1, uint16_t op2,
    size_t vl);
vint32m4_t vwmulsu_vv_i32m4 (vint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vint32m4_t vwmulsu_vx_i32m4 (vint16m2_t op1, uint16_t op2,
    size_t vl);
vint32m8_t vwmulsu_vv_i32m8 (vint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vint32m8_t vwmulsu_vx_i32m8 (vint16m4_t op1, uint16_t op2,
    size_t vl);
vint64m1_t vwmulsu_vv_i64m1 (vint32mf2_t op1, vuint32mf2_t op2,
    size_t vl);
vint64m1_t vwmulsu_vx_i64m1 (vint32mf2_t op1, uint32_t op2,
    size_t vl);
vint64m2_t vwmulsu_vv_i64m2 (vint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vint64m2_t vwmulsu_vx_i64m2 (vint32m1_t op1, uint32_t op2,
    size_t vl);
vint64m4_t vwmulsu_vv_i64m4 (vint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vint64m4_t vwmulsu_vx_i64m4 (vint32m2_t op1, uint32_t op2,
    size_t vl);
vint64m8_t vwmulsu_vv_i64m8 (vint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vint64m8_t vwmulsu_vx_i64m8 (vint32m4_t op1, uint32_t op2,
    size_t vl);
// masked functions
vint16mf4_t vwmul_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
```

```
vint16mf4_t vwmul_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vint16mf2_t vwmul_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint16mf2_t vwmul_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vint16m1_t vwmul_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint16m1_t vwmul_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vint16m2_t vwmul_vv_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint8m1_t op1, vint8m1_t op2, size_t vl);
vint16m2_t vwmul_vx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint8m1_t op1, int8_t op2, size_t vl);
vint16m4_t vwmul_vv_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint8m2_t op1, vint8m2_t op2, size_t vl);
vint16m4_t vwmul_vx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint8m2_t op1, int8_t op2, size_t vl);
vint16m8_t vwmul_vv_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint8m4_t op1, vint8m4_t op2, size_t vl);
vint16m8_t vwmul_vx_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint8m4_t op1, int8_t op2, size_t vl);
vint32mf2_t vwmul_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vint32mf2_t vwmul_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vint32m1_t vwmul_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vint32m1_t vwmul_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vint32m2_t vwmul_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vint32m2_t vwmul_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vint32m4_t vwmul_vv_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint16m2_t op1, vint16m2_t op2, size_t vl);
vint32m4_t vwmul_vx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint16m2_t op1, int16_t op2, size_t vl);
vint32m8_t vwmul_vv_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint16m4_t op1, vint16m4_t op2, size_t vl);
vint32m8_t vwmul_vx_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint16m4_t op1, int16_t op2, size_t vl);
vint64m1_t vwmul_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vint64m1_t vwmul_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
```

```
vint64m2_t vwmul_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vint64m2_t vwmul_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vint64m4_t vwmul_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vint64m4_t vwmul_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vint64m8_t vwmul_vv_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint32m4_t op1, vint32m4_t op2, size_t vl);
vint64m8_t vwmul_vx_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint32m4_t op1, int32_t op2, size_t vl);
vuint16mf4_t vwmulu_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vuint16mf4_t vwmulu_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vuint16mf2_t vwmulu_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vuint16mf2_t vwmulu_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vuint16m1_t vwmulu_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vuint16m1_t vwmulu_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vuint16m2_t vwmulu_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vuint16m2_t vwmulu_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint8m1_t op1, uint8_t op2, size_t vl);
vuint16m4_t vwmulu_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vuint16m4_t vwmulu_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint8m2_t op1, uint8_t op2, size_t vl);
vuint16m8_t vwmulu_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vuint16m8_t vwmulu_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint8m4_t op1, uint8_t op2, size_t vl);
vuint32mf2_t vwmulu_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vuint32mf2_t vwmulu_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vuint32m1_t vwmulu_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vuint32m1_t vwmulu_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vuint32m2_t vwmulu_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
```

```
vuint32m2_t vwmulu_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vuint32m4_t vwmulu_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vuint32m4_t vwmulu_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vuint32m8_t vwmulu_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vuint32m8_t vwmulu_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vuint64m1_t vwmulu_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vuint64m1_t vwmulu_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vuint64m2_t vwmulu_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vuint64m2_t vwmulu_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vuint64m4_t vwmulu_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vuint64m4_t vwmulu_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vuint64m8_t vwmulu_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vuint64m8_t vwmulu_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vint16mf4_t vwmulsu_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vint16mf4_t vwmulsu_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint8mf8_t op1, uint8_t op2, size_t vl);
vint16mf2_t vwmulsu_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vint16mf2_t vwmulsu_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint8mf4_t op1, uint8_t op2, size_t vl);
vint16m1_t vwmulsu_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vint16m1_t vwmulsu_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint8mf2_t op1, uint8_t op2, size_t vl);
vint16m2_t vwmulsu_vv_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint8m1_t op1, vuint8m1_t op2, size_t vl);
vint16m2_t vwmulsu_vx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint8m1_t op1, uint8_t op2, size_t vl);
vint16m4_t vwmulsu_vv_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint8m2_t op1, vuint8m2_t op2, size_t vl);
vint16m4_t vwmulsu_vx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint8m2_t op1, uint8_t op2, size_t vl);
```

```
vint16m8_t vwmulsu_vv_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint8m4_t op1, vuint8m4_t op2, size_t vl);
vint16m8_t vwmulsu_vx_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint8m4_t op1, uint8_t op2, size_t vl);
vint32mf2_t vwmulsu_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vint32mf2_t vwmulsu_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint16mf4_t op1, uint16_t op2, size_t vl);
vint32m1_t vwmulsu_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vint32m1_t vwmulsu_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint16mf2_t op1, uint16_t op2, size_t vl);
vint32m2_t vwmulsu_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint16m1_t op1, vuint16m1_t op2, size_t vl);
vint32m2_t vwmulsu_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint16m1_t op1, uint16_t op2, size_t vl);
vint32m4_t vwmulsu_vv_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint16m2_t op1, vuint16m2_t op2, size_t vl);
vint32m4_t vwmulsu_vx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint16m2_t op1, uint16_t op2, size_t vl);
vint32m8_t vwmulsu_vv_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint16m4_t op1, vuint16m4_t op2, size_t vl);
vint32m8_t vwmulsu_vx_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint16m4_t op1, uint16_t op2, size_t vl);
vint64m1_t vwmulsu_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vint64m1_t vwmulsu_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint32mf2_t op1, uint32_t op2, size_t vl);
vint64m2_t vwmulsu_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint32m1_t op1, vuint32m1_t op2, size_t vl);
vint64m2_t vwmulsu_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint32m1_t op1, uint32_t op2, size_t vl);
vint64m4_t vwmulsu_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint32m2_t op1, vuint32m2_t op2, size_t vl);
vint64m4_t vwmulsu_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint32m2_t op1, uint32_t op2, size_t vl);
vint64m8_t vwmulsu_vv_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint32m4_t op1, vuint32m4_t op2, size_t vl);
vint64m8_t vwmulsu_vx_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint32m4_t op1, uint32_t op2, size_t vl);
```

Vector Single-Width Integer Multiply-Add Functions:

Prototypes:

```
vint8mf8_t vmacc_vv_i8mf8 (vint8mf8_t vd, vint8mf8_t vs1,
    vint8mf8_t vs2, size_t vl);
vint8mf8_t vmacc_vx_i8mf8 (vint8mf8_t vd, int8_t rs1, vint8mf8_t
    vs2, size_t vl);
vint8mf4_t vmacc_vv_i8mf4 (vint8mf4_t vd, vint8mf4_t vs1,
    vint8mf4_t vs2, size_t vl);
vint8mf4_t vmacc_vx_i8mf4 (vint8mf4_t vd, int8_t rs1, vint8mf4_t
    vs2, size_t vl);
vint8mf2_t vmacc_vv_i8mf2 (vint8mf2_t vd, vint8mf2_t vs1,
    vint8mf2_t vs2, size_t vl);
vint8mf2_t vmacc_vx_i8mf2 (vint8mf2_t vd, int8_t rs1, vint8mf2_t
    vs2, size_t vl);
vint8m1_t vmacc_vv_i8m1 (vint8m1_t vd, vint8m1_t vs1, vint8m1_t
    vs2, size_t vl);
vint8m1_t vmacc_vx_i8m1 (vint8m1_t vd, int8_t rs1, vint8m1_t
    vs2, size_t vl);
vint8m2_t vmacc_vv_i8m2 (vint8m2_t vd, vint8m2_t vs1, vint8m2_t
    vs2, size_t vl);
vint8m2_t vmacc_vx_i8m2 (vint8m2_t vd, int8_t rs1, vint8m2_t
    vs2, size_t vl);
vint8m4_t vmacc_vv_i8m4 (vint8m4_t vd, vint8m4_t vs1, vint8m4_t
    vs2, size_t vl);
vint8m4_t vmacc_vx_i8m4 (vint8m4_t vd, int8_t rs1, vint8m4_t
    vs2, size_t vl);
vint8m8_t vmacc_vv_i8m8 (vint8m8_t vd, vint8m8_t vs1, vint8m8_t
    vs2, size_t vl);
vint8m8_t vmacc_vx_i8m8 (vint8m8_t vd, int8_t rs1, vint8m8_t
    vs2, size_t vl);
vint16mf4_t vmacc_vv_i16mf4 (vint16mf4_t vd, vint16mf4_t vs1,
    vint16mf4_t vs2, size_t vl);
vint16mf4_t vmacc_vx_i16mf4 (vint16mf4_t vd, int16_t rs1,
    vint16mf4_t vs2, size_t vl);
vint16mf2_t vmacc_vv_i16mf2 (vint16mf2_t vd, vint16mf2_t vs1,
    vint16mf2_t vs2, size_t vl);
vint16mf2_t vmacc_vx_i16mf2 (vint16mf2_t vd, int16_t rs1,
    vint16mf2_t vs2, size_t vl);
vint16m1_t vmacc_vv_i16m1 (vint16m1_t vd, vint16m1_t vs1,
    vint16m1_t vs2, size_t vl);
vint16m1_t vmacc_vx_i16m1 (vint16m1_t vd, int16_t rs1,
    vint16m1_t vs2, size_t vl);
vint16m2_t vmacc_vv_i16m2 (vint16m2_t vd, vint16m2_t vs1,
    vint16m2_t vs2, size_t vl);
vint16m2_t vmacc_vx_i16m2 (vint16m2_t vd, int16_t rs1,
    vint16m2_t vs2, size_t vl);
vint16m4_t vmacc_vv_i16m4 (vint16m4_t vd, vint16m4_t vs1,
    vint16m4_t vs2, size_t vl);
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646

```
vint16m4_t vmacc_vx_i16m4 (vint16m4_t vd, int16_t rs1,
    vint16m4_t vs2, size_t vl);
vint16m8_t vmacc_vv_i16m8 (vint16m8_t vd, vint16m8_t vs1,
    vint16m8_t vs2, size_t vl);
vint16m8_t vmacc_vx_i16m8 (vint16m8_t vd, int16_t rs1,
    vint16m8_t vs2, size_t vl);
vint32mf2_t vmacc_vv_i32mf2 (vint32mf2_t vd, vint32mf2_t vs1,
    vint32mf2_t vs2, size_t vl);
vint32mf2_t vmacc_vx_i32mf2 (vint32mf2_t vd, int32_t rs1,
    vint32mf2_t vs2, size_t vl);
vint32m1_t vmacc_vv_i32m1 (vint32m1_t vd, vint32m1_t vs1,
    vint32m1_t vs2, size_t vl);
vint32m1_t vmacc_vx_i32m1 (vint32m1_t vd, int32_t rs1,
    vint32m1_t vs2, size_t vl);
vint32m2_t vmacc_vv_i32m2 (vint32m2_t vd, vint32m2_t vs1,
    vint32m2_t vs2, size_t vl);
vint32m2_t vmacc_vx_i32m2 (vint32m2_t vd, int32_t rs1,
    vint32m2_t vs2, size_t vl);
vint32m4_t vmacc_vv_i32m4 (vint32m4_t vd, vint32m4_t vs1,
    vint32m4_t vs2, size_t vl);
vint32m4_t vmacc_vx_i32m4 (vint32m4_t vd, int32_t rs1,
    vint32m4_t vs2, size_t vl);
vint32m8_t vmacc_vv_i32m8 (vint32m8_t vd, vint32m8_t vs1,
    vint32m8_t vs2, size_t vl);
vint32m8_t vmacc_vx_i32m8 (vint32m8_t vd, int32_t rs1,
    vint32m8_t vs2, size_t vl);
vint64m1_t vmacc_vv_i64m1 (vint64m1_t vd, vint64m1_t vs1,
    vint64m1_t vs2, size_t vl);
vint64m1_t vmacc_vx_i64m1 (vint64m1_t vd, int64_t rs1,
    vint64m1_t vs2, size_t vl);
vint64m2_t vmacc_vv_i64m2 (vint64m2_t vd, vint64m2_t vs1,
    vint64m2_t vs2, size_t vl);
vint64m2_t vmacc_vx_i64m2 (vint64m2_t vd, int64_t rs1,
    vint64m2_t vs2, size_t vl);
vint64m4_t vmacc_vv_i64m4 (vint64m4_t vd, vint64m4_t vs1,
    vint64m4_t vs2, size_t vl);
vint64m4_t vmacc_vx_i64m4 (vint64m4_t vd, int64_t rs1,
    vint64m4_t vs2, size_t vl);
vint64m8_t vmacc_vv_i64m8 (vint64m8_t vd, vint64m8_t vs1,
    vint64m8_t vs2, size_t vl);
vint64m8_t vmacc_vx_i64m8 (vint64m8_t vd, int64_t rs1,
    vint64m8_t vs2, size_t vl);
vuint8mf8_t vmacc_vv_u8mf8 (vuint8mf8_t vd, vuint8mf8_t vs1,
    vuint8mf8_t vs2, size_t vl);
vuint8mf8_t vmacc_vx_u8mf8 (vuint8mf8_t vd, uint8_t rs1,
    vuint8mf8_t vs2, size_t vl);
```

```
vuint8mf4_t vmacc_vv_u8mf4 (vuint8mf4_t vd, vuint8mf4_t vs1,
    vuint8mf4_t vs2, size_t vl);
vuint8mf4_t vmacc_vx_u8mf4 (vuint8mf4_t vd, uint8_t rs1,
    vuint8mf4_t vs2, size_t vl);
vuint8mf2_t vmacc_vv_u8mf2 (vuint8mf2_t vd, vuint8mf2_t vs1,
    vuint8mf2_t vs2, size_t vl);
vuint8mf2_t vmacc_vx_u8mf2 (vuint8mf2_t vd, uint8_t rs1,
    vuint8mf2_t vs2, size_t vl);
vuint8m1_t vmacc_vv_u8m1 (vuint8m1_t vd, vuint8m1_t vs1,
    vuint8m1_t vs2, size_t vl);
vuint8m1_t vmacc_vx_u8m1 (vuint8m1_t vd, uint8_t rs1, vuint8m1_t
    vs2, size_t vl);
vuint8m2_t vmacc_vv_u8m2 (vuint8m2_t vd, vuint8m2_t vs1,
    vuint8m2_t vs2, size_t vl);
vuint8m2_t vmacc_vx_u8m2 (vuint8m2_t vd, uint8_t rs1, vuint8m2_t
    vs2, size_t vl);
vuint8m4_t vmacc_vv_u8m4 (vuint8m4_t vd, vuint8m4_t vs1,
    vuint8m4_t vs2, size_t vl);
vuint8m4_t vmacc_vx_u8m4 (vuint8m4_t vd, uint8_t rs1, vuint8m4_t
    vs2, size_t vl);
vuint8m8_t vmacc_vv_u8m8 (vuint8m8_t vd, vuint8m8_t vs1,
    vuint8m8_t vs2, size_t vl);
vuint8m8_t vmacc_vx_u8m8 (vuint8m8_t vd, uint8_t rs1, vuint8m8_t
    vs2, size_t vl);
vuint16mf4_t vmacc_vv_u16mf4 (vuint16mf4_t vd, vuint16mf4_t vs1,
    vuint16mf4_t vs2, size_t vl);
vuint16mf4_t vmacc_vx_u16mf4 (vuint16mf4_t vd, uint16_t rs1,
    vuint16mf4_t vs2, size_t vl);
vuint16mf2_t vmacc_vv_u16mf2 (vuint16mf2_t vd, vuint16mf2_t vs1,
    vuint16mf2_t vs2, size_t vl);
vuint16mf2_t vmacc_vx_u16mf2 (vuint16mf2_t vd, uint16_t rs1,
    vuint16mf2_t vs2, size_t vl);
vuint16m1_t vmacc_vv_u16m1 (vuint16m1_t vd, vuint16m1_t vs1,
    vuint16m1_t vs2, size_t vl);
vuint16m1_t vmacc_vx_u16m1 (vuint16m1_t vd, uint16_t rs1,
    vuint16m1_t vs2, size_t vl);
vuint16m2_t vmacc_vv_u16m2 (vuint16m2_t vd, vuint16m2_t vs1,
    vuint16m2_t vs2, size_t vl);
vuint16m2_t vmacc_vx_u16m2 (vuint16m2_t vd, uint16_t rs1,
    vuint16m2_t vs2, size_t vl);
vuint16m4_t vmacc_vv_u16m4 (vuint16m4_t vd, vuint16m4_t vs1,
    vuint16m4_t vs2, size_t vl);
vuint16m4_t vmacc_vx_u16m4 (vuint16m4_t vd, uint16_t rs1,
    vuint16m4_t vs2, size_t vl);
vuint16m8_t vmacc_vv_u16m8 (vuint16m8_t vd, vuint16m8_t vs1,
    vuint16m8_t vs2, size_t vl);
```

```
vuint16m8_t vmacc_vx_u16m8 (vuint16m8_t vd, uint16_t rs1,
    vuint16m8_t vs2, size_t vl);
vuint32mf2_t vmacc_vv_u32mf2 (vuint32mf2_t vd, vuint32mf2_t vs1,
    vuint32mf2_t vs2, size_t vl);
vuint32mf2_t vmacc_vx_u32mf2 (vuint32mf2_t vd, uint32_t rs1,
    vuint32mf2_t vs2, size_t vl);
vuint32m1_t vmacc_vv_u32m1 (vuint32m1_t vd, vuint32m1_t vs1,
    vuint32m1_t vs2, size_t vl);
vuint32m1_t vmacc_vx_u32m1 (vuint32m1_t vd, uint32_t rs1,
    vuint32m1_t vs2, size_t vl);
vuint32m2_t vmacc_vv_u32m2 (vuint32m2_t vd, vuint32m2_t vs1,
    vuint32m2_t vs2, size_t vl);
vuint32m2_t vmacc_vx_u32m2 (vuint32m2_t vd, uint32_t rs1,
    vuint32m2_t vs2, size_t vl);
vuint32m4_t vmacc_vv_u32m4 (vuint32m4_t vd, vuint32m4_t vs1,
    vuint32m4_t vs2, size_t vl);
vuint32m4_t vmacc_vx_u32m4 (vuint32m4_t vd, uint32_t rs1,
    vuint32m4_t vs2, size_t vl);
vuint32m8_t vmacc_vv_u32m8 (vuint32m8_t vd, vuint32m8_t vs1,
    vuint32m8_t vs2, size_t vl);
vuint32m8_t vmacc_vx_u32m8 (vuint32m8_t vd, uint32_t rs1,
    vuint32m8_t vs2, size_t vl);
vuint64m1_t vmacc_vv_u64m1 (vuint64m1_t vd, vuint64m1_t vs1,
    vuint64m1_t vs2, size_t vl);
vuint64m1_t vmacc_vx_u64m1 (vuint64m1_t vd, uint64_t rs1,
    vuint64m1_t vs2, size_t vl);
vuint64m2_t vmacc_vv_u64m2 (vuint64m2_t vd, vuint64m2_t vs1,
    vuint64m2_t vs2, size_t vl);
vuint64m2_t vmacc_vx_u64m2 (vuint64m2_t vd, uint64_t rs1,
    vuint64m2_t vs2, size_t vl);
vuint64m4_t vmacc_vv_u64m4 (vuint64m4_t vd, vuint64m4_t vs1,
    vuint64m4_t vs2, size_t vl);
vuint64m4_t vmacc_vx_u64m4 (vuint64m4_t vd, uint64_t rs1,
    vuint64m4_t vs2, size_t vl);
vuint64m8_t vmacc_vv_u64m8 (vuint64m8_t vd, vuint64m8_t vs1,
    vuint64m8_t vs2, size_t vl);
vuint64m8_t vmacc_vx_u64m8 (vuint64m8_t vd, uint64_t rs1,
    vuint64m8_t vs2, size_t vl);
vint8mf8_t vnmsac_vv_i8mf8 (vint8mf8_t vd, vint8mf8_t vs1,
    vint8mf8_t vs2, size_t vl);
vint8mf8_t vnmsac_vx_i8mf8 (vint8mf8_t vd, int8_t rs1,
    vint8mf8_t vs2, size_t vl);
vint8mf4_t vnmsac_vv_i8mf4 (vint8mf4_t vd, vint8mf4_t vs1,
    vint8mf4_t vs2, size_t vl);
vint8mf4_t vnmsac_vx_i8mf4 (vint8mf4_t vd, int8_t rs1,
    vint8mf4_t vs2, size_t vl);
```

```
vint8mf2_t vnmsac_vv_i8mf2 (vint8mf2_t vd, vint8mf2_t vs1,
    vint8mf2_t vs2, size_t vl);
vint8mf2_t vnmsac_vx_i8mf2 (vint8mf2_t vd, int8_t rs1,
    vint8mf2_t vs2, size_t vl);
vint8m1_t vnmsac_vv_i8m1 (vint8m1_t vd, vint8m1_t vs1, vint8m1_t
    vs2, size_t vl);
vint8m1_t vnmsac_vx_i8m1 (vint8m1_t vd, int8_t rs1, vint8m1_t
    vs2, size_t vl);
vint8m2_t vnmsac_vv_i8m2 (vint8m2_t vd, vint8m2_t vs1, vint8m2_t
    vs2, size_t vl);
vint8m2_t vnmsac_vx_i8m2 (vint8m2_t vd, int8_t rs1, vint8m2_t
    vs2, size_t vl);
vint8m4_t vnmsac_vv_i8m4 (vint8m4_t vd, vint8m4_t vs1, vint8m4_t
    vs2, size_t vl);
vint8m4_t vnmsac_vx_i8m4 (vint8m4_t vd, int8_t rs1, vint8m4_t
    vs2, size_t vl);
vint8m8_t vnmsac_vv_i8m8 (vint8m8_t vd, vint8m8_t vs1, vint8m8_t
    vs2, size_t vl);
vint8m8_t vnmsac_vx_i8m8 (vint8m8_t vd, int8_t rs1, vint8m8_t
    vs2, size_t vl);
vint16mf4_t vnmsac_vv_i16mf4 (vint16mf4_t vd, vint16mf4_t vs1,
    vint16mf4_t vs2, size_t vl);
vint16mf4_t vnmsac_vx_i16mf4 (vint16mf4_t vd, int16_t rs1,
    vint16mf4_t vs2, size_t vl);
vint16mf2_t vnmsac_vv_i16mf2 (vint16mf2_t vd, vint16mf2_t vs1,
    vint16mf2_t vs2, size_t vl);
vint16mf2_t vnmsac_vx_i16mf2 (vint16mf2_t vd, int16_t rs1,
    vint16mf2_t vs2, size_t vl);
vint16m1_t vnmsac_vv_i16m1 (vint16m1_t vd, vint16m1_t vs1,
    vint16m1_t vs2, size_t vl);
vint16m1_t vnmsac_vx_i16m1 (vint16m1_t vd, int16_t rs1,
    vint16m1_t vs2, size_t vl);
vint16m2_t vnmsac_vv_i16m2 (vint16m2_t vd, vint16m2_t vs1,
    vint16m2_t vs2, size_t vl);
vint16m2_t vnmsac_vx_i16m2 (vint16m2_t vd, int16_t rs1,
    vint16m2_t vs2, size_t vl);
vint16m4_t vnmsac_vv_i16m4 (vint16m4_t vd, vint16m4_t vs1,
    vint16m4_t vs2, size_t vl);
vint16m4_t vnmsac_vx_i16m4 (vint16m4_t vd, int16_t rs1,
    vint16m4_t vs2, size_t vl);
vint16m8_t vnmsac_vv_i16m8 (vint16m8_t vd, vint16m8_t vs1,
    vint16m8_t vs2, size_t vl);
vint16m8_t vnmsac_vx_i16m8 (vint16m8_t vd, int16_t rs1,
    vint16m8_t vs2, size_t vl);
vint32mf2_t vnmsac_vv_i32mf2 (vint32mf2_t vd, vint32mf2_t vs1,
    vint32mf2_t vs2, size_t vl);
```

```
vint32mf2_t vnmsac_vx_i32mf2 (vint32mf2_t vd, int32_t rs1,
    vint32mf2_t vs2, size_t vl);
vint32m1_t vnmsac_vv_i32m1 (vint32m1_t vd, vint32m1_t vs1,
    vint32m1_t vs2, size_t vl);
vint32m1_t vnmsac_vx_i32m1 (vint32m1_t vd, int32_t rs1,
    vint32m1_t vs2, size_t vl);
vint32m2_t vnmsac_vv_i32m2 (vint32m2_t vd, vint32m2_t vs1,
    vint32m2_t vs2, size_t vl);
vint32m2_t vnmsac_vx_i32m2 (vint32m2_t vd, int32_t rs1,
    vint32m2_t vs2, size_t vl);
vint32m4_t vnmsac_vv_i32m4 (vint32m4_t vd, vint32m4_t vs1,
    vint32m4_t vs2, size_t vl);
vint32m4_t vnmsac_vx_i32m4 (vint32m4_t vd, int32_t rs1,
    vint32m4_t vs2, size_t vl);
vint32m8_t vnmsac_vv_i32m8 (vint32m8_t vd, vint32m8_t vs1,
    vint32m8_t vs2, size_t vl);
vint32m8_t vnmsac_vx_i32m8 (vint32m8_t vd, int32_t rs1,
    vint32m8_t vs2, size_t vl);
vint64m1_t vnmsac_vv_i64m1 (vint64m1_t vd, vint64m1_t vs1,
    vint64m1_t vs2, size_t vl);
vint64m1_t vnmsac_vx_i64m1 (vint64m1_t vd, int64_t rs1,
    vint64m1_t vs2, size_t vl);
vint64m2_t vnmsac_vv_i64m2 (vint64m2_t vd, vint64m2_t vs1,
    vint64m2_t vs2, size_t vl);
vint64m2_t vnmsac_vx_i64m2 (vint64m2_t vd, int64_t rs1,
    vint64m2_t vs2, size_t vl);
vint64m4_t vnmsac_vv_i64m4 (vint64m4_t vd, vint64m4_t vs1,
    vint64m4_t vs2, size_t vl);
vint64m4_t vnmsac_vx_i64m4 (vint64m4_t vd, int64_t rs1,
    vint64m4_t vs2, size_t vl);
vint64m8_t vnmsac_vv_i64m8 (vint64m8_t vd, vint64m8_t vs1,
    vint64m8_t vs2, size_t vl);
vint64m8_t vnmsac_vx_i64m8 (vint64m8_t vd, int64_t rs1,
    vint64m8_t vs2, size_t vl);
vuint8mf8_t vnmsac_vv_u8mf8 (vuint8mf8_t vd, vuint8mf8_t vs1,
    vuint8mf8_t vs2, size_t vl);
vuint8mf8_t vnmsac_vx_u8mf8 (vuint8mf8_t vd, uint8_t rs1,
    vuint8mf8_t vs2, size_t vl);
vuint8mf4_t vnmsac_vv_u8mf4 (vuint8mf4_t vd, vuint8mf4_t vs1,
    vuint8mf4_t vs2, size_t vl);
vuint8mf4_t vnmsac_vx_u8mf4 (vuint8mf4_t vd, uint8_t rs1,
    vuint8mf4_t vs2, size_t vl);
vuint8mf2_t vnmsac_vv_u8mf2 (vuint8mf2_t vd, vuint8mf2_t vs1,
    vuint8mf2_t vs2, size_t vl);
vuint8mf2_t vnmsac_vx_u8mf2 (vuint8mf2_t vd, uint8_t rs1,
    vuint8mf2_t vs2, size_t vl);
```

```
vuint8m1_t vnmsac_vv_u8m1 (vuint8m1_t vd, vuint8m1_t vs1,
    vuint8m1_t vs2, size_t vl);
vuint8m1_t vnmsac_vx_u8m1 (vuint8m1_t vd, uint8_t rs1,
    vuint8m1_t vs2, size_t vl);
vuint8m2_t vnmsac_vv_u8m2 (vuint8m2_t vd, vuint8m2_t vs1,
    vuint8m2_t vs2, size_t vl);
vuint8m2_t vnmsac_vx_u8m2 (vuint8m2_t vd, uint8_t rs1,
    vuint8m2_t vs2, size_t vl);
vuint8m4_t vnmsac_vv_u8m4 (vuint8m4_t vd, vuint8m4_t vs1,
    vuint8m4_t vs2, size_t vl);
vuint8m4_t vnmsac_vx_u8m4 (vuint8m4_t vd, uint8_t rs1,
    vuint8m4_t vs2, size_t vl);
vuint8m8_t vnmsac_vv_u8m8 (vuint8m8_t vd, vuint8m8_t vs1,
    vuint8m8_t vs2, size_t vl);
vuint8m8_t vnmsac_vx_u8m8 (vuint8m8_t vd, uint8_t rs1,
    vuint8m8_t vs2, size_t vl);
vuint16mf4_t vnmsac_vv_u16mf4 (vuint16mf4_t vd, vuint16mf4_t
    vs1, vuint16mf4_t vs2, size_t vl);
vuint16mf4_t vnmsac_vx_u16mf4 (vuint16mf4_t vd, uint16_t rs1,
    vuint16mf4_t vs2, size_t vl);
vuint16mf2_t vnmsac_vv_u16mf2 (vuint16mf2_t vd, vuint16mf2_t
    vs1, vuint16mf2_t vs2, size_t vl);
vuint16mf2_t vnmsac_vx_u16mf2 (vuint16mf2_t vd, uint16_t rs1,
    vuint16mf2_t vs2, size_t vl);
vuint16m1_t vnmsac_vv_u16m1 (vuint16m1_t vd, vuint16m1_t vs1,
    vuint16m1_t vs2, size_t vl);
vuint16m1_t vnmsac_vx_u16m1 (vuint16m1_t vd, uint16_t rs1,
    vuint16m1_t vs2, size_t vl);
vuint16m2_t vnmsac_vv_u16m2 (vuint16m2_t vd, vuint16m2_t vs1,
    vuint16m2_t vs2, size_t vl);
vuint16m2_t vnmsac_vx_u16m2 (vuint16m2_t vd, uint16_t rs1,
    vuint16m2_t vs2, size_t vl);
vuint16m4_t vnmsac_vv_u16m4 (vuint16m4_t vd, vuint16m4_t vs1,
    vuint16m4_t vs2, size_t vl);
vuint16m4_t vnmsac_vx_u16m4 (vuint16m4_t vd, uint16_t rs1,
    vuint16m4_t vs2, size_t vl);
vuint16m8_t vnmsac_vv_u16m8 (vuint16m8_t vd, vuint16m8_t vs1,
    vuint16m8_t vs2, size_t vl);
vuint16m8_t vnmsac_vx_u16m8 (vuint16m8_t vd, uint16_t rs1,
    vuint16m8_t vs2, size_t vl);
vuint32mf2_t vnmsac_vv_u32mf2 (vuint32mf2_t vd, vuint32mf2_t
    vs1, vuint32mf2_t vs2, size_t vl);
vuint32mf2_t vnmsac_vx_u32mf2 (vuint32mf2_t vd, uint32_t rs1,
    vuint32mf2_t vs2, size_t vl);
vuint32m1_t vnmsac_vv_u32m1 (vuint32m1_t vd, vuint32m1_t vs1,
    vuint32m1_t vs2, size_t vl);
```

```
vuint32m1_t vnmsac_vx_u32m1 (vuint32m1_t vd, uint32_t rs1,
    vuint32m1_t vs2, size_t vl);
vuint32m2_t vnmsac_vv_u32m2 (vuint32m2_t vd, vuint32m2_t vs1,
    vuint32m2_t vs2, size_t vl);
vuint32m2_t vnmsac_vx_u32m2 (vuint32m2_t vd, uint32_t rs1,
    vuint32m2_t vs2, size_t vl);
vuint32m4_t vnmsac_vv_u32m4 (vuint32m4_t vd, vuint32m4_t vs1,
    vuint32m4_t vs2, size_t vl);
vuint32m4_t vnmsac_vx_u32m4 (vuint32m4_t vd, uint32_t rs1,
    vuint32m4_t vs2, size_t vl);
vuint32m8_t vnmsac_vv_u32m8 (vuint32m8_t vd, vuint32m8_t vs1,
    vuint32m8_t vs2, size_t vl);
vuint32m8_t vnmsac_vx_u32m8 (vuint32m8_t vd, uint32_t rs1,
    vuint32m8_t vs2, size_t vl);
vuint64m1_t vnmsac_vv_u64m1 (vuint64m1_t vd, vuint64m1_t vs1,
    vuint64m1_t vs2, size_t vl);
vuint64m1_t vnmsac_vx_u64m1 (vuint64m1_t vd, uint64_t rs1,
    vuint64m1_t vs2, size_t vl);
vuint64m2_t vnmsac_vv_u64m2 (vuint64m2_t vd, vuint64m2_t vs1,
    vuint64m2_t vs2, size_t vl);
vuint64m2_t vnmsac_vx_u64m2 (vuint64m2_t vd, uint64_t rs1,
    vuint64m2_t vs2, size_t vl);
vuint64m4_t vnmsac_vv_u64m4 (vuint64m4_t vd, vuint64m4_t vs1,
    vuint64m4_t vs2, size_t vl);
vuint64m4_t vnmsac_vx_u64m4 (vuint64m4_t vd, uint64_t rs1,
    vuint64m4_t vs2, size_t vl);
vuint64m8_t vnmsac_vv_u64m8 (vuint64m8_t vd, vuint64m8_t vs1,
    vuint64m8_t vs2, size_t vl);
vuint64m8_t vnmsac_vx_u64m8 (vuint64m8_t vd, uint64_t rs1,
    vuint64m8_t vs2, size_t vl);
vint8mf8_t vmadd_vv_i8mf8 (vint8mf8_t vd, vint8mf8_t vs1,
    vint8mf8_t vs2, size_t vl);
vint8mf8_t vmadd_vx_i8mf8 (vint8mf8_t vd, int8_t rs1, vint8mf8_t
    vs2, size_t vl);
vint8mf4_t vmadd_vv_i8mf4 (vint8mf4_t vd, vint8mf4_t vs1,
    vint8mf4_t vs2, size_t vl);
vint8mf4_t vmadd_vx_i8mf4 (vint8mf4_t vd, int8_t rs1, vint8mf4_t
    vs2, size_t vl);
vint8mf2_t vmadd_vv_i8mf2 (vint8mf2_t vd, vint8mf2_t vs1,
    vint8mf2_t vs2, size_t vl);
vint8mf2_t vmadd_vx_i8mf2 (vint8mf2_t vd, int8_t rs1, vint8mf2_t
    vs2, size_t vl);
vint8m1_t vmadd_vv_i8m1 (vint8m1_t vd, vint8m1_t vs1, vint8m1_t
    vs2, size_t vl);
vint8m1_t vmadd_vx_i8m1 (vint8m1_t vd, int8_t rs1, vint8m1_t
    vs2, size_t vl);
```

```
vint8m2_t vmadd_vv_i8m2 (vint8m2_t vd, vint8m2_t vs1, vint8m2_t
    vs2, size_t vl);
vint8m2_t vmadd_vx_i8m2 (vint8m2_t vd, int8_t rs1, vint8m2_t
    vs2, size_t vl);
vint8m4_t vmadd_vv_i8m4 (vint8m4_t vd, vint8m4_t vs1, vint8m4_t
    vs2, size_t vl);
vint8m4_t vmadd_vx_i8m4 (vint8m4_t vd, int8_t rs1, vint8m4_t
    vs2, size_t vl);
vint8m8_t vmadd_vv_i8m8 (vint8m8_t vd, vint8m8_t vs1, vint8m8_t
    vs2, size_t vl);
vint8m8_t vmadd_vx_i8m8 (vint8m8_t vd, int8_t rs1, vint8m8_t
    vs2, size_t vl);
vint16mf4_t vmadd_vv_i16mf4 (vint16mf4_t vd, vint16mf4_t vs1,
    vint16mf4_t vs2, size_t vl);
vint16mf4_t vmadd_vx_i16mf4 (vint16mf4_t vd, int16_t rs1,
    vint16mf4_t vs2, size_t vl);
vint16mf2_t vmadd_vv_i16mf2 (vint16mf2_t vd, vint16mf2_t vs1,
    vint16mf2_t vs2, size_t vl);
vint16mf2_t vmadd_vx_i16mf2 (vint16mf2_t vd, int16_t rs1,
    vint16mf2_t vs2, size_t vl);
vint16m1_t vmadd_vv_i16m1 (vint16m1_t vd, vint16m1_t vs1,
    vint16m1_t vs2, size_t vl);
vint16m1_t vmadd_vx_i16m1 (vint16m1_t vd, int16_t rs1,
    vint16m1_t vs2, size_t vl);
vint16m2_t vmadd_vv_i16m2 (vint16m2_t vd, vint16m2_t vs1,
    vint16m2_t vs2, size_t vl);
vint16m2_t vmadd_vx_i16m2 (vint16m2_t vd, int16_t rs1,
    vint16m2_t vs2, size_t vl);
vint16m4_t vmadd_vv_i16m4 (vint16m4_t vd, vint16m4_t vs1,
    vint16m4_t vs2, size_t vl);
vint16m4_t vmadd_vx_i16m4 (vint16m4_t vd, int16_t rs1,
    vint16m4_t vs2, size_t vl);
vint16m8_t vmadd_vv_i16m8 (vint16m8_t vd, vint16m8_t vs1,
    vint16m8_t vs2, size_t vl);
vint16m8_t vmadd_vx_i16m8 (vint16m8_t vd, int16_t rs1,
    vint16m8_t vs2, size_t vl);
vint32mf2_t vmadd_vv_i32mf2 (vint32mf2_t vd, vint32mf2_t vs1,
    vint32mf2_t vs2, size_t vl);
vint32mf2_t vmadd_vx_i32mf2 (vint32mf2_t vd, int32_t rs1,
    vint32mf2_t vs2, size_t vl);
vint32m1_t vmadd_vv_i32m1 (vint32m1_t vd, vint32m1_t vs1,
    vint32m1_t vs2, size_t vl);
vint32m1_t vmadd_vx_i32m1 (vint32m1_t vd, int32_t rs1,
    vint32m1_t vs2, size_t vl);
vint32m2_t vmadd_vv_i32m2 (vint32m2_t vd, vint32m2_t vs1,
    vint32m2_t vs2, size_t vl);
```

```
vint32m2_t vmadd_vx_i32m2 (vint32m2_t vd, int32_t rs1,
    vint32m2_t vs2, size_t vl);
vint32m4_t vmadd_vv_i32m4 (vint32m4_t vd, vint32m4_t vs1,
    vint32m4_t vs2, size_t vl);
vint32m4_t vmadd_vx_i32m4 (vint32m4_t vd, int32_t rs1,
    vint32m4_t vs2, size_t vl);
vint32m8_t vmadd_vv_i32m8 (vint32m8_t vd, vint32m8_t vs1,
    vint32m8_t vs2, size_t vl);
vint32m8_t vmadd_vx_i32m8 (vint32m8_t vd, int32_t rs1,
    vint32m8_t vs2, size_t vl);
vint64m1_t vmadd_vv_i64m1 (vint64m1_t vd, vint64m1_t vs1,
    vint64m1_t vs2, size_t vl);
vint64m1_t vmadd_vx_i64m1 (vint64m1_t vd, int64_t rs1,
    vint64m1_t vs2, size_t vl);
vint64m2_t vmadd_vv_i64m2 (vint64m2_t vd, vint64m2_t vs1,
    vint64m2_t vs2, size_t vl);
vint64m2_t vmadd_vx_i64m2 (vint64m2_t vd, int64_t rs1,
    vint64m2_t vs2, size_t vl);
vint64m4_t vmadd_vv_i64m4 (vint64m4_t vd, vint64m4_t vs1,
    vint64m4_t vs2, size_t vl);
vint64m4_t vmadd_vx_i64m4 (vint64m4_t vd, int64_t rs1,
    vint64m4_t vs2, size_t vl);
vint64m8_t vmadd_vv_i64m8 (vint64m8_t vd, vint64m8_t vs1,
    vint64m8_t vs2, size_t vl);
vint64m8_t vmadd_vx_i64m8 (vint64m8_t vd, int64_t rs1,
    vint64m8_t vs2, size_t vl);
vuint8mf8_t vmadd_vv_u8mf8 (vuint8mf8_t vd, vuint8mf8_t vs1,
    vuint8mf8_t vs2, size_t vl);
vuint8mf8_t vmadd_vx_u8mf8 (vuint8mf8_t vd, uint8_t rs1,
    vuint8mf8_t vs2, size_t vl);
vuint8mf4_t vmadd_vv_u8mf4 (vuint8mf4_t vd, vuint8mf4_t vs1,
    vuint8mf4_t vs2, size_t vl);
vuint8mf4_t vmadd_vx_u8mf4 (vuint8mf4_t vd, uint8_t rs1,
    vuint8mf4_t vs2, size_t vl);
vuint8mf2_t vmadd_vv_u8mf2 (vuint8mf2_t vd, vuint8mf2_t vs1,
    vuint8mf2_t vs2, size_t vl);
vuint8mf2_t vmadd_vx_u8mf2 (vuint8mf2_t vd, uint8_t rs1,
    vuint8mf2_t vs2, size_t vl);
vuint8m1_t vmadd_vv_u8m1 (vuint8m1_t vd, vuint8m1_t vs1,
    vuint8m1_t vs2, size_t vl);
vuint8m1_t vmadd_vx_u8m1 (vuint8m1_t vd, uint8_t rs1, vuint8m1_t
    vs2, size_t vl);
vuint8m2_t vmadd_vv_u8m2 (vuint8m2_t vd, vuint8m2_t vs1,
    vuint8m2_t vs2, size_t vl);
vuint8m2_t vmadd_vx_u8m2 (vuint8m2_t vd, uint8_t rs1, vuint8m2_t
    vs2, size_t vl);
```

```
vuint8m4_t vmadd_vv_u8m4 (vuint8m4_t vd, vuint8m4_t vs1,
    vuint8m4_t vs2, size_t vl);
vuint8m4_t vmadd_vx_u8m4 (vuint8m4_t vd, uint8_t rs1, vuint8m4_t
    vs2, size_t vl);
vuint8m8_t vmadd_vv_u8m8 (vuint8m8_t vd, vuint8m8_t vs1,
    vuint8m8_t vs2, size_t vl);
vuint8m8_t vmadd_vx_u8m8 (vuint8m8_t vd, uint8_t rs1, vuint8m8_t
    vs2, size_t vl);
vuint16mf4_t vmadd_vv_u16mf4 (vuint16mf4_t vd, vuint16mf4_t vs1,
    vuint16mf4_t vs2, size_t vl);
vuint16mf4_t vmadd_vx_u16mf4 (vuint16mf4_t vd, uint16_t rs1,
    vuint16mf4_t vs2, size_t vl);
vuint16mf2_t vmadd_vv_u16mf2 (vuint16mf2_t vd, vuint16mf2_t vs1,
    vuint16mf2_t vs2, size_t vl);
vuint16mf2_t vmadd_vx_u16mf2 (vuint16mf2_t vd, uint16_t rs1,
    vuint16mf2_t vs2, size_t vl);
vuint16m1_t vmadd_vv_u16m1 (vuint16m1_t vd, vuint16m1_t vs1,
    vuint16m1_t vs2, size_t vl);
vuint16m1_t vmadd_vx_u16m1 (vuint16m1_t vd, uint16_t rs1,
    vuint16m1_t vs2, size_t vl);
vuint16m2_t vmadd_vv_u16m2 (vuint16m2_t vd, vuint16m2_t vs1,
    vuint16m2_t vs2, size_t vl);
vuint16m2_t vmadd_vx_u16m2 (vuint16m2_t vd, uint16_t rs1,
    vuint16m2_t vs2, size_t vl);
vuint16m4_t vmadd_vv_u16m4 (vuint16m4_t vd, vuint16m4_t vs1,
    vuint16m4_t vs2, size_t vl);
vuint16m4_t vmadd_vx_u16m4 (vuint16m4_t vd, uint16_t rs1,
    vuint16m4_t vs2, size_t vl);
vuint16m8_t vmadd_vv_u16m8 (vuint16m8_t vd, vuint16m8_t vs1,
    vuint16m8_t vs2, size_t vl);
vuint16m8_t vmadd_vx_u16m8 (vuint16m8_t vd, uint16_t rs1,
    vuint16m8_t vs2, size_t vl);
vuint32mf2_t vmadd_vv_u32mf2 (vuint32mf2_t vd, vuint32mf2_t vs1,
    vuint32mf2_t vs2, size_t vl);
vuint32mf2_t vmadd_vx_u32mf2 (vuint32mf2_t vd, uint32_t rs1,
    vuint32mf2_t vs2, size_t vl);
vuint32m1_t vmadd_vv_u32m1 (vuint32m1_t vd, vuint32m1_t vs1,
    vuint32m1_t vs2, size_t vl);
vuint32m1_t vmadd_vx_u32m1 (vuint32m1_t vd, uint32_t rs1,
    vuint32m1_t vs2, size_t vl);
vuint32m2_t vmadd_vv_u32m2 (vuint32m2_t vd, vuint32m2_t vs1,
    vuint32m2_t vs2, size_t vl);
vuint32m2_t vmadd_vx_u32m2 (vuint32m2_t vd, uint32_t rs1,
    vuint32m2_t vs2, size_t vl);
vuint32m4_t vmadd_vv_u32m4 (vuint32m4_t vd, vuint32m4_t vs1,
    vuint32m4_t vs2, size_t vl);
```

```
vuint32m4_t vmadd_vx_u32m4 (vuint32m4_t vd, uint32_t rs1,
    vuint32m4_t vs2, size_t vl);
vuint32m8_t vmadd_vv_u32m8 (vuint32m8_t vd, vuint32m8_t vs1,
    vuint32m8_t vs2, size_t vl);
vuint32m8_t vmadd_vx_u32m8 (vuint32m8_t vd, uint32_t rs1,
    vuint32m8_t vs2, size_t vl);
vuint64m1_t vmadd_vv_u64m1 (vuint64m1_t vd, vuint64m1_t vs1,
    vuint64m1_t vs2, size_t vl);
vuint64m1_t vmadd_vx_u64m1 (vuint64m1_t vd, uint64_t rs1,
    vuint64m1_t vs2, size_t vl);
vuint64m2_t vmadd_vv_u64m2 (vuint64m2_t vd, vuint64m2_t vs1,
    vuint64m2_t vs2, size_t vl);
vuint64m2_t vmadd_vx_u64m2 (vuint64m2_t vd, uint64_t rs1,
    vuint64m2_t vs2, size_t vl);
vuint64m4_t vmadd_vv_u64m4 (vuint64m4_t vd, vuint64m4_t vs1,
    vuint64m4_t vs2, size_t vl);
vuint64m4_t vmadd_vx_u64m4 (vuint64m4_t vd, uint64_t rs1,
    vuint64m4_t vs2, size_t vl);
vuint64m8_t vmadd_vv_u64m8 (vuint64m8_t vd, vuint64m8_t vs1,
    vuint64m8_t vs2, size_t vl);
vuint64m8_t vmadd_vx_u64m8 (vuint64m8_t vd, uint64_t rs1,
    vuint64m8_t vs2, size_t vl);
vint8mf8_t vnmsub_vv_i8mf8 (vint8mf8_t vd, vint8mf8_t vs1,
    vint8mf8_t vs2, size_t vl);
vint8mf8_t vnmsub_vx_i8mf8 (vint8mf8_t vd, int8_t rs1,
    vint8mf8_t vs2, size_t vl);
vint8mf4_t vnmsub_vv_i8mf4 (vint8mf4_t vd, vint8mf4_t vs1,
    vint8mf4_t vs2, size_t vl);
vint8mf4_t vnmsub_vx_i8mf4 (vint8mf4_t vd, int8_t rs1,
    vint8mf4_t vs2, size_t vl);
vint8mf2_t vnmsub_vv_i8mf2 (vint8mf2_t vd, vint8mf2_t vs1,
    vint8mf2_t vs2, size_t vl);
vint8mf2_t vnmsub_vx_i8mf2 (vint8mf2_t vd, int8_t rs1,
    vint8mf2_t vs2, size_t vl);
vint8m1_t vnmsub_vv_i8m1 (vint8m1_t vd, vint8m1_t vs1, vint8m1_t
    vs2, size_t vl);
vint8m1_t vnmsub_vx_i8m1 (vint8m1_t vd, int8_t rs1, vint8m1_t
    vs2, size_t vl);
vint8m2_t vnmsub_vv_i8m2 (vint8m2_t vd, vint8m2_t vs1, vint8m2_t
    vs2, size_t vl);
vint8m2_t vnmsub_vx_i8m2 (vint8m2_t vd, int8_t rs1, vint8m2_t
    vs2, size_t vl);
vint8m4_t vnmsub_vv_i8m4 (vint8m4_t vd, vint8m4_t vs1, vint8m4_t
    vs2, size_t vl);
vint8m4_t vnmsub_vx_i8m4 (vint8m4_t vd, int8_t rs1, vint8m4_t
    vs2, size_t vl);
```

```
vint8m8_t vnmsub_vv_i8m8 (vint8m8_t vd, vint8m8_t vs1, vint8m8_t
    vs2, size_t vl);
vint8m8_t vnmsub_vx_i8m8 (vint8m8_t vd, int8_t rs1, vint8m8_t
    vs2, size_t vl);
vint16mf4_t vnmsub_vv_i16mf4 (vint16mf4_t vd, vint16mf4_t vs1,
    vint16mf4_t vs2, size_t vl);
vint16mf4_t vnmsub_vx_i16mf4 (vint16mf4_t vd, int16_t rs1,
    vint16mf4_t vs2, size_t vl);
vint16mf2_t vnmsub_vv_i16mf2 (vint16mf2_t vd, vint16mf2_t vs1,
    vint16mf2_t vs2, size_t vl);
vint16mf2_t vnmsub_vx_i16mf2 (vint16mf2_t vd, int16_t rs1,
    vint16mf2_t vs2, size_t vl);
vint16m1_t vnmsub_vv_i16m1 (vint16m1_t vd, vint16m1_t vs1,
    vint16m1_t vs2, size_t vl);
vint16m1_t vnmsub_vx_i16m1 (vint16m1_t vd, int16_t rs1,
    vint16m1_t vs2, size_t vl);
vint16m2_t vnmsub_vv_i16m2 (vint16m2_t vd, vint16m2_t vs1,
    vint16m2_t vs2, size_t vl);
vint16m2_t vnmsub_vx_i16m2 (vint16m2_t vd, int16_t rs1,
    vint16m2_t vs2, size_t vl);
vint16m4_t vnmsub_vv_i16m4 (vint16m4_t vd, vint16m4_t vs1,
    vint16m4_t vs2, size_t vl);
vint16m4_t vnmsub_vx_i16m4 (vint16m4_t vd, int16_t rs1,
    vint16m4_t vs2, size_t vl);
vint16m8_t vnmsub_vv_i16m8 (vint16m8_t vd, vint16m8_t vs1,
    vint16m8_t vs2, size_t vl);
vint16m8_t vnmsub_vx_i16m8 (vint16m8_t vd, int16_t rs1,
    vint16m8_t vs2, size_t vl);
vint32mf2_t vnmsub_vv_i32mf2 (vint32mf2_t vd, vint32mf2_t vs1,
    vint32mf2_t vs2, size_t vl);
vint32mf2_t vnmsub_vx_i32mf2 (vint32mf2_t vd, int32_t rs1,
    vint32mf2_t vs2, size_t vl);
vint32m1_t vnmsub_vv_i32m1 (vint32m1_t vd, vint32m1_t vs1,
    vint32m1_t vs2, size_t vl);
vint32m1_t vnmsub_vx_i32m1 (vint32m1_t vd, int32_t rs1,
    vint32m1_t vs2, size_t vl);
vint32m2_t vnmsub_vv_i32m2 (vint32m2_t vd, vint32m2_t vs1,
    vint32m2_t vs2, size_t vl);
vint32m2_t vnmsub_vx_i32m2 (vint32m2_t vd, int32_t rs1,
    vint32m2_t vs2, size_t vl);
vint32m4_t vnmsub_vv_i32m4 (vint32m4_t vd, vint32m4_t vs1,
    vint32m4_t vs2, size_t vl);
vint32m4_t vnmsub_vx_i32m4 (vint32m4_t vd, int32_t rs1,
    vint32m4_t vs2, size_t vl);
vint32m8_t vnmsub_vv_i32m8 (vint32m8_t vd, vint32m8_t vs1,
    vint32m8_t vs2, size_t vl);
```

```
vint32m8_t vnmsub_vx_i32m8 (vint32m8_t vd, int32_t rs1,
    vint32m8_t vs2, size_t vl);
vint64m1_t vnmsub_vv_i64m1 (vint64m1_t vd, vint64m1_t vs1,
    vint64m1_t vs2, size_t vl);
vint64m1_t vnmsub_vx_i64m1 (vint64m1_t vd, int64_t rs1,
    vint64m1_t vs2, size_t vl);
vint64m2_t vnmsub_vv_i64m2 (vint64m2_t vd, vint64m2_t vs1,
    vint64m2_t vs2, size_t vl);
vint64m2_t vnmsub_vx_i64m2 (vint64m2_t vd, int64_t rs1,
    vint64m2_t vs2, size_t vl);
vint64m4_t vnmsub_vv_i64m4 (vint64m4_t vd, vint64m4_t vs1,
    vint64m4_t vs2, size_t vl);
vint64m4_t vnmsub_vx_i64m4 (vint64m4_t vd, int64_t rs1,
    vint64m4_t vs2, size_t vl);
vint64m8_t vnmsub_vv_i64m8 (vint64m8_t vd, vint64m8_t vs1,
    vint64m8_t vs2, size_t vl);
vint64m8_t vnmsub_vx_i64m8 (vint64m8_t vd, int64_t rs1,
    vint64m8_t vs2, size_t vl);
vuint8mf8_t vnmsub_vv_u8mf8 (vuint8mf8_t vd, vuint8mf8_t vs1,
    vuint8mf8_t vs2, size_t vl);
vuint8mf8_t vnmsub_vx_u8mf8 (vuint8mf8_t vd, uint8_t rs1,
    vuint8mf8_t vs2, size_t vl);
vuint8mf4_t vnmsub_vv_u8mf4 (vuint8mf4_t vd, vuint8mf4_t vs1,
    vuint8mf4_t vs2, size_t vl);
vuint8mf4_t vnmsub_vx_u8mf4 (vuint8mf4_t vd, uint8_t rs1,
    vuint8mf4_t vs2, size_t vl);
vuint8mf2_t vnmsub_vv_u8mf2 (vuint8mf2_t vd, vuint8mf2_t vs1,
    vuint8mf2_t vs2, size_t vl);
vuint8mf2_t vnmsub_vx_u8mf2 (vuint8mf2_t vd, uint8_t rs1,
    vuint8mf2_t vs2, size_t vl);
vuint8m1_t vnmsub_vv_u8m1 (vuint8m1_t vd, vuint8m1_t vs1,
    vuint8m1_t vs2, size_t vl);
vuint8m1_t vnmsub_vx_u8m1 (vuint8m1_t vd, uint8_t rs1,
    vuint8m1_t vs2, size_t vl);
vuint8m2_t vnmsub_vv_u8m2 (vuint8m2_t vd, vuint8m2_t vs1,
    vuint8m2_t vs2, size_t vl);
vuint8m2_t vnmsub_vx_u8m2 (vuint8m2_t vd, uint8_t rs1,
    vuint8m2_t vs2, size_t vl);
vuint8m4_t vnmsub_vv_u8m4 (vuint8m4_t vd, vuint8m4_t vs1,
    vuint8m4_t vs2, size_t vl);
vuint8m4_t vnmsub_vx_u8m4 (vuint8m4_t vd, uint8_t rs1,
    vuint8m4_t vs2, size_t vl);
vuint8m8_t vnmsub_vv_u8m8 (vuint8m8_t vd, vuint8m8_t vs1,
    vuint8m8_t vs2, size_t vl);
vuint8m8_t vnmsub_vx_u8m8 (vuint8m8_t vd, uint8_t rs1,
    vuint8m8_t vs2, size_t vl);
```

```
vuint16mf4_t vnmsub_vv_u16mf4 (vuint16mf4_t vd, vuint16mf4_t
    vs1, vuint16mf4_t vs2, size_t vl);
vuint16mf4_t vnmsub_vx_u16mf4 (vuint16mf4_t vd, uint16_t rs1,
    vuint16mf4_t vs2, size_t vl);
vuint16mf2_t vnmsub_vv_u16mf2 (vuint16mf2_t vd, vuint16mf2_t
    vs1, vuint16mf2_t vs2, size_t vl);
vuint16mf2_t vnmsub_vx_u16mf2 (vuint16mf2_t vd, uint16_t rs1,
    vuint16mf2_t vs2, size_t vl);
vuint16m1_t vnmsub_vv_u16m1 (vuint16m1_t vd, vuint16m1_t vs1,
    vuint16m1_t vs2, size_t vl);
vuint16m1_t vnmsub_vx_u16m1 (vuint16m1_t vd, uint16_t rs1,
    vuint16m1_t vs2, size_t vl);
vuint16m2_t vnmsub_vv_u16m2 (vuint16m2_t vd, vuint16m2_t vs1,
    vuint16m2_t vs2, size_t vl);
vuint16m2_t vnmsub_vx_u16m2 (vuint16m2_t vd, uint16_t rs1,
    vuint16m2_t vs2, size_t vl);
vuint16m4_t vnmsub_vv_u16m4 (vuint16m4_t vd, vuint16m4_t vs1,
    vuint16m4_t vs2, size_t vl);
vuint16m4_t vnmsub_vx_u16m4 (vuint16m4_t vd, uint16_t rs1,
    vuint16m4_t vs2, size_t vl);
vuint16m8_t vnmsub_vv_u16m8 (vuint16m8_t vd, vuint16m8_t vs1,
    vuint16m8_t vs2, size_t vl);
vuint16m8_t vnmsub_vx_u16m8 (vuint16m8_t vd, uint16_t rs1,
    vuint16m8_t vs2, size_t vl);
vuint32mf2_t vnmsub_vv_u32mf2 (vuint32mf2_t vd, vuint32mf2_t
    vs1, vuint32mf2_t vs2, size_t vl);
vuint32mf2_t vnmsub_vx_u32mf2 (vuint32mf2_t vd, uint32_t rs1,
    vuint32mf2_t vs2, size_t vl);
vuint32m1_t vnmsub_vv_u32m1 (vuint32m1_t vd, vuint32m1_t vs1,
    vuint32m1_t vs2, size_t vl);
vuint32m1_t vnmsub_vx_u32m1 (vuint32m1_t vd, uint32_t rs1,
    vuint32m1_t vs2, size_t vl);
vuint32m2_t vnmsub_vv_u32m2 (vuint32m2_t vd, vuint32m2_t vs1,
    vuint32m2_t vs2, size_t vl);
vuint32m2_t vnmsub_vx_u32m2 (vuint32m2_t vd, uint32_t rs1,
    vuint32m2_t vs2, size_t vl);
vuint32m4_t vnmsub_vv_u32m4 (vuint32m4_t vd, vuint32m4_t vs1,
    vuint32m4_t vs2, size_t vl);
vuint32m4_t vnmsub_vx_u32m4 (vuint32m4_t vd, uint32_t rs1,
    vuint32m4_t vs2, size_t vl);
vuint32m8_t vnmsub_vv_u32m8 (vuint32m8_t vd, vuint32m8_t vs1,
    vuint32m8_t vs2, size_t vl);
vuint32m8_t vnmsub_vx_u32m8 (vuint32m8_t vd, uint32_t rs1,
    vuint32m8_t vs2, size_t vl);
vuint64m1_t vnmsub_vv_u64m1 (vuint64m1_t vd, vuint64m1_t vs1,
    vuint64m1_t vs2, size_t vl);
```

```
vuint64m1_t vnmsub_vx_u64m1 (vuint64m1_t vd, uint64_t rs1,
    vuint64m1_t vs2, size_t vl);
vuint64m2_t vnmsub_vv_u64m2 (vuint64m2_t vd, vuint64m2_t vs1,
    vuint64m2_t vs2, size_t vl);
vuint64m2_t vnmsub_vx_u64m2 (vuint64m2_t vd, uint64_t rs1,
    vuint64m2_t vs2, size_t vl);
vuint64m4_t vnmsub_vv_u64m4 (vuint64m4_t vd, vuint64m4_t vs1,
    vuint64m4_t vs2, size_t vl);
vuint64m4_t vnmsub_vx_u64m4 (vuint64m4_t vd, uint64_t rs1,
    vuint64m4_t vs2, size_t vl);
vuint64m8_t vnmsub_vv_u64m8 (vuint64m8_t vd, vuint64m8_t vs1,
    vuint64m8_t vs2, size_t vl);
vuint64m8_t vnmsub_vx_u64m8 (vuint64m8_t vd, uint64_t rs1,
    vuint64m8_t vs2, size_t vl);
// masked functions
vint8mf8_t vmacc_vv_i8mf8_m (vbool64_t mask, vint8mf8_t vd,
    vint8mf8_t vs1, vint8mf8_t vs2, size_t vl);
vint8mf8_t vmacc_vx_i8mf8_m (vbool64_t mask, vint8mf8_t vd,
    int8_t rs1, vint8mf8_t vs2, size_t vl);
vint8mf4_t vmacc_vv_i8mf4_m (vbool32_t mask, vint8mf4_t vd,
    vint8mf4_t vs1, vint8mf4_t vs2, size_t vl);
vint8mf4_t vmacc_vx_i8mf4_m (vbool32_t mask, vint8mf4_t vd,
    int8_t rs1, vint8mf4_t vs2, size_t vl);
vint8mf2_t vmacc_vv_i8mf2_m (vbool16_t mask, vint8mf2_t vd,
    vint8mf2_t vs1, vint8mf2_t vs2, size_t vl);
vint8mf2_t vmacc_vx_i8mf2_m (vbool16_t mask, vint8mf2_t vd,
    int8_t rs1, vint8mf2_t vs2, size_t vl);
vint8m1_t vmacc_vv_i8m1_m (vbool8_t mask, vint8m1_t vd,
    vint8m1_t vs1, vint8m1_t vs2, size_t vl);
vint8m1_t vmacc_vx_i8m1_m (vbool8_t mask, vint8m1_t vd, int8_t
    rs1, vint8m1_t vs2, size_t vl);
vint8m2_t vmacc_vv_i8m2_m (vbool4_t mask, vint8m2_t vd,
    vint8m2_t vs1, vint8m2_t vs2, size_t vl);
vint8m2_t vmacc_vx_i8m2_m (vbool4_t mask, vint8m2_t vd, int8_t
    rs1, vint8m2_t vs2, size_t vl);
vint8m4_t vmacc_vv_i8m4_m (vbool2_t mask, vint8m4_t vd,
    vint8m4_t vs1, vint8m4_t vs2, size_t vl);
vint8m4_t vmacc_vx_i8m4_m (vbool2_t mask, vint8m4_t vd, int8_t
    rs1, vint8m4_t vs2, size_t vl);
vint8m8_t vmacc_vv_i8m8_m (vbool1_t mask, vint8m8_t vd,
    vint8m8_t vs1, vint8m8_t vs2, size_t vl);
vint8m8_t vmacc_vx_i8m8_m (vbool1_t mask, vint8m8_t vd, int8_t
    rs1, vint8m8_t vs2, size_t vl);
vint16mf4_t vmacc_vv_i16mf4_m (vbool64_t mask, vint16mf4_t vd,
    vint16mf4_t vs1, vint16mf4_t vs2, size_t vl);
```

```
vint16mf4_t vmacc_vx_i16mf4_m (vbool64_t mask, vint16mf4_t vd,
    int16_t rs1, vint16mf4_t vs2, size_t vl);
vint16mf2_t vmacc_vv_i16mf2_m (vbool32_t mask, vint16mf2_t vd,
    vint16mf2_t vs1, vint16mf2_t vs2, size_t vl);
vint16mf2_t vmacc_vx_i16mf2_m (vbool32_t mask, vint16mf2_t vd,
    int16_t rs1, vint16mf2_t vs2, size_t vl);
vint16m1_t vmacc_vv_i16m1_m (vbool16_t mask, vint16m1_t vd,
    vint16m1_t vs1, vint16m1_t vs2, size_t vl);
vint16m1_t vmacc_vx_i16m1_m (vbool16_t mask, vint16m1_t vd,
    int16_t rs1, vint16m1_t vs2, size_t vl);
vint16m2_t vmacc_vv_i16m2_m (vbool8_t mask, vint16m2_t vd,
    vint16m2_t vs1, vint16m2_t vs2, size_t vl);
vint16m2_t vmacc_vx_i16m2_m (vbool8_t mask, vint16m2_t vd,
    int16_t rs1, vint16m2_t vs2, size_t vl);
vint16m4_t vmacc_vv_i16m4_m (vbool4_t mask, vint16m4_t vd,
    vint16m4_t vs1, vint16m4_t vs2, size_t vl);
vint16m4_t vmacc_vx_i16m4_m (vbool4_t mask, vint16m4_t vd,
    int16_t rs1, vint16m4_t vs2, size_t vl);
vint16m8_t vmacc_vv_i16m8_m (vbool2_t mask, vint16m8_t vd,
    vint16m8_t vs1, vint16m8_t vs2, size_t vl);
vint16m8_t vmacc_vx_i16m8_m (vbool2_t mask, vint16m8_t vd,
    int16_t rs1, vint16m8_t vs2, size_t vl);
vint32mf2_t vmacc_vv_i32mf2_m (vbool64_t mask, vint32mf2_t vd,
    vint32mf2_t vs1, vint32mf2_t vs2, size_t vl);
vint32mf2_t vmacc_vx_i32mf2_m (vbool64_t mask, vint32mf2_t vd,
    int32_t rs1, vint32mf2_t vs2, size_t vl);
vint32m1_t vmacc_vv_i32m1_m (vbool32_t mask, vint32m1_t vd,
    vint32m1_t vs1, vint32m1_t vs2, size_t vl);
vint32m1_t vmacc_vx_i32m1_m (vbool32_t mask, vint32m1_t vd,
    int32_t rs1, vint32m1_t vs2, size_t vl);
vint32m2_t vmacc_vv_i32m2_m (vbool16_t mask, vint32m2_t vd,
    vint32m2_t vs1, vint32m2_t vs2, size_t vl);
vint32m2_t vmacc_vx_i32m2_m (vbool16_t mask, vint32m2_t vd,
    int32_t rs1, vint32m2_t vs2, size_t vl);
vint32m4_t vmacc_vv_i32m4_m (vbool8_t mask, vint32m4_t vd,
    vint32m4_t vs1, vint32m4_t vs2, size_t vl);
vint32m4_t vmacc_vx_i32m4_m (vbool8_t mask, vint32m4_t vd,
    int32_t rs1, vint32m4_t vs2, size_t vl);
vint32m8_t vmacc_vv_i32m8_m (vbool4_t mask, vint32m8_t vd,
    vint32m8_t vs1, vint32m8_t vs2, size_t vl);
vint32m8_t vmacc_vx_i32m8_m (vbool4_t mask, vint32m8_t vd,
    int32_t rs1, vint32m8_t vs2, size_t vl);
vint64m1_t vmacc_vv_i64m1_m (vbool64_t mask, vint64m1_t vd,
    vint64m1_t vs1, vint64m1_t vs2, size_t vl);
vint64m1_t vmacc_vx_i64m1_m (vbool64_t mask, vint64m1_t vd,
    int64_t rs1, vint64m1_t vs2, size_t vl);
```

```
vint64m2_t vmacc_vv_i64m2_m (vbool32_t mask, vint64m2_t vd,
    vint64m2_t vs1, vint64m2_t vs2, size_t vl);
vint64m2_t vmacc_vx_i64m2_m (vbool32_t mask, vint64m2_t vd,
    int64_t rs1, vint64m2_t vs2, size_t vl);
vint64m4_t vmacc_vv_i64m4_m (vbool16_t mask, vint64m4_t vd,
    vint64m4_t vs1, vint64m4_t vs2, size_t vl);
vint64m4_t vmacc_vx_i64m4_m (vbool16_t mask, vint64m4_t vd,
    int64_t rs1, vint64m4_t vs2, size_t vl);
vint64m8_t vmacc_vv_i64m8_m (vbool8_t mask, vint64m8_t vd,
    vint64m8_t vs1, vint64m8_t vs2, size_t vl);
vint64m8_t vmacc_vx_i64m8_m (vbool8_t mask, vint64m8_t vd,
    int64_t rs1, vint64m8_t vs2, size_t vl);
vuint8mf8_t vmacc_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t vd,
    vuint8mf8_t vs1, vuint8mf8_t vs2, size_t vl);
vuint8mf8_t vmacc_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t vd,
    uint8_t rs1, vuint8mf8_t vs2, size_t vl);
vuint8mf4_t vmacc_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t vd,
    vuint8mf4_t vs1, vuint8mf4_t vs2, size_t vl);
vuint8mf4_t vmacc_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t vd,
    uint8_t rs1, vuint8mf4_t vs2, size_t vl);
vuint8mf2_t vmacc_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t vd,
    vuint8mf2_t vs1, vuint8mf2_t vs2, size_t vl);
vuint8mf2_t vmacc_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t vd,
    uint8_t rs1, vuint8mf2_t vs2, size_t vl);
vuint8m1_t vmacc_vv_u8m1_m (vbool8_t mask, vuint8m1_t vd,
    vuint8m1_t vs1, vuint8m1_t vs2, size_t vl);
vuint8m1_t vmacc_vx_u8m1_m (vbool8_t mask, vuint8m1_t vd,
    uint8_t rs1, vuint8m1_t vs2, size_t vl);
vuint8m2_t vmacc_vv_u8m2_m (vbool4_t mask, vuint8m2_t vd,
    vuint8m2_t vs1, vuint8m2_t vs2, size_t vl);
vuint8m2_t vmacc_vx_u8m2_m (vbool4_t mask, vuint8m2_t vd,
    uint8_t rs1, vuint8m2_t vs2, size_t vl);
vuint8m4_t vmacc_vv_u8m4_m (vbool2_t mask, vuint8m4_t vd,
    vuint8m4_t vs1, vuint8m4_t vs2, size_t vl);
vuint8m4_t vmacc_vx_u8m4_m (vbool2_t mask, vuint8m4_t vd,
    uint8_t rs1, vuint8m4_t vs2, size_t vl);
vuint8m8_t vmacc_vv_u8m8_m (vbool1_t mask, vuint8m8_t vd,
    vuint8m8_t vs1, vuint8m8_t vs2, size_t vl);
vuint8m8_t vmacc_vx_u8m8_m (vbool1_t mask, vuint8m8_t vd,
    uint8_t rs1, vuint8m8_t vs2, size_t vl);
vuint16mf4_t vmacc_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t vd,
    vuint16mf4_t vs1, vuint16mf4_t vs2, size_t vl);
vuint16mf4_t vmacc_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t vd,
    uint16_t rs1, vuint16mf4_t vs2, size_t vl);
vuint16mf2_t vmacc_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t vd,
    vuint16mf2_t vs1, vuint16mf2_t vs2, size_t vl);
```

```
vuint16mf2_t vmacc_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t vd,
    uint16_t rs1, vuint16mf2_t vs2, size_t vl);
vuint16m1_t vmacc_vv_u16m1_m (vbool16_t mask, vuint16m1_t vd,
    vuint16m1_t vs1, vuint16m1_t vs2, size_t vl);
vuint16m1_t vmacc_vx_u16m1_m (vbool16_t mask, vuint16m1_t vd,
    uint16_t rs1, vuint16m1_t vs2, size_t vl);
vuint16m2_t vmacc_vv_u16m2_m (vbool8_t mask, vuint16m2_t vd,
    vuint16m2_t vs1, vuint16m2_t vs2, size_t vl);
vuint16m2_t vmacc_vx_u16m2_m (vbool8_t mask, vuint16m2_t vd,
    uint16_t rs1, vuint16m2_t vs2, size_t vl);
vuint16m4_t vmacc_vv_u16m4_m (vbool4_t mask, vuint16m4_t vd,
    vuint16m4_t vs1, vuint16m4_t vs2, size_t vl);
vuint16m4_t vmacc_vx_u16m4_m (vbool4_t mask, vuint16m4_t vd,
    uint16_t rs1, vuint16m4_t vs2, size_t vl);
vuint16m8_t vmacc_vv_u16m8_m (vbool2_t mask, vuint16m8_t vd,
    vuint16m8_t vs1, vuint16m8_t vs2, size_t vl);
vuint16m8_t vmacc_vx_u16m8_m (vbool2_t mask, vuint16m8_t vd,
    uint16_t rs1, vuint16m8_t vs2, size_t vl);
vuint32mf2_t vmacc_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t vd,
    vuint32mf2_t vs1, vuint32mf2_t vs2, size_t vl);
vuint32mf2_t vmacc_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t vd,
    uint32_t rs1, vuint32mf2_t vs2, size_t vl);
vuint32m1_t vmacc_vv_u32m1_m (vbool32_t mask, vuint32m1_t vd,
    vuint32m1_t vs1, vuint32m1_t vs2, size_t vl);
vuint32m1_t vmacc_vx_u32m1_m (vbool32_t mask, vuint32m1_t vd,
    uint32_t rs1, vuint32m1_t vs2, size_t vl);
vuint32m2_t vmacc_vv_u32m2_m (vbool16_t mask, vuint32m2_t vd,
    vuint32m2_t vs1, vuint32m2_t vs2, size_t vl);
vuint32m2_t vmacc_vx_u32m2_m (vbool16_t mask, vuint32m2_t vd,
    uint32_t rs1, vuint32m2_t vs2, size_t vl);
vuint32m4_t vmacc_vv_u32m4_m (vbool8_t mask, vuint32m4_t vd,
    vuint32m4_t vs1, vuint32m4_t vs2, size_t vl);
vuint32m4_t vmacc_vx_u32m4_m (vbool8_t mask, vuint32m4_t vd,
    uint32_t rs1, vuint32m4_t vs2, size_t vl);
vuint32m8_t vmacc_vv_u32m8_m (vbool4_t mask, vuint32m8_t vd,
    vuint32m8_t vs1, vuint32m8_t vs2, size_t vl);
vuint32m8_t vmacc_vx_u32m8_m (vbool4_t mask, vuint32m8_t vd,
    uint32_t rs1, vuint32m8_t vs2, size_t vl);
vuint64m1_t vmacc_vv_u64m1_m (vbool64_t mask, vuint64m1_t vd,
    vuint64m1_t vs1, vuint64m1_t vs2, size_t vl);
vuint64m1_t vmacc_vx_u64m1_m (vbool64_t mask, vuint64m1_t vd,
    uint64_t rs1, vuint64m1_t vs2, size_t vl);
vuint64m2_t vmacc_vv_u64m2_m (vbool32_t mask, vuint64m2_t vd,
    vuint64m2_t vs1, vuint64m2_t vs2, size_t vl);
vuint64m2_t vmacc_vx_u64m2_m (vbool32_t mask, vuint64m2_t vd,
    uint64_t rs1, vuint64m2_t vs2, size_t vl);
```

```
vuint64m4_t vmacc_vv_u64m4_m (vbool16_t mask, vuint64m4_t vd,
    vuint64m4_t vs1, vuint64m4_t vs2, size_t vl);
vuint64m4_t vmacc_vx_u64m4_m (vbool16_t mask, vuint64m4_t vd,
    uint64_t rs1, vuint64m4_t vs2, size_t vl);
vuint64m8_t vmacc_vv_u64m8_m (vbool8_t mask, vuint64m8_t vd,
    vuint64m8_t vs1, vuint64m8_t vs2, size_t vl);
vuint64m8_t vmacc_vx_u64m8_m (vbool8_t mask, vuint64m8_t vd,
    uint64_t rs1, vuint64m8_t vs2, size_t vl);
vint8mf8_t vnmsac_vv_i8mf8_m (vbool64_t mask, vint8mf8_t vd,
    vint8mf8_t vs1, vint8mf8_t vs2, size_t vl);
vint8mf8_t vnmsac_vx_i8mf8_m (vbool64_t mask, vint8mf8_t vd,
    int8_t rs1, vint8mf8_t vs2, size_t vl);
vint8mf4_t vnmsac_vv_i8mf4_m (vbool32_t mask, vint8mf4_t vd,
    vint8mf4_t vs1, vint8mf4_t vs2, size_t vl);
vint8mf4_t vnmsac_vx_i8mf4_m (vbool32_t mask, vint8mf4_t vd,
    int8_t rs1, vint8mf4_t vs2, size_t vl);
vint8mf2_t vnmsac_vv_i8mf2_m (vbool16_t mask, vint8mf2_t vd,
    vint8mf2_t vs1, vint8mf2_t vs2, size_t vl);
vint8mf2_t vnmsac_vx_i8mf2_m (vbool16_t mask, vint8mf2_t vd,
    int8_t rs1, vint8mf2_t vs2, size_t vl);
vint8m1_t vnmsac_vv_i8m1_m (vbool8_t mask, vint8m1_t vd,
    vint8m1_t vs1, vint8m1_t vs2, size_t vl);
vint8m1_t vnmsac_vx_i8m1_m (vbool8_t mask, vint8m1_t vd, int8_t
    rs1, vint8m1_t vs2, size_t vl);
vint8m2_t vnmsac_vv_i8m2_m (vbool4_t mask, vint8m2_t vd,
    vint8m2_t vs1, vint8m2_t vs2, size_t vl);
vint8m2_t vnmsac_vx_i8m2_m (vbool4_t mask, vint8m2_t vd, int8_t
    rs1, vint8m2_t vs2, size_t vl);
vint8m4_t vnmsac_vv_i8m4_m (vbool2_t mask, vint8m4_t vd,
    vint8m4_t vs1, vint8m4_t vs2, size_t vl);
vint8m4_t vnmsac_vx_i8m4_m (vbool2_t mask, vint8m4_t vd, int8_t
    rs1, vint8m4_t vs2, size_t vl);
vint8m8_t vnmsac_vv_i8m8_m (vbool1_t mask, vint8m8_t vd,
    vint8m8_t vs1, vint8m8_t vs2, size_t vl);
vint8m8_t vnmsac_vx_i8m8_m (vbool1_t mask, vint8m8_t vd, int8_t
    rs1, vint8m8_t vs2, size_t vl);
vint16mf4_t vnmsac_vv_i16mf4_m (vbool64_t mask, vint16mf4_t vd,
    vint16mf4_t vs1, vint16mf4_t vs2, size_t vl);
vint16mf4_t vnmsac_vx_i16mf4_m (vbool64_t mask, vint16mf4_t vd,
    int16_t rs1, vint16mf4_t vs2, size_t vl);
vint16mf2_t vnmsac_vv_i16mf2_m (vbool32_t mask, vint16mf2_t vd,
    vint16mf2_t vs1, vint16mf2_t vs2, size_t vl);
vint16mf2_t vnmsac_vx_i16mf2_m (vbool32_t mask, vint16mf2_t vd,
    int16_t rs1, vint16mf2_t vs2, size_t vl);
vint16m1_t vnmsac_vv_i16m1_m (vbool16_t mask, vint16m1_t vd,
    vint16m1_t vs1, vint16m1_t vs2, size_t vl);
```

```
vint16m1_t vnmsac_vx_i16m1_m (vbool16_t mask, vint16m1_t vd,
    int16_t rs1, vint16m1_t vs2, size_t vl);
vint16m2_t vnmsac_vv_i16m2_m (vbool8_t mask, vint16m2_t vd,
    vint16m2_t vs1, vint16m2_t vs2, size_t vl);
vint16m2_t vnmsac_vx_i16m2_m (vbool8_t mask, vint16m2_t vd,
    int16_t rs1, vint16m2_t vs2, size_t vl);
vint16m4_t vnmsac_vv_i16m4_m (vbool4_t mask, vint16m4_t vd,
    vint16m4_t vs1, vint16m4_t vs2, size_t vl);
vint16m4_t vnmsac_vx_i16m4_m (vbool4_t mask, vint16m4_t vd,
    int16_t rs1, vint16m4_t vs2, size_t vl);
vint16m8_t vnmsac_vv_i16m8_m (vbool2_t mask, vint16m8_t vd,
    vint16m8_t vs1, vint16m8_t vs2, size_t vl);
vint16m8_t vnmsac_vx_i16m8_m (vbool2_t mask, vint16m8_t vd,
    int16_t rs1, vint16m8_t vs2, size_t vl);
vint32mf2_t vnmsac_vv_i32mf2_m (vbool64_t mask, vint32mf2_t vd,
    vint32mf2_t vs1, vint32mf2_t vs2, size_t vl);
vint32mf2_t vnmsac_vx_i32mf2_m (vbool64_t mask, vint32mf2_t vd,
    int32_t rs1, vint32mf2_t vs2, size_t vl);
vint32m1_t vnmsac_vv_i32m1_m (vbool32_t mask, vint32m1_t vd,
    vint32m1_t vs1, vint32m1_t vs2, size_t vl);
vint32m1_t vnmsac_vx_i32m1_m (vbool32_t mask, vint32m1_t vd,
    int32_t rs1, vint32m1_t vs2, size_t vl);
vint32m2_t vnmsac_vv_i32m2_m (vbool16_t mask, vint32m2_t vd,
    vint32m2_t vs1, vint32m2_t vs2, size_t vl);
vint32m2_t vnmsac_vx_i32m2_m (vbool16_t mask, vint32m2_t vd,
    int32_t rs1, vint32m2_t vs2, size_t vl);
vint32m4_t vnmsac_vv_i32m4_m (vbool8_t mask, vint32m4_t vd,
    vint32m4_t vs1, vint32m4_t vs2, size_t vl);
vint32m4_t vnmsac_vx_i32m4_m (vbool8_t mask, vint32m4_t vd,
    int32_t rs1, vint32m4_t vs2, size_t vl);
vint32m8_t vnmsac_vv_i32m8_m (vbool4_t mask, vint32m8_t vd,
    vint32m8_t vs1, vint32m8_t vs2, size_t vl);
vint32m8_t vnmsac_vx_i32m8_m (vbool4_t mask, vint32m8_t vd,
    int32_t rs1, vint32m8_t vs2, size_t vl);
vint64m1_t vnmsac_vv_i64m1_m (vbool64_t mask, vint64m1_t vd,
    vint64m1_t vs1, vint64m1_t vs2, size_t vl);
vint64m1_t vnmsac_vx_i64m1_m (vbool64_t mask, vint64m1_t vd,
    int64_t rs1, vint64m1_t vs2, size_t vl);
vint64m2_t vnmsac_vv_i64m2_m (vbool32_t mask, vint64m2_t vd,
    vint64m2_t vs1, vint64m2_t vs2, size_t vl);
vint64m2_t vnmsac_vx_i64m2_m (vbool32_t mask, vint64m2_t vd,
    int64_t rs1, vint64m2_t vs2, size_t vl);
vint64m4_t vnmsac_vv_i64m4_m (vbool16_t mask, vint64m4_t vd,
    vint64m4_t vs1, vint64m4_t vs2, size_t vl);
vint64m4_t vnmsac_vx_i64m4_m (vbool16_t mask, vint64m4_t vd,
    int64_t rs1, vint64m4_t vs2, size_t vl);
```

```
vint64m8_t vnmsac_vv_i64m8_m (vbool8_t mask, vint64m8_t vd,
    vint64m8_t vs1, vint64m8_t vs2, size_t vl);
vint64m8_t vnmsac_vx_i64m8_m (vbool8_t mask, vint64m8_t vd,
    int64_t rs1, vint64m8_t vs2, size_t vl);
vuint8mf8_t vnmsac_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t vd,
    vuint8mf8_t vs1, vuint8mf8_t vs2, size_t vl);
vuint8mf8_t vnmsac_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t vd,
    uint8_t rs1, vuint8mf8_t vs2, size_t vl);
vuint8mf4_t vnmsac_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t vd,
    vuint8mf4_t vs1, vuint8mf4_t vs2, size_t vl);
vuint8mf4_t vnmsac_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t vd,
    uint8_t rs1, vuint8mf4_t vs2, size_t vl);
vuint8mf2_t vnmsac_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t vd,
    vuint8mf2_t vs1, vuint8mf2_t vs2, size_t vl);
vuint8mf2_t vnmsac_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t vd,
    uint8_t rs1, vuint8mf2_t vs2, size_t vl);
vuint8m1_t vnmsac_vv_u8m1_m (vbool8_t mask, vuint8m1_t vd,
    vuint8m1_t vs1, vuint8m1_t vs2, size_t vl);
vuint8m1_t vnmsac_vx_u8m1_m (vbool8_t mask, vuint8m1_t vd,
    uint8_t rs1, vuint8m1_t vs2, size_t vl);
vuint8m2_t vnmsac_vv_u8m2_m (vbool4_t mask, vuint8m2_t vd,
    vuint8m2_t vs1, vuint8m2_t vs2, size_t vl);
vuint8m2_t vnmsac_vx_u8m2_m (vbool4_t mask, vuint8m2_t vd,
    uint8_t rs1, vuint8m2_t vs2, size_t vl);
vuint8m4_t vnmsac_vv_u8m4_m (vbool2_t mask, vuint8m4_t vd,
    vuint8m4_t vs1, vuint8m4_t vs2, size_t vl);
vuint8m4_t vnmsac_vx_u8m4_m (vbool2_t mask, vuint8m4_t vd,
    uint8_t rs1, vuint8m4_t vs2, size_t vl);
vuint8m8_t vnmsac_vv_u8m8_m (vbool1_t mask, vuint8m8_t vd,
    vuint8m8_t vs1, vuint8m8_t vs2, size_t vl);
vuint8m8_t vnmsac_vx_u8m8_m (vbool1_t mask, vuint8m8_t vd,
    uint8_t rs1, vuint8m8_t vs2, size_t vl);
vuint16mf4_t vnmsac_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    vd, vuint16mf4_t vs1, vuint16mf4_t vs2, size_t vl);
vuint16mf4_t vnmsac_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    vd, uint16_t rs1, vuint16mf4_t vs2, size_t vl);
vuint16mf2_t vnmsac_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    vd, vuint16mf2_t vs1, vuint16mf2_t vs2, size_t vl);
vuint16mf2_t vnmsac_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    vd, uint16_t rs1, vuint16mf2_t vs2, size_t vl);
vuint16m1_t vnmsac_vv_u16m1_m (vbool16_t mask, vuint16m1_t vd,
    vuint16m1_t vs1, vuint16m1_t vs2, size_t vl);
vuint16m1_t vnmsac_vx_u16m1_m (vbool16_t mask, vuint16m1_t vd,
    uint16_t rs1, vuint16m1_t vs2, size_t vl);
vuint16m2_t vnmsac_vv_u16m2_m (vbool8_t mask, vuint16m2_t vd,
    vuint16m2_t vs1, vuint16m2_t vs2, size_t vl);
```

```
vuint16m2_t vnmsac_vx_u16m2_m (vbool8_t mask, vuint16m2_t vd,
    uint16_t rs1, vuint16m2_t vs2, size_t vl);
vuint16m4_t vnmsac_vv_u16m4_m (vbool4_t mask, vuint16m4_t vd,
    vuint16m4_t vs1, vuint16m4_t vs2, size_t vl);
vuint16m4_t vnmsac_vx_u16m4_m (vbool4_t mask, vuint16m4_t vd,
    uint16_t rs1, vuint16m4_t vs2, size_t vl);
vuint16m8_t vnmsac_vv_u16m8_m (vbool2_t mask, vuint16m8_t vd,
    vuint16m8_t vs1, vuint16m8_t vs2, size_t vl);
vuint16m8_t vnmsac_vx_u16m8_m (vbool2_t mask, vuint16m8_t vd,
    uint16_t rs1, vuint16m8_t vs2, size_t vl);
vuint32mf2_t vnmsac_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    vd, vuint32mf2_t vs1, vuint32mf2_t vs2, size_t vl);
vuint32mf2_t vnmsac_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    vd, uint32_t rs1, vuint32mf2_t vs2, size_t vl);
vuint32m1_t vnmsac_vv_u32m1_m (vbool32_t mask, vuint32m1_t vd,
    vuint32m1_t vs1, vuint32m1_t vs2, size_t vl);
vuint32m1_t vnmsac_vx_u32m1_m (vbool32_t mask, vuint32m1_t vd,
    uint32_t rs1, vuint32m1_t vs2, size_t vl);
vuint32m2_t vnmsac_vv_u32m2_m (vbool16_t mask, vuint32m2_t vd,
    vuint32m2_t vs1, vuint32m2_t vs2, size_t vl);
vuint32m2_t vnmsac_vx_u32m2_m (vbool16_t mask, vuint32m2_t vd,
    uint32_t rs1, vuint32m2_t vs2, size_t vl);
vuint32m4_t vnmsac_vv_u32m4_m (vbool8_t mask, vuint32m4_t vd,
    vuint32m4_t vs1, vuint32m4_t vs2, size_t vl);
vuint32m4_t vnmsac_vx_u32m4_m (vbool8_t mask, vuint32m4_t vd,
    uint32_t rs1, vuint32m4_t vs2, size_t vl);
vuint32m8_t vnmsac_vv_u32m8_m (vbool4_t mask, vuint32m8_t vd,
    vuint32m8_t vs1, vuint32m8_t vs2, size_t vl);
vuint32m8_t vnmsac_vx_u32m8_m (vbool4_t mask, vuint32m8_t vd,
    uint32_t rs1, vuint32m8_t vs2, size_t vl);
vuint64m1_t vnmsac_vv_u64m1_m (vbool64_t mask, vuint64m1_t vd,
    vuint64m1_t vs1, vuint64m1_t vs2, size_t vl);
vuint64m1_t vnmsac_vx_u64m1_m (vbool64_t mask, vuint64m1_t vd,
    uint64_t rs1, vuint64m1_t vs2, size_t vl);
vuint64m2_t vnmsac_vv_u64m2_m (vbool32_t mask, vuint64m2_t vd,
    vuint64m2_t vs1, vuint64m2_t vs2, size_t vl);
vuint64m2_t vnmsac_vx_u64m2_m (vbool32_t mask, vuint64m2_t vd,
    uint64_t rs1, vuint64m2_t vs2, size_t vl);
vuint64m4_t vnmsac_vv_u64m4_m (vbool16_t mask, vuint64m4_t vd,
    vuint64m4_t vs1, vuint64m4_t vs2, size_t vl);
vuint64m4_t vnmsac_vx_u64m4_m (vbool16_t mask, vuint64m4_t vd,
    uint64_t rs1, vuint64m4_t vs2, size_t vl);
vuint64m8_t vnmsac_vv_u64m8_m (vbool8_t mask, vuint64m8_t vd,
    vuint64m8_t vs1, vuint64m8_t vs2, size_t vl);
vuint64m8_t vnmsac_vx_u64m8_m (vbool8_t mask, vuint64m8_t vd,
    uint64_t rs1, vuint64m8_t vs2, size_t vl);
```

```
vint8mf8_t vmadd_vv_i8mf8_m (vbool64_t mask, vint8mf8_t vd,
    vint8mf8_t vs1, vint8mf8_t vs2, size_t vl);
vint8mf8_t vmadd_vx_i8mf8_m (vbool64_t mask, vint8mf8_t vd,
    int8_t rs1, vint8mf8_t vs2, size_t vl);
vint8mf4_t vmadd_vv_i8mf4_m (vbool32_t mask, vint8mf4_t vd,
    vint8mf4_t vs1, vint8mf4_t vs2, size_t vl);
vint8mf4_t vmadd_vx_i8mf4_m (vbool32_t mask, vint8mf4_t vd,
    int8_t rs1, vint8mf4_t vs2, size_t vl);
vint8mf2_t vmadd_vv_i8mf2_m (vbool16_t mask, vint8mf2_t vd,
    vint8mf2_t vs1, vint8mf2_t vs2, size_t vl);
vint8mf2_t vmadd_vx_i8mf2_m (vbool16_t mask, vint8mf2_t vd,
    int8_t rs1, vint8mf2_t vs2, size_t vl);
vint8m1_t vmadd_vv_i8m1_m (vbool8_t mask, vint8m1_t vd,
    vint8m1_t vs1, vint8m1_t vs2, size_t vl);
vint8m1_t vmadd_vx_i8m1_m (vbool8_t mask, vint8m1_t vd, int8_t
    rs1, vint8m1_t vs2, size_t vl);
vint8m2_t vmadd_vv_i8m2_m (vbool4_t mask, vint8m2_t vd,
    vint8m2_t vs1, vint8m2_t vs2, size_t vl);
vint8m2_t vmadd_vx_i8m2_m (vbool4_t mask, vint8m2_t vd, int8_t
    rs1, vint8m2_t vs2, size_t vl);
vint8m4_t vmadd_vv_i8m4_m (vbool2_t mask, vint8m4_t vd,
    vint8m4_t vs1, vint8m4_t vs2, size_t vl);
vint8m4_t vmadd_vx_i8m4_m (vbool2_t mask, vint8m4_t vd, int8_t
    rs1, vint8m4_t vs2, size_t vl);
vint8m8_t vmadd_vv_i8m8_m (vbool1_t mask, vint8m8_t vd,
    vint8m8_t vs1, vint8m8_t vs2, size_t vl);
vint8m8_t vmadd_vx_i8m8_m (vbool1_t mask, vint8m8_t vd, int8_t
    rs1, vint8m8_t vs2, size_t vl);
vint16mf4_t vmadd_vv_i16mf4_m (vbool64_t mask, vint16mf4_t vd,
    vint16mf4_t vs1, vint16mf4_t vs2, size_t vl);
vint16mf4_t vmadd_vx_i16mf4_m (vbool64_t mask, vint16mf4_t vd,
    int16_t rs1, vint16mf4_t vs2, size_t vl);
vint16mf2_t vmadd_vv_i16mf2_m (vbool32_t mask, vint16mf2_t vd,
    vint16mf2_t vs1, vint16mf2_t vs2, size_t vl);
vint16mf2_t vmadd_vx_i16mf2_m (vbool32_t mask, vint16mf2_t vd,
    int16_t rs1, vint16mf2_t vs2, size_t vl);
vint16m1_t vmadd_vv_i16m1_m (vbool16_t mask, vint16m1_t vd,
    vint16m1_t vs1, vint16m1_t vs2, size_t vl);
vint16m1_t vmadd_vx_i16m1_m (vbool16_t mask, vint16m1_t vd,
    int16_t rs1, vint16m1_t vs2, size_t vl);
vint16m2_t vmadd_vv_i16m2_m (vbool8_t mask, vint16m2_t vd,
    vint16m2_t vs1, vint16m2_t vs2, size_t vl);
vint16m2_t vmadd_vx_i16m2_m (vbool8_t mask, vint16m2_t vd,
    int16_t rs1, vint16m2_t vs2, size_t vl);
vint16m4_t vmadd_vv_i16m4_m (vbool4_t mask, vint16m4_t vd,
    vint16m4_t vs1, vint16m4_t vs2, size_t vl);
```

```
vint16m4_t vmadd_vx_i16m4_m (vbool4_t mask, vint16m4_t vd,
    int16_t rs1, vint16m4_t vs2, size_t vl);
vint16m8_t vmadd_vv_i16m8_m (vbool2_t mask, vint16m8_t vd,
    vint16m8_t vs1, vint16m8_t vs2, size_t vl);
vint16m8_t vmadd_vx_i16m8_m (vbool2_t mask, vint16m8_t vd,
    int16_t rs1, vint16m8_t vs2, size_t vl);
vint32mf2_t vmadd_vv_i32mf2_m (vbool64_t mask, vint32mf2_t vd,
    vint32mf2_t vs1, vint32mf2_t vs2, size_t vl);
vint32mf2_t vmadd_vx_i32mf2_m (vbool64_t mask, vint32mf2_t vd,
    int32_t rs1, vint32mf2_t vs2, size_t vl);
vint32m1_t vmadd_vv_i32m1_m (vbool32_t mask, vint32m1_t vd,
    vint32m1_t vs1, vint32m1_t vs2, size_t vl);
vint32m1_t vmadd_vx_i32m1_m (vbool32_t mask, vint32m1_t vd,
    int32_t rs1, vint32m1_t vs2, size_t vl);
vint32m2_t vmadd_vv_i32m2_m (vbool16_t mask, vint32m2_t vd,
    vint32m2_t vs1, vint32m2_t vs2, size_t vl);
vint32m2_t vmadd_vx_i32m2_m (vbool16_t mask, vint32m2_t vd,
    int32_t rs1, vint32m2_t vs2, size_t vl);
vint32m4_t vmadd_vv_i32m4_m (vbool8_t mask, vint32m4_t vd,
    vint32m4_t vs1, vint32m4_t vs2, size_t vl);
vint32m4_t vmadd_vx_i32m4_m (vbool8_t mask, vint32m4_t vd,
    int32_t rs1, vint32m4_t vs2, size_t vl);
vint32m8_t vmadd_vv_i32m8_m (vbool4_t mask, vint32m8_t vd,
    vint32m8_t vs1, vint32m8_t vs2, size_t vl);
vint32m8_t vmadd_vx_i32m8_m (vbool4_t mask, vint32m8_t vd,
    int32_t rs1, vint32m8_t vs2, size_t vl);
vint64m1_t vmadd_vv_i64m1_m (vbool64_t mask, vint64m1_t vd,
    vint64m1_t vs1, vint64m1_t vs2, size_t vl);
vint64m1_t vmadd_vx_i64m1_m (vbool64_t mask, vint64m1_t vd,
    int64_t rs1, vint64m1_t vs2, size_t vl);
vint64m2_t vmadd_vv_i64m2_m (vbool32_t mask, vint64m2_t vd,
    vint64m2_t vs1, vint64m2_t vs2, size_t vl);
vint64m2_t vmadd_vx_i64m2_m (vbool32_t mask, vint64m2_t vd,
    int64_t rs1, vint64m2_t vs2, size_t vl);
vint64m4_t vmadd_vv_i64m4_m (vbool16_t mask, vint64m4_t vd,
    vint64m4_t vs1, vint64m4_t vs2, size_t vl);
vint64m4_t vmadd_vx_i64m4_m (vbool16_t mask, vint64m4_t vd,
    int64_t rs1, vint64m4_t vs2, size_t vl);
vint64m8_t vmadd_vv_i64m8_m (vbool8_t mask, vint64m8_t vd,
    vint64m8_t vs1, vint64m8_t vs2, size_t vl);
vint64m8_t vmadd_vx_i64m8_m (vbool8_t mask, vint64m8_t vd,
    int64_t rs1, vint64m8_t vs2, size_t vl);
vuint8mf8_t vmadd_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t vd,
    vuint8mf8_t vs1, vuint8mf8_t vs2, size_t vl);
vuint8mf8_t vmadd_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t vd,
    uint8_t rs1, vuint8mf8_t vs2, size_t vl);
```

```
vuint8mf4_t vmadd_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t vd,
    vuint8mf4_t vs1, vuint8mf4_t vs2, size_t vl);
vuint8mf4_t vmadd_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t vd,
    uint8_t rs1, vuint8mf4_t vs2, size_t vl);
vuint8mf2_t vmadd_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t vd,
    vuint8mf2_t vs1, vuint8mf2_t vs2, size_t vl);
vuint8mf2_t vmadd_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t vd,
    uint8_t rs1, vuint8mf2_t vs2, size_t vl);
vuint8m1_t vmadd_vv_u8m1_m (vbool8_t mask, vuint8m1_t vd,
    vuint8m1_t vs1, vuint8m1_t vs2, size_t vl);
vuint8m1_t vmadd_vx_u8m1_m (vbool8_t mask, vuint8m1_t vd,
    uint8_t rs1, vuint8m1_t vs2, size_t vl);
vuint8m2_t vmadd_vv_u8m2_m (vbool4_t mask, vuint8m2_t vd,
    vuint8m2_t vs1, vuint8m2_t vs2, size_t vl);
vuint8m2_t vmadd_vx_u8m2_m (vbool4_t mask, vuint8m2_t vd,
    uint8_t rs1, vuint8m2_t vs2, size_t vl);
vuint8m4_t vmadd_vv_u8m4_m (vbool2_t mask, vuint8m4_t vd,
    vuint8m4_t vs1, vuint8m4_t vs2, size_t vl);
vuint8m4_t vmadd_vx_u8m4_m (vbool2_t mask, vuint8m4_t vd,
    uint8_t rs1, vuint8m4_t vs2, size_t vl);
vuint8m8_t vmadd_vv_u8m8_m (vbool1_t mask, vuint8m8_t vd,
    vuint8m8_t vs1, vuint8m8_t vs2, size_t vl);
vuint8m8_t vmadd_vx_u8m8_m (vbool1_t mask, vuint8m8_t vd,
    uint8_t rs1, vuint8m8_t vs2, size_t vl);
vuint16mf4_t vmadd_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t vd,
    vuint16mf4_t vs1, vuint16mf4_t vs2, size_t vl);
vuint16mf4_t vmadd_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t vd,
    uint16_t rs1, vuint16mf4_t vs2, size_t vl);
vuint16mf2_t vmadd_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t vd,
    vuint16mf2_t vs1, vuint16mf2_t vs2, size_t vl);
vuint16mf2_t vmadd_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t vd,
    uint16_t rs1, vuint16mf2_t vs2, size_t vl);
vuint16m1_t vmadd_vv_u16m1_m (vbool16_t mask, vuint16m1_t vd,
    vuint16m1_t vs1, vuint16m1_t vs2, size_t vl);
vuint16m1_t vmadd_vx_u16m1_m (vbool16_t mask, vuint16m1_t vd,
    uint16_t rs1, vuint16m1_t vs2, size_t vl);
vuint16m2_t vmadd_vv_u16m2_m (vbool8_t mask, vuint16m2_t vd,
    vuint16m2_t vs1, vuint16m2_t vs2, size_t vl);
vuint16m2_t vmadd_vx_u16m2_m (vbool8_t mask, vuint16m2_t vd,
    uint16_t rs1, vuint16m2_t vs2, size_t vl);
vuint16m4_t vmadd_vv_u16m4_m (vbool4_t mask, vuint16m4_t vd,
    vuint16m4_t vs1, vuint16m4_t vs2, size_t vl);
vuint16m4_t vmadd_vx_u16m4_m (vbool4_t mask, vuint16m4_t vd,
    uint16_t rs1, vuint16m4_t vs2, size_t vl);
vuint16m8_t vmadd_vv_u16m8_m (vbool2_t mask, vuint16m8_t vd,
    vuint16m8_t vs1, vuint16m8_t vs2, size_t vl);
```

```
vuint16m8_t vmadd_vx_u16m8_m (vbool2_t mask, vuint16m8_t vd,
    uint16_t rs1, vuint16m8_t vs2, size_t vl);
vuint32mf2_t vmadd_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t vd,
    vuint32mf2_t vs1, vuint32mf2_t vs2, size_t vl);
vuint32mf2_t vmadd_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t vd,
    uint32_t rs1, vuint32mf2_t vs2, size_t vl);
vuint32m1_t vmadd_vv_u32m1_m (vbool32_t mask, vuint32m1_t vd,
    vuint32m1_t vs1, vuint32m1_t vs2, size_t vl);
vuint32m1_t vmadd_vx_u32m1_m (vbool32_t mask, vuint32m1_t vd,
    uint32_t rs1, vuint32m1_t vs2, size_t vl);
vuint32m2_t vmadd_vv_u32m2_m (vbool16_t mask, vuint32m2_t vd,
    vuint32m2_t vs1, vuint32m2_t vs2, size_t vl);
vuint32m2_t vmadd_vx_u32m2_m (vbool16_t mask, vuint32m2_t vd,
    uint32_t rs1, vuint32m2_t vs2, size_t vl);
vuint32m4_t vmadd_vv_u32m4_m (vbool8_t mask, vuint32m4_t vd,
    vuint32m4_t vs1, vuint32m4_t vs2, size_t vl);
vuint32m4_t vmadd_vx_u32m4_m (vbool8_t mask, vuint32m4_t vd,
    uint32_t rs1, vuint32m4_t vs2, size_t vl);
vuint32m8_t vmadd_vv_u32m8_m (vbool4_t mask, vuint32m8_t vd,
    vuint32m8_t vs1, vuint32m8_t vs2, size_t vl);
vuint32m8_t vmadd_vx_u32m8_m (vbool4_t mask, vuint32m8_t vd,
    uint32_t rs1, vuint32m8_t vs2, size_t vl);
vuint64m1_t vmadd_vv_u64m1_m (vbool64_t mask, vuint64m1_t vd,
    vuint64m1_t vs1, vuint64m1_t vs2, size_t vl);
vuint64m1_t vmadd_vx_u64m1_m (vbool64_t mask, vuint64m1_t vd,
    uint64_t rs1, vuint64m1_t vs2, size_t vl);
vuint64m2_t vmadd_vv_u64m2_m (vbool32_t mask, vuint64m2_t vd,
    vuint64m2_t vs1, vuint64m2_t vs2, size_t vl);
vuint64m2_t vmadd_vx_u64m2_m (vbool32_t mask, vuint64m2_t vd,
    uint64_t rs1, vuint64m2_t vs2, size_t vl);
vuint64m4_t vmadd_vv_u64m4_m (vbool16_t mask, vuint64m4_t vd,
    vuint64m4_t vs1, vuint64m4_t vs2, size_t vl);
vuint64m4_t vmadd_vx_u64m4_m (vbool16_t mask, vuint64m4_t vd,
    uint64_t rs1, vuint64m4_t vs2, size_t vl);
vuint64m8_t vmadd_vv_u64m8_m (vbool8_t mask, vuint64m8_t vd,
    vuint64m8_t vs1, vuint64m8_t vs2, size_t vl);
vuint64m8_t vmadd_vx_u64m8_m (vbool8_t mask, vuint64m8_t vd,
    uint64_t rs1, vuint64m8_t vs2, size_t vl);
vint8mf8_t vnmsub_vv_i8mf8_m (vbool64_t mask, vint8mf8_t vd,
    vint8mf8_t vs1, vint8mf8_t vs2, size_t vl);
vint8mf8_t vnmsub_vx_i8mf8_m (vbool64_t mask, vint8mf8_t vd,
    int8_t rs1, vint8mf8_t vs2, size_t vl);
vint8mf4_t vnmsub_vv_i8mf4_m (vbool32_t mask, vint8mf4_t vd,
    vint8mf4_t vs1, vint8mf4_t vs2, size_t vl);
vint8mf4_t vnmsub_vx_i8mf4_m (vbool32_t mask, vint8mf4_t vd,
    int8_t rs1, vint8mf4_t vs2, size_t vl);
```

```
vint8mf2_t vnmsub_vv_i8mf2_m (vbool16_t mask, vint8mf2_t vd,
    vint8mf2_t vs1, vint8mf2_t vs2, size_t vl);
vint8mf2_t vnmsub_vx_i8mf2_m (vbool16_t mask, vint8mf2_t vd,
    int8_t rs1, vint8mf2_t vs2, size_t vl);
vint8m1_t vnmsub_vv_i8m1_m (vbool8_t mask, vint8m1_t vd,
    vint8m1_t vs1, vint8m1_t vs2, size_t vl);
vint8m1_t vnmsub_vx_i8m1_m (vbool8_t mask, vint8m1_t vd, int8_t
    rs1, vint8m1_t vs2, size_t vl);
vint8m2_t vnmsub_vv_i8m2_m (vbool4_t mask, vint8m2_t vd,
    vint8m2_t vs1, vint8m2_t vs2, size_t vl);
vint8m2_t vnmsub_vx_i8m2_m (vbool4_t mask, vint8m2_t vd, int8_t
    rs1, vint8m2_t vs2, size_t vl);
vint8m4_t vnmsub_vv_i8m4_m (vbool2_t mask, vint8m4_t vd,
    vint8m4_t vs1, vint8m4_t vs2, size_t vl);
vint8m4_t vnmsub_vx_i8m4_m (vbool2_t mask, vint8m4_t vd, int8_t
    rs1, vint8m4_t vs2, size_t vl);
vint8m8_t vnmsub_vv_i8m8_m (vbool1_t mask, vint8m8_t vd,
    vint8m8_t vs1, vint8m8_t vs2, size_t vl);
vint8m8_t vnmsub_vx_i8m8_m (vbool1_t mask, vint8m8_t vd, int8_t
    rs1, vint8m8_t vs2, size_t vl);
vint16mf4_t vnmsub_vv_i16mf4_m (vbool64_t mask, vint16mf4_t vd,
    vint16mf4_t vs1, vint16mf4_t vs2, size_t vl);
vint16mf4_t vnmsub_vx_i16mf4_m (vbool64_t mask, vint16mf4_t vd,
    int16_t rs1, vint16mf4_t vs2, size_t vl);
vint16mf2_t vnmsub_vv_i16mf2_m (vbool32_t mask, vint16mf2_t vd,
    vint16mf2_t vs1, vint16mf2_t vs2, size_t vl);
vint16mf2_t vnmsub_vx_i16mf2_m (vbool32_t mask, vint16mf2_t vd,
    int16_t rs1, vint16mf2_t vs2, size_t vl);
vint16m1_t vnmsub_vv_i16m1_m (vbool16_t mask, vint16m1_t vd,
    vint16m1_t vs1, vint16m1_t vs2, size_t vl);
vint16m1_t vnmsub_vx_i16m1_m (vbool16_t mask, vint16m1_t vd,
    int16_t rs1, vint16m1_t vs2, size_t vl);
vint16m2_t vnmsub_vv_i16m2_m (vbool8_t mask, vint16m2_t vd,
    vint16m2_t vs1, vint16m2_t vs2, size_t vl);
vint16m2_t vnmsub_vx_i16m2_m (vbool8_t mask, vint16m2_t vd,
    int16_t rs1, vint16m2_t vs2, size_t vl);
vint16m4_t vnmsub_vv_i16m4_m (vbool4_t mask, vint16m4_t vd,
    vint16m4_t vs1, vint16m4_t vs2, size_t vl);
vint16m4_t vnmsub_vx_i16m4_m (vbool4_t mask, vint16m4_t vd,
    int16_t rs1, vint16m4_t vs2, size_t vl);
vint16m8_t vnmsub_vv_i16m8_m (vbool2_t mask, vint16m8_t vd,
    vint16m8_t vs1, vint16m8_t vs2, size_t vl);
vint16m8_t vnmsub_vx_i16m8_m (vbool2_t mask, vint16m8_t vd,
    int16_t rs1, vint16m8_t vs2, size_t vl);
vint32mf2_t vnmsub_vv_i32mf2_m (vbool64_t mask, vint32mf2_t vd,
    vint32mf2_t vs1, vint32mf2_t vs2, size_t vl);
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673

```
vint32mf2_t vnmsub_vx_i32mf2_m (vbool64_t mask, vint32mf2_t vd,
    int32_t rs1, vint32mf2_t vs2, size_t vl);
vint32m1_t vnmsub_vv_i32m1_m (vbool32_t mask, vint32m1_t vd,
    vint32m1_t vs1, vint32m1_t vs2, size_t vl);
vint32m1_t vnmsub_vx_i32m1_m (vbool32_t mask, vint32m1_t vd,
    int32_t rs1, vint32m1_t vs2, size_t vl);
vint32m2_t vnmsub_vv_i32m2_m (vbool16_t mask, vint32m2_t vd,
    vint32m2_t vs1, vint32m2_t vs2, size_t vl);
vint32m2_t vnmsub_vx_i32m2_m (vbool16_t mask, vint32m2_t vd,
    int32_t rs1, vint32m2_t vs2, size_t vl);
vint32m4_t vnmsub_vv_i32m4_m (vbool8_t mask, vint32m4_t vd,
    vint32m4_t vs1, vint32m4_t vs2, size_t vl);
vint32m4_t vnmsub_vx_i32m4_m (vbool8_t mask, vint32m4_t vd,
    int32_t rs1, vint32m4_t vs2, size_t vl);
vint32m8_t vnmsub_vv_i32m8_m (vbool4_t mask, vint32m8_t vd,
    vint32m8_t vs1, vint32m8_t vs2, size_t vl);
vint32m8_t vnmsub_vx_i32m8_m (vbool4_t mask, vint32m8_t vd,
    int32_t rs1, vint32m8_t vs2, size_t vl);
vint64m1_t vnmsub_vv_i64m1_m (vbool64_t mask, vint64m1_t vd,
    vint64m1_t vs1, vint64m1_t vs2, size_t vl);
vint64m1_t vnmsub_vx_i64m1_m (vbool64_t mask, vint64m1_t vd,
    int64_t rs1, vint64m1_t vs2, size_t vl);
vint64m2_t vnmsub_vv_i64m2_m (vbool32_t mask, vint64m2_t vd,
    vint64m2_t vs1, vint64m2_t vs2, size_t vl);
vint64m2_t vnmsub_vx_i64m2_m (vbool32_t mask, vint64m2_t vd,
    int64_t rs1, vint64m2_t vs2, size_t vl);
vint64m4_t vnmsub_vv_i64m4_m (vbool16_t mask, vint64m4_t vd,
    vint64m4_t vs1, vint64m4_t vs2, size_t vl);
vint64m4_t vnmsub_vx_i64m4_m (vbool16_t mask, vint64m4_t vd,
    int64_t rs1, vint64m4_t vs2, size_t vl);
vint64m8_t vnmsub_vv_i64m8_m (vbool8_t mask, vint64m8_t vd,
    vint64m8_t vs1, vint64m8_t vs2, size_t vl);
vint64m8_t vnmsub_vx_i64m8_m (vbool8_t mask, vint64m8_t vd,
    int64_t rs1, vint64m8_t vs2, size_t vl);
vuint8mf8_t vnmsub_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t vd,
    vuint8mf8_t vs1, vuint8mf8_t vs2, size_t vl);
vuint8mf8_t vnmsub_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t vd,
    uint8_t rs1, vuint8mf8_t vs2, size_t vl);
vuint8mf4_t vnmsub_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t vd,
    vuint8mf4_t vs1, vuint8mf4_t vs2, size_t vl);
vuint8mf4_t vnmsub_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t vd,
    uint8_t rs1, vuint8mf4_t vs2, size_t vl);
vuint8mf2_t vnmsub_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t vd,
    vuint8mf2_t vs1, vuint8mf2_t vs2, size_t vl);
vuint8mf2_t vnmsub_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t vd,
    uint8_t rs1, vuint8mf2_t vs2, size_t vl);
```

674

```
vuint8m1_t vnmsub_vv_u8m1_m (vbool8_t mask, vuint8m1_t vd,
    vuint8m1_t vs1, vuint8m1_t vs2, size_t vl);
vuint8m1_t vnmsub_vx_u8m1_m (vbool8_t mask, vuint8m1_t vd,
    uint8_t rs1, vuint8m1_t vs2, size_t vl);
vuint8m2_t vnmsub_vv_u8m2_m (vbool4_t mask, vuint8m2_t vd,
    vuint8m2_t vs1, vuint8m2_t vs2, size_t vl);
vuint8m2_t vnmsub_vx_u8m2_m (vbool4_t mask, vuint8m2_t vd,
    uint8_t rs1, vuint8m2_t vs2, size_t vl);
vuint8m4_t vnmsub_vv_u8m4_m (vbool2_t mask, vuint8m4_t vd,
    vuint8m4_t vs1, vuint8m4_t vs2, size_t vl);
vuint8m4_t vnmsub_vx_u8m4_m (vbool2_t mask, vuint8m4_t vd,
    uint8_t rs1, vuint8m4_t vs2, size_t vl);
vuint8m8_t vnmsub_vv_u8m8_m (vbool1_t mask, vuint8m8_t vd,
    vuint8m8_t vs1, vuint8m8_t vs2, size_t vl);
vuint8m8_t vnmsub_vx_u8m8_m (vbool1_t mask, vuint8m8_t vd,
    uint8_t rs1, vuint8m8_t vs2, size_t vl);
vuint16mf4_t vnmsub_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    vd, vuint16mf4_t vs1, vuint16mf4_t vs2, size_t vl);
vuint16mf4_t vnmsub_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    vd, uint16_t rs1, vuint16mf4_t vs2, size_t vl);
vuint16mf2_t vnmsub_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    vd, vuint16mf2_t vs1, vuint16mf2_t vs2, size_t vl);
vuint16mf2_t vnmsub_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    vd, uint16_t rs1, vuint16mf2_t vs2, size_t vl);
vuint16m1_t vnmsub_vv_u16m1_m (vbool16_t mask, vuint16m1_t vd,
    vuint16m1_t vs1, vuint16m1_t vs2, size_t vl);
vuint16m1_t vnmsub_vx_u16m1_m (vbool16_t mask, vuint16m1_t vd,
    uint16_t rs1, vuint16m1_t vs2, size_t vl);
vuint16m2_t vnmsub_vv_u16m2_m (vbool8_t mask, vuint16m2_t vd,
    vuint16m2_t vs1, vuint16m2_t vs2, size_t vl);
vuint16m2_t vnmsub_vx_u16m2_m (vbool8_t mask, vuint16m2_t vd,
    uint16_t rs1, vuint16m2_t vs2, size_t vl);
vuint16m4_t vnmsub_vv_u16m4_m (vbool4_t mask, vuint16m4_t vd,
    vuint16m4_t vs1, vuint16m4_t vs2, size_t vl);
vuint16m4_t vnmsub_vx_u16m4_m (vbool4_t mask, vuint16m4_t vd,
    uint16_t rs1, vuint16m4_t vs2, size_t vl);
vuint16m8_t vnmsub_vv_u16m8_m (vbool2_t mask, vuint16m8_t vd,
    vuint16m8_t vs1, vuint16m8_t vs2, size_t vl);
vuint16m8_t vnmsub_vx_u16m8_m (vbool2_t mask, vuint16m8_t vd,
    uint16_t rs1, vuint16m8_t vs2, size_t vl);
vuint32mf2_t vnmsub_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    vd, vuint32mf2_t vs1, vuint32mf2_t vs2, size_t vl);
vuint32mf2_t vnmsub_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    vd, uint32_t rs1, vuint32mf2_t vs2, size_t vl);
vuint32m1_t vnmsub_vv_u32m1_m (vbool32_t mask, vuint32m1_t vd,
    vuint32m1_t vs1, vuint32m1_t vs2, size_t vl);
```

```
vuint32m1_t vnmsub_vx_u32m1_m (vbool32_t mask, vuint32m1_t vd,
    uint32_t rs1, vuint32m1_t vs2, size_t vl);
vuint32m2_t vnmsub_vv_u32m2_m (vbool16_t mask, vuint32m2_t vd,
    vuint32m2_t vs1, vuint32m2_t vs2, size_t vl);
vuint32m2_t vnmsub_vx_u32m2_m (vbool16_t mask, vuint32m2_t vd,
    uint32_t rs1, vuint32m2_t vs2, size_t vl);
vuint32m4_t vnmsub_vv_u32m4_m (vbool8_t mask, vuint32m4_t vd,
    vuint32m4_t vs1, vuint32m4_t vs2, size_t vl);
vuint32m4_t vnmsub_vx_u32m4_m (vbool8_t mask, vuint32m4_t vd,
    uint32_t rs1, vuint32m4_t vs2, size_t vl);
vuint32m8_t vnmsub_vv_u32m8_m (vbool4_t mask, vuint32m8_t vd,
    vuint32m8_t vs1, vuint32m8_t vs2, size_t vl);
vuint32m8_t vnmsub_vx_u32m8_m (vbool4_t mask, vuint32m8_t vd,
    uint32_t rs1, vuint32m8_t vs2, size_t vl);
vuint64m1_t vnmsub_vv_u64m1_m (vbool64_t mask, vuint64m1_t vd,
    vuint64m1_t vs1, vuint64m1_t vs2, size_t vl);
vuint64m1_t vnmsub_vx_u64m1_m (vbool64_t mask, vuint64m1_t vd,
    uint64_t rs1, vuint64m1_t vs2, size_t vl);
vuint64m2_t vnmsub_vv_u64m2_m (vbool32_t mask, vuint64m2_t vd,
    vuint64m2_t vs1, vuint64m2_t vs2, size_t vl);
vuint64m2_t vnmsub_vx_u64m2_m (vbool32_t mask, vuint64m2_t vd,
    uint64_t rs1, vuint64m2_t vs2, size_t vl);
vuint64m4_t vnmsub_vv_u64m4_m (vbool16_t mask, vuint64m4_t vd,
    vuint64m4_t vs1, vuint64m4_t vs2, size_t vl);
vuint64m4_t vnmsub_vx_u64m4_m (vbool16_t mask, vuint64m4_t vd,
    uint64_t rs1, vuint64m4_t vs2, size_t vl);
vuint64m8_t vnmsub_vv_u64m8_m (vbool8_t mask, vuint64m8_t vd,
    vuint64m8_t vs1, vuint64m8_t vs2, size_t vl);
vuint64m8_t vnmsub_vx_u64m8_m (vbool8_t mask, vuint64m8_t vd,
    uint64_t rs1, vuint64m8_t vs2, size_t vl);
```

Vector Widening Integer Multiply-Add Functions:

Prototypes:

```
vint16mf4_t vwmacc_vv_i16mf4 (vint16mf4_t vd, vint8mf8_t vs1,
    vint8mf8_t vs2, size_t vl);
vint16mf4_t vwmacc_vx_i16mf4 (vint16mf4_t vd, int8_t rs1,
    vint8mf8_t vs2, size_t vl);
vint16mf2_t vwmacc_vv_i16mf2 (vint16mf2_t vd, vint8mf4_t vs1,
    vint8mf4_t vs2, size_t vl);
vint16mf2_t vwmacc_vx_i16mf2 (vint16mf2_t vd, int8_t rs1,
    vint8mf4_t vs2, size_t vl);
vint16m1_t vwmacc_vv_i16m1 (vint16m1_t vd, vint8mf2_t vs1,
    vint8mf2_t vs2, size_t vl);
```

```
vint16m1_t vwmacc_vx_i16m1 (vint16m1_t vd, int8_t rs1,
    vint8mf2_t vs2, size_t vl);
vint16m2_t vwmacc_vv_i16m2 (vint16m2_t vd, vint8m1_t vs1,
    vint8m1_t vs2, size_t vl);
vint16m2_t vwmacc_vx_i16m2 (vint16m2_t vd, int8_t rs1, vint8m1_t
    vs2, size_t vl);
vint16m4_t vwmacc_vv_i16m4 (vint16m4_t vd, vint8m2_t vs1,
    vint8m2_t vs2, size_t vl);
vint16m4_t vwmacc_vx_i16m4 (vint16m4_t vd, int8_t rs1, vint8m2_t
    vs2, size_t vl);
vint16m8_t vwmacc_vv_i16m8 (vint16m8_t vd, vint8m4_t vs1,
    vint8m4_t vs2, size_t vl);
vint16m8_t vwmacc_vx_i16m8 (vint16m8_t vd, int8_t rs1, vint8m4_t
    vs2, size_t vl);
vint32mf2_t vwmacc_vv_i32mf2 (vint32mf2_t vd, vint16mf4_t vs1,
    vint16mf4_t vs2, size_t vl);
vint32mf2_t vwmacc_vx_i32mf2 (vint32mf2_t vd, int16_t rs1,
    vint16mf4_t vs2, size_t vl);
vint32m1_t vwmacc_vv_i32m1 (vint32m1_t vd, vint16mf2_t vs1,
    vint16mf2_t vs2, size_t vl);
vint32m1_t vwmacc_vx_i32m1 (vint32m1_t vd, int16_t rs1,
    vint16mf2_t vs2, size_t vl);
vint32m2_t vwmacc_vv_i32m2 (vint32m2_t vd, vint16m1_t vs1,
    vint16m1_t vs2, size_t vl);
vint32m2_t vwmacc_vx_i32m2 (vint32m2_t vd, int16_t rs1,
    vint16m1_t vs2, size_t vl);
vint32m4_t vwmacc_vv_i32m4 (vint32m4_t vd, vint16m2_t vs1,
    vint16m2_t vs2, size_t vl);
vint32m4_t vwmacc_vx_i32m4 (vint32m4_t vd, int16_t rs1,
    vint16m2_t vs2, size_t vl);
vint32m8_t vwmacc_vv_i32m8 (vint32m8_t vd, vint16m4_t vs1,
    vint16m4_t vs2, size_t vl);
vint32m8_t vwmacc_vx_i32m8 (vint32m8_t vd, int16_t rs1,
    vint16m4_t vs2, size_t vl);
vint64m1_t vwmacc_vv_i64m1 (vint64m1_t vd, vint32mf2_t vs1,
    vint32mf2_t vs2, size_t vl);
vint64m1_t vwmacc_vx_i64m1 (vint64m1_t vd, int32_t rs1,
    vint32mf2_t vs2, size_t vl);
vint64m2_t vwmacc_vv_i64m2 (vint64m2_t vd, vint32m1_t vs1,
    vint32m1_t vs2, size_t vl);
vint64m2_t vwmacc_vx_i64m2 (vint64m2_t vd, int32_t rs1,
    vint32m1_t vs2, size_t vl);
vint64m4_t vwmacc_vv_i64m4 (vint64m4_t vd, vint32m2_t vs1,
    vint32m2_t vs2, size_t vl);
vint64m4_t vwmacc_vx_i64m4 (vint64m4_t vd, int32_t rs1,
    vint32m2_t vs2, size_t vl);
```

677

```
vint64m8_t vwmacc_vv_i64m8 (vint64m8_t vd, vint32m4_t vs1,
    vint32m4_t vs2, size_t vl);
vint64m8_t vwmacc_vx_i64m8 (vint64m8_t vd, int32_t rs1,
    vint32m4_t vs2, size_t vl);
vuint16mf4_t vwmaccu_vv_u16mf4 (vuint16mf4_t vd, vuint8mf8_t
    vs1, vuint8mf8_t vs2, size_t vl);
vuint16mf4_t vwmaccu_vx_u16mf4 (vuint16mf4_t vd, uint8_t rs1,
    vuint8mf8_t vs2, size_t vl);
vuint16mf2_t vwmaccu_vv_u16mf2 (vuint16mf2_t vd, vuint8mf4_t
    vs1, vuint8mf4_t vs2, size_t vl);
vuint16mf2_t vwmaccu_vx_u16mf2 (vuint16mf2_t vd, uint8_t rs1,
    vuint8mf4_t vs2, size_t vl);
vuint16m1_t vwmaccu_vv_u16m1 (vuint16m1_t vd, vuint8mf2_t vs1,
    vuint8mf2_t vs2, size_t vl);
vuint16m1_t vwmaccu_vx_u16m1 (vuint16m1_t vd, uint8_t rs1,
    vuint8mf2_t vs2, size_t vl);
vuint16m2_t vwmaccu_vv_u16m2 (vuint16m2_t vd, vuint8m1_t vs1,
    vuint8m1_t vs2, size_t vl);
vuint16m2_t vwmaccu_vx_u16m2 (vuint16m2_t vd, uint8_t rs1,
    vuint8m1_t vs2, size_t vl);
vuint16m4_t vwmaccu_vv_u16m4 (vuint16m4_t vd, vuint8m2_t vs1,
    vuint8m2_t vs2, size_t vl);
vuint16m4_t vwmaccu_vx_u16m4 (vuint16m4_t vd, uint8_t rs1,
    vuint8m2_t vs2, size_t vl);
vuint16m8_t vwmaccu_vv_u16m8 (vuint16m8_t vd, vuint8m4_t vs1,
    vuint8m4_t vs2, size_t vl);
vuint16m8_t vwmaccu_vx_u16m8 (vuint16m8_t vd, uint8_t rs1,
    vuint8m4_t vs2, size_t vl);
vuint32mf2_t vwmaccu_vv_u32mf2 (vuint32mf2_t vd, vuint16mf4_t
    vs1, vuint16mf4_t vs2, size_t vl);
vuint32mf2_t vwmaccu_vx_u32mf2 (vuint32mf2_t vd, uint16_t rs1,
    vuint16mf4_t vs2, size_t vl);
vuint32m1_t vwmaccu_vv_u32m1 (vuint32m1_t vd, vuint16mf2_t vs1,
    vuint16mf2_t vs2, size_t vl);
vuint32m1_t vwmaccu_vx_u32m1 (vuint32m1_t vd, uint16_t rs1,
    vuint16mf2_t vs2, size_t vl);
vuint32m2_t vwmaccu_vv_u32m2 (vuint32m2_t vd, vuint16m1_t vs1,
    vuint16m1_t vs2, size_t vl);
vuint32m2_t vwmaccu_vx_u32m2 (vuint32m2_t vd, uint16_t rs1,
    vuint16m1_t vs2, size_t vl);
vuint32m4_t vwmaccu_vv_u32m4 (vuint32m4_t vd, vuint16m2_t vs1,
    vuint16m2_t vs2, size_t vl);
vuint32m4_t vwmaccu_vx_u32m4 (vuint32m4_t vd, uint16_t rs1,
    vuint16m2_t vs2, size_t vl);
vuint32m8_t vwmaccu_vv_u32m8 (vuint32m8_t vd, vuint16m4_t vs1,
    vuint16m4_t vs2, size_t vl);
```

```
vuint32m8_t vwmaccu_vx_u32m8 (vuint32m8_t vd, uint16_t rs1,
    vuint16m4_t vs2, size_t vl);
vuint64m1_t vwmaccu_vv_u64m1 (vuint64m1_t vd, vuint32mf2_t vs1,
    vuint32mf2_t vs2, size_t vl);
vuint64m1_t vwmaccu_vx_u64m1 (vuint64m1_t vd, uint32_t rs1,
    vuint32mf2_t vs2, size_t vl);
vuint64m2_t vwmaccu_vv_u64m2 (vuint64m2_t vd, vuint32m1_t vs1,
    vuint32m1_t vs2, size_t vl);
vuint64m2_t vwmaccu_vx_u64m2 (vuint64m2_t vd, uint32_t rs1,
    vuint32m1_t vs2, size_t vl);
vuint64m4_t vwmaccu_vv_u64m4 (vuint64m4_t vd, vuint32m2_t vs1,
    vuint32m2_t vs2, size_t vl);
vuint64m4_t vwmaccu_vx_u64m4 (vuint64m4_t vd, uint32_t rs1,
    vuint32m2_t vs2, size_t vl);
vuint64m8_t vwmaccu_vv_u64m8 (vuint64m8_t vd, vuint32m4_t vs1,
    vuint32m4_t vs2, size_t vl);
vuint64m8_t vwmaccu_vx_u64m8 (vuint64m8_t vd, uint32_t rs1,
    vuint32m4_t vs2, size_t vl);
vint16mf4_t vwmaccsu_vv_i16mf4 (vint16mf4_t vd, vint8mf8_t vs1,
    vuint8mf8_t vs2, size_t vl);
vint16mf4_t vwmaccsu_vx_i16mf4 (vint16mf4_t vd, int8_t rs1,
    vuint8mf8_t vs2, size_t vl);
vint16mf2_t vwmaccsu_vv_i16mf2 (vint16mf2_t vd, vint8mf4_t vs1,
    vuint8mf4_t vs2, size_t vl);
vint16mf2_t vwmaccsu_vx_i16mf2 (vint16mf2_t vd, int8_t rs1,
    vuint8mf4_t vs2, size_t vl);
vint16m1_t vwmaccsu_vv_i16m1 (vint16m1_t vd, vint8mf2_t vs1,
    vuint8mf2_t vs2, size_t vl);
vint16m1_t vwmaccsu_vx_i16m1 (vint16m1_t vd, int8_t rs1,
    vuint8mf2_t vs2, size_t vl);
vint16m2_t vwmaccsu_vv_i16m2 (vint16m2_t vd, vint8m1_t vs1,
    vuint8m1_t vs2, size_t vl);
vint16m2_t vwmaccsu_vx_i16m2 (vint16m2_t vd, int8_t rs1,
    vuint8m1_t vs2, size_t vl);
vint16m4_t vwmaccsu_vv_i16m4 (vint16m4_t vd, vint8m2_t vs1,
    vuint8m2_t vs2, size_t vl);
vint16m4_t vwmaccsu_vx_i16m4 (vint16m4_t vd, int8_t rs1,
    vuint8m2_t vs2, size_t vl);
vint16m8_t vwmaccsu_vv_i16m8 (vint16m8_t vd, vint8m4_t vs1,
    vuint8m4_t vs2, size_t vl);
vint16m8_t vwmaccsu_vx_i16m8 (vint16m8_t vd, int8_t rs1,
    vuint8m4_t vs2, size_t vl);
vint32mf2_t vwmaccsu_vv_i32mf2 (vint32mf2_t vd, vint16mf4_t vs1,
    vuint16mf4_t vs2, size_t vl);
vint32mf2_t vwmaccsu_vx_i32mf2 (vint32mf2_t vd, int16_t rs1,
    vuint16mf4_t vs2, size_t vl);
```

```
vint32m1_t vwmaccsu_vv_i32m1 (vint32m1_t vd, vint16mf2_t vs1,
    vuint16mf2_t vs2, size_t vl);
vint32m1_t vwmaccsu_vx_i32m1 (vint32m1_t vd, int16_t rs1,
    vuint16mf2_t vs2, size_t vl);
vint32m2_t vwmaccsu_vv_i32m2 (vint32m2_t vd, vint16m1_t vs1,
    vuint16m1_t vs2, size_t vl);
vint32m2_t vwmaccsu_vx_i32m2 (vint32m2_t vd, int16_t rs1,
    vuint16m1_t vs2, size_t vl);
vint32m4_t vwmaccsu_vv_i32m4 (vint32m4_t vd, vint16m2_t vs1,
    vuint16m2_t vs2, size_t vl);
vint32m4_t vwmaccsu_vx_i32m4 (vint32m4_t vd, int16_t rs1,
    vuint16m2_t vs2, size_t vl);
vint32m8_t vwmaccsu_vv_i32m8 (vint32m8_t vd, vint16m4_t vs1,
    vuint16m4_t vs2, size_t vl);
vint32m8_t vwmaccsu_vx_i32m8 (vint32m8_t vd, int16_t rs1,
    vuint16m4_t vs2, size_t vl);
vint64m1_t vwmaccsu_vv_i64m1 (vint64m1_t vd, vint32mf2_t vs1,
    vuint32mf2_t vs2, size_t vl);
vint64m1_t vwmaccsu_vx_i64m1 (vint64m1_t vd, int32_t rs1,
    vuint32mf2_t vs2, size_t vl);
vint64m2_t vwmaccsu_vv_i64m2 (vint64m2_t vd, vint32m1_t vs1,
    vuint32m1_t vs2, size_t vl);
vint64m2_t vwmaccsu_vx_i64m2 (vint64m2_t vd, int32_t rs1,
    vuint32m1_t vs2, size_t vl);
vint64m4_t vwmaccsu_vv_i64m4 (vint64m4_t vd, vint32m2_t vs1,
    vuint32m2_t vs2, size_t vl);
vint64m4_t vwmaccsu_vx_i64m4 (vint64m4_t vd, int32_t rs1,
    vuint32m2_t vs2, size_t vl);
vint64m8_t vwmaccsu_vv_i64m8 (vint64m8_t vd, vint32m4_t vs1,
    vuint32m4_t vs2, size_t vl);
vint64m8_t vwmaccsu_vx_i64m8 (vint64m8_t vd, int32_t rs1,
    vuint32m4_t vs2, size_t vl);
vint16mf4_t vwmaccus_vx_i16mf4 (vint16mf4_t vd, uint8_t rs1,
    vint8mf8_t vs2, size_t vl);
vint16mf2_t vwmaccus_vx_i16mf2 (vint16mf2_t vd, uint8_t rs1,
    vint8mf4_t vs2, size_t vl);
vint16m1_t vwmaccus_vx_i16m1 (vint16m1_t vd, uint8_t rs1,
    vint8mf2_t vs2, size_t vl);
vint16m2_t vwmaccus_vx_i16m2 (vint16m2_t vd, uint8_t rs1,
    vint8m1_t vs2, size_t vl);
vint16m4_t vwmaccus_vx_i16m4 (vint16m4_t vd, uint8_t rs1,
    vint8m2_t vs2, size_t vl);
vint16m8_t vwmaccus_vx_i16m8 (vint16m8_t vd, uint8_t rs1,
    vint8m4_t vs2, size_t vl);
vint32mf2_t vwmaccus_vx_i32mf2 (vint32mf2_t vd, uint16_t rs1,
    vint16mf4_t vs2, size_t vl);
```

```
vint32m1_t vwmaccus_vx_i32m1 (vint32m1_t vd, uint16_t rs1,
    vint16mf2_t vs2, size_t vl);
vint32m2_t vwmaccus_vx_i32m2 (vint32m2_t vd, uint16_t rs1,
    vint16m1_t vs2, size_t vl);
vint32m4_t vwmaccus_vx_i32m4 (vint32m4_t vd, uint16_t rs1,
    vint16m2_t vs2, size_t vl);
vint32m8_t vwmaccus_vx_i32m8 (vint32m8_t vd, uint16_t rs1,
    vint16m4_t vs2, size_t vl);
vint64m1_t vwmaccus_vx_i64m1 (vint64m1_t vd, uint32_t rs1,
    vint32mf2_t vs2, size_t vl);
vint64m2_t vwmaccus_vx_i64m2 (vint64m2_t vd, uint32_t rs1,
    vint32m1_t vs2, size_t vl);
vint64m4_t vwmaccus_vx_i64m4 (vint64m4_t vd, uint32_t rs1,
    vint32m2_t vs2, size_t vl);
vint64m8_t vwmaccus_vx_i64m8 (vint64m8_t vd, uint32_t rs1,
    vint32m4_t vs2, size_t vl);
// masked functions
vint16mf4_t vwmacc_vv_i16mf4_m (vbool64_t mask, vint16mf4_t vd,
    vint8mf8_t vs1, vint8mf8_t vs2, size_t vl);
vint16mf4_t vwmacc_vx_i16mf4_m (vbool64_t mask, vint16mf4_t vd,
    int8_t rs1, vint8mf8_t vs2, size_t vl);
vint16mf2_t vwmacc_vv_i16mf2_m (vbool32_t mask, vint16mf2_t vd,
    vint8mf4_t vs1, vint8mf4_t vs2, size_t vl);
vint16mf2_t vwmacc_vx_i16mf2_m (vbool32_t mask, vint16mf2_t vd,
    int8_t rs1, vint8mf4_t vs2, size_t vl);
vint16m1_t vwmacc_vv_i16m1_m (vbool16_t mask, vint16m1_t vd,
    vint8mf2_t vs1, vint8mf2_t vs2, size_t vl);
vint16m1_t vwmacc_vx_i16m1_m (vbool16_t mask, vint16m1_t vd,
    int8_t rs1, vint8mf2_t vs2, size_t vl);
vint16m2_t vwmacc_vv_i16m2_m (vbool8_t mask, vint16m2_t vd,
    vint8m1_t vs1, vint8m1_t vs2, size_t vl);
vint16m2_t vwmacc_vx_i16m2_m (vbool8_t mask, vint16m2_t vd,
    int8_t rs1, vint8m1_t vs2, size_t vl);
vint16m4_t vwmacc_vv_i16m4_m (vbool4_t mask, vint16m4_t vd,
    vint8m2_t vs1, vint8m2_t vs2, size_t vl);
vint16m4_t vwmacc_vx_i16m4_m (vbool4_t mask, vint16m4_t vd,
    int8_t rs1, vint8m2_t vs2, size_t vl);
vint16m8_t vwmacc_vv_i16m8_m (vbool2_t mask, vint16m8_t vd,
    vint8m4_t vs1, vint8m4_t vs2, size_t vl);
vint16m8_t vwmacc_vx_i16m8_m (vbool2_t mask, vint16m8_t vd,
    int8_t rs1, vint8m4_t vs2, size_t vl);
vint32mf2_t vwmacc_vv_i32mf2_m (vbool64_t mask, vint32mf2_t vd,
    vint16mf4_t vs1, vint16mf4_t vs2, size_t vl);
vint32mf2_t vwmacc_vx_i32mf2_m (vbool64_t mask, vint32mf2_t vd,
    int16_t rs1, vint16mf4_t vs2, size_t vl);
```

```
vint32m1_t vwmacc_vv_i32m1_m (vbool32_t mask, vint32m1_t vd,
    vint16mf2_t vs1, vint16mf2_t vs2, size_t vl);
vint32m1_t vwmacc_vx_i32m1_m (vbool32_t mask, vint32m1_t vd,
    int16_t rs1, vint16mf2_t vs2, size_t vl);
vint32m2_t vwmacc_vv_i32m2_m (vbool16_t mask, vint32m2_t vd,
    vint16m1_t vs1, vint16m1_t vs2, size_t vl);
vint32m2_t vwmacc_vx_i32m2_m (vbool16_t mask, vint32m2_t vd,
    int16_t rs1, vint16m1_t vs2, size_t vl);
vint32m4_t vwmacc_vv_i32m4_m (vbool8_t mask, vint32m4_t vd,
    vint16m2_t vs1, vint16m2_t vs2, size_t vl);
vint32m4_t vwmacc_vx_i32m4_m (vbool8_t mask, vint32m4_t vd,
    int16_t rs1, vint16m2_t vs2, size_t vl);
vint32m8_t vwmacc_vv_i32m8_m (vbool4_t mask, vint32m8_t vd,
    vint16m4_t vs1, vint16m4_t vs2, size_t vl);
vint32m8_t vwmacc_vx_i32m8_m (vbool4_t mask, vint32m8_t vd,
    int16_t rs1, vint16m4_t vs2, size_t vl);
vint64m1_t vwmacc_vv_i64m1_m (vbool64_t mask, vint64m1_t vd,
    vint32mf2_t vs1, vint32mf2_t vs2, size_t vl);
vint64m1_t vwmacc_vx_i64m1_m (vbool64_t mask, vint64m1_t vd,
    int32_t rs1, vint32mf2_t vs2, size_t vl);
vint64m2_t vwmacc_vv_i64m2_m (vbool32_t mask, vint64m2_t vd,
    vint32m1_t vs1, vint32m1_t vs2, size_t vl);
vint64m2_t vwmacc_vx_i64m2_m (vbool32_t mask, vint64m2_t vd,
    int32_t rs1, vint32m1_t vs2, size_t vl);
vint64m4_t vwmacc_vv_i64m4_m (vbool16_t mask, vint64m4_t vd,
    vint32m2_t vs1, vint32m2_t vs2, size_t vl);
vint64m4_t vwmacc_vx_i64m4_m (vbool16_t mask, vint64m4_t vd,
    int32_t rs1, vint32m2_t vs2, size_t vl);
vint64m8_t vwmacc_vv_i64m8_m (vbool8_t mask, vint64m8_t vd,
    vint32m4_t vs1, vint32m4_t vs2, size_t vl);
vint64m8_t vwmacc_vx_i64m8_m (vbool8_t mask, vint64m8_t vd,
    int32_t rs1, vint32m4_t vs2, size_t vl);
vuint16mf4_t vwmaccu_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    vd, vuint8mf8_t vs1, vuint8mf8_t vs2, size_t vl);
vuint16mf4_t vwmaccu_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    vd, uint8_t rs1, vuint8mf8_t vs2, size_t vl);
vuint16mf2_t vwmaccu_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    vd, vuint8mf4_t vs1, vuint8mf4_t vs2, size_t vl);
vuint16mf2_t vwmaccu_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    vd, uint8_t rs1, vuint8mf4_t vs2, size_t vl);
vuint16m1_t vwmaccu_vv_u16m1_m (vbool16_t mask, vuint16m1_t vd,
    vuint8mf2_t vs1, vuint8mf2_t vs2, size_t vl);
vuint16m1_t vwmaccu_vx_u16m1_m (vbool16_t mask, vuint16m1_t vd,
    uint8_t rs1, vuint8mf2_t vs2, size_t vl);
vuint16m2_t vwmaccu_vv_u16m2_m (vbool8_t mask, vuint16m2_t vd,
    vuint8m1_t vs1, vuint8m1_t vs2, size_t vl);
```

```
vuint16m2_t vwmaccu_vx_u16m2_m (vbool8_t mask, vuint16m2_t vd,
    uint8_t rs1, vuint8m1_t vs2, size_t vl);
vuint16m4_t vwmaccu_vv_u16m4_m (vbool4_t mask, vuint16m4_t vd,
    vuint8m2_t vs1, vuint8m2_t vs2, size_t vl);
vuint16m4_t vwmaccu_vx_u16m4_m (vbool4_t mask, vuint16m4_t vd,
    uint8_t rs1, vuint8m2_t vs2, size_t vl);
vuint16m8_t vwmaccu_vv_u16m8_m (vbool2_t mask, vuint16m8_t vd,
    vuint8m4_t vs1, vuint8m4_t vs2, size_t vl);
vuint16m8_t vwmaccu_vx_u16m8_m (vbool2_t mask, vuint16m8_t vd,
    uint8_t rs1, vuint8m4_t vs2, size_t vl);
vuint32mf2_t vwmaccu_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    vd, vuint16mf4_t vs1, vuint16mf4_t vs2, size_t vl);
vuint32mf2_t vwmaccu_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    vd, uint16_t rs1, vuint16mf4_t vs2, size_t vl);
vuint32m1_t vwmaccu_vv_u32m1_m (vbool32_t mask, vuint32m1_t vd,
    vuint16mf2_t vs1, vuint16mf2_t vs2, size_t vl);
vuint32m1_t vwmaccu_vx_u32m1_m (vbool32_t mask, vuint32m1_t vd,
    uint16_t rs1, vuint16mf2_t vs2, size_t vl);
vuint32m2_t vwmaccu_vv_u32m2_m (vbool16_t mask, vuint32m2_t vd,
    vuint16m1_t vs1, vuint16m1_t vs2, size_t vl);
vuint32m2_t vwmaccu_vx_u32m2_m (vbool16_t mask, vuint32m2_t vd,
    uint16_t rs1, vuint16m1_t vs2, size_t vl);
vuint32m4_t vwmaccu_vv_u32m4_m (vbool8_t mask, vuint32m4_t vd,
    vuint16m2_t vs1, vuint16m2_t vs2, size_t vl);
vuint32m4_t vwmaccu_vx_u32m4_m (vbool8_t mask, vuint32m4_t vd,
    uint16_t rs1, vuint16m2_t vs2, size_t vl);
vuint32m8_t vwmaccu_vv_u32m8_m (vbool4_t mask, vuint32m8_t vd,
    vuint16m4_t vs1, vuint16m4_t vs2, size_t vl);
vuint32m8_t vwmaccu_vx_u32m8_m (vbool4_t mask, vuint32m8_t vd,
    uint16_t rs1, vuint16m4_t vs2, size_t vl);
vuint64m1_t vwmaccu_vv_u64m1_m (vbool64_t mask, vuint64m1_t vd,
    vuint32mf2_t vs1, vuint32mf2_t vs2, size_t vl);
vuint64m1_t vwmaccu_vx_u64m1_m (vbool64_t mask, vuint64m1_t vd,
    uint32_t rs1, vuint32mf2_t vs2, size_t vl);
vuint64m2_t vwmaccu_vv_u64m2_m (vbool32_t mask, vuint64m2_t vd,
    vuint32m1_t vs1, vuint32m1_t vs2, size_t vl);
vuint64m2_t vwmaccu_vx_u64m2_m (vbool32_t mask, vuint64m2_t vd,
    uint32_t rs1, vuint32m1_t vs2, size_t vl);
vuint64m4_t vwmaccu_vv_u64m4_m (vbool16_t mask, vuint64m4_t vd,
    vuint32m2_t vs1, vuint32m2_t vs2, size_t vl);
vuint64m4_t vwmaccu_vx_u64m4_m (vbool16_t mask, vuint64m4_t vd,
    uint32_t rs1, vuint32m2_t vs2, size_t vl);
vuint64m8_t vwmaccu_vv_u64m8_m (vbool8_t mask, vuint64m8_t vd,
    vuint32m4_t vs1, vuint32m4_t vs2, size_t vl);
vuint64m8_t vwmaccu_vx_u64m8_m (vbool8_t mask, vuint64m8_t vd,
    uint32_t rs1, vuint32m4_t vs2, size_t vl);
```

```
vint16mf4_t vwmaccsu_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    vd, vint8mf8_t vs1, vuint8mf8_t vs2, size_t vl);
vint16mf4_t vwmaccsu_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    vd, int8_t rs1, vuint8mf8_t vs2, size_t vl);
vint16mf2_t vwmaccsu_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    vd, vint8mf4_t vs1, vuint8mf4_t vs2, size_t vl);
vint16mf2_t vwmaccsu_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    vd, int8_t rs1, vuint8mf4_t vs2, size_t vl);
vint16m1_t vwmaccsu_vv_i16m1_m (vbool16_t mask, vint16m1_t vd,
    vint8mf2_t vs1, vuint8mf2_t vs2, size_t vl);
vint16m1_t vwmaccsu_vx_i16m1_m (vbool16_t mask, vint16m1_t vd,
    int8_t rs1, vuint8mf2_t vs2, size_t vl);
vint16m2_t vwmaccsu_vv_i16m2_m (vbool8_t mask, vint16m2_t vd,
    vint8m1_t vs1, vuint8m1_t vs2, size_t vl);
vint16m2_t vwmaccsu_vx_i16m2_m (vbool8_t mask, vint16m2_t vd,
    int8_t rs1, vuint8m1_t vs2, size_t vl);
vint16m4_t vwmaccsu_vv_i16m4_m (vbool4_t mask, vint16m4_t vd,
    vint8m2_t vs1, vuint8m2_t vs2, size_t vl);
vint16m4_t vwmaccsu_vx_i16m4_m (vbool4_t mask, vint16m4_t vd,
    int8_t rs1, vuint8m2_t vs2, size_t vl);
vint16m8_t vwmaccsu_vv_i16m8_m (vbool2_t mask, vint16m8_t vd,
    vint8m4_t vs1, vuint8m4_t vs2, size_t vl);
vint16m8_t vwmaccsu_vx_i16m8_m (vbool2_t mask, vint16m8_t vd,
    int8_t rs1, vuint8m4_t vs2, size_t vl);
vint32mf2_t vwmaccsu_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    vd, vint16mf4_t vs1, vuint16mf4_t vs2, size_t vl);
vint32mf2_t vwmaccsu_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    vd, int16_t rs1, vuint16mf4_t vs2, size_t vl);
vint32m1_t vwmaccsu_vv_i32m1_m (vbool32_t mask, vint32m1_t vd,
    vint16mf2_t vs1, vuint16mf2_t vs2, size_t vl);
vint32m1_t vwmaccsu_vx_i32m1_m (vbool32_t mask, vint32m1_t vd,
    int16_t rs1, vuint16mf2_t vs2, size_t vl);
vint32m2_t vwmaccsu_vv_i32m2_m (vbool16_t mask, vint32m2_t vd,
    vint16m1_t vs1, vuint16m1_t vs2, size_t vl);
vint32m2_t vwmaccsu_vx_i32m2_m (vbool16_t mask, vint32m2_t vd,
    int16_t rs1, vuint16m1_t vs2, size_t vl);
vint32m4_t vwmaccsu_vv_i32m4_m (vbool8_t mask, vint32m4_t vd,
    vint16m2_t vs1, vuint16m2_t vs2, size_t vl);
vint32m4_t vwmaccsu_vx_i32m4_m (vbool8_t mask, vint32m4_t vd,
    int16_t rs1, vuint16m2_t vs2, size_t vl);
vint32m8_t vwmaccsu_vv_i32m8_m (vbool4_t mask, vint32m8_t vd,
    vint16m4_t vs1, vuint16m4_t vs2, size_t vl);
vint32m8_t vwmaccsu_vx_i32m8_m (vbool4_t mask, vint32m8_t vd,
    int16_t rs1, vuint16m4_t vs2, size_t vl);
vint64m1_t vwmaccsu_vv_i64m1_m (vbool64_t mask, vint64m1_t vd,
    vint32mf2_t vs1, vuint32mf2_t vs2, size_t vl);
```

```
vint64m1_t vwmaccsu_vx_i64m1_m (vbool64_t mask, vint64m1_t vd,
    int32_t rs1, vuint32mf2_t vs2, size_t vl);
vint64m2_t vwmaccsu_vv_i64m2_m (vbool32_t mask, vint64m2_t vd,
    vint32m1_t vs1, vuint32m1_t vs2, size_t vl);
vint64m2_t vwmaccsu_vx_i64m2_m (vbool32_t mask, vint64m2_t vd,
    int32_t rs1, vuint32m1_t vs2, size_t vl);
vint64m4_t vwmaccsu_vv_i64m4_m (vbool16_t mask, vint64m4_t vd,
    vint32m2_t vs1, vuint32m2_t vs2, size_t vl);
vint64m4_t vwmaccsu_vx_i64m4_m (vbool16_t mask, vint64m4_t vd,
    int32_t rs1, vuint32m2_t vs2, size_t vl);
vint64m8_t vwmaccsu_vv_i64m8_m (vbool8_t mask, vint64m8_t vd,
    vint32m4_t vs1, vuint32m4_t vs2, size_t vl);
vint64m8_t vwmaccsu_vx_i64m8_m (vbool8_t mask, vint64m8_t vd,
    int32_t rs1, vuint32m4_t vs2, size_t vl);
vint16mf4_t vwmaccus_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    vd, uint8_t rs1, vint8mf8_t vs2, size_t vl);
vint16mf2_t vwmaccus_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    vd, uint8_t rs1, vint8mf4_t vs2, size_t vl);
vint16m1_t vwmaccus_vx_i16m1_m (vbool16_t mask, vint16m1_t vd,
    uint8_t rs1, vint8mf2_t vs2, size_t vl);
vint16m2_t vwmaccus_vx_i16m2_m (vbool8_t mask, vint16m2_t vd,
    uint8_t rs1, vint8m1_t vs2, size_t vl);
vint16m4_t vwmaccus_vx_i16m4_m (vbool4_t mask, vint16m4_t vd,
    uint8_t rs1, vint8m2_t vs2, size_t vl);
vint16m8_t vwmaccus_vx_i16m8_m (vbool2_t mask, vint16m8_t vd,
    uint8_t rs1, vint8m4_t vs2, size_t vl);
vint32mf2_t vwmaccus_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    vd, uint16_t rs1, vint16mf4_t vs2, size_t vl);
vint32m1_t vwmaccus_vx_i32m1_m (vbool32_t mask, vint32m1_t vd,
    uint16_t rs1, vint16mf2_t vs2, size_t vl);
vint32m2_t vwmaccus_vx_i32m2_m (vbool16_t mask, vint32m2_t vd,
    uint16_t rs1, vint16m1_t vs2, size_t vl);
vint32m4_t vwmaccus_vx_i32m4_m (vbool8_t mask, vint32m4_t vd,
    uint16_t rs1, vint16m2_t vs2, size_t vl);
vint32m8_t vwmaccus_vx_i32m8_m (vbool4_t mask, vint32m8_t vd,
    uint16_t rs1, vint16m4_t vs2, size_t vl);
vint64m1_t vwmaccus_vx_i64m1_m (vbool64_t mask, vint64m1_t vd,
    uint32_t rs1, vint32mf2_t vs2, size_t vl);
vint64m2_t vwmaccus_vx_i64m2_m (vbool32_t mask, vint64m2_t vd,
    uint32_t rs1, vint32m1_t vs2, size_t vl);
vint64m4_t vwmaccus_vx_i64m4_m (vbool16_t mask, vint64m4_t vd,
    uint32_t rs1, vint32m2_t vs2, size_t vl);
vint64m8_t vwmaccus_vx_i64m8_m (vbool8_t mask, vint64m8_t vd,
    uint32_t rs1, vint32m4_t vs2, size_t vl);
```

Vector Integer Merge Functions:

Prototypes:

```
vint8mf8_t vmerge_vvm_i8mf8 (vbool64_t mask, vint8mf8_t op1,
    vint8mf8_t op2, size_t vl);
vint8mf8_t vmerge_vxm_i8mf8 (vbool64_t mask, vint8mf8_t op1,
    int8_t op2, size_t vl);
vint8mf4_t vmerge_vvm_i8mf4 (vbool32_t mask, vint8mf4_t op1,
    vint8mf4_t op2, size_t vl);
vint8mf4_t vmerge_vxm_i8mf4 (vbool32_t mask, vint8mf4_t op1,
    int8_t op2, size_t vl);
vint8mf2_t vmerge_vvm_i8mf2 (vbool16_t mask, vint8mf2_t op1,
    vint8mf2_t op2, size_t vl);
vint8mf2_t vmerge_vxm_i8mf2 (vbool16_t mask, vint8mf2_t op1,
    int8_t op2, size_t vl);
vint8m1_t vmerge_vvm_i8m1 (vbool8_t mask, vint8m1_t op1,
    vint8m1_t op2, size_t vl);
vint8m1_t vmerge_vxm_i8m1 (vbool8_t mask, vint8m1_t op1, int8_t
    op2, size_t vl);
vint8m2_t vmerge_vvm_i8m2 (vbool4_t mask, vint8m2_t op1,
    vint8m2_t op2, size_t vl);
vint8m2_t vmerge_vxm_i8m2 (vbool4_t mask, vint8m2_t op1, int8_t
    op2, size_t vl);
vint8m4_t vmerge_vvm_i8m4 (vbool2_t mask, vint8m4_t op1,
    vint8m4_t op2, size_t vl);
vint8m4_t vmerge_vxm_i8m4 (vbool2_t mask, vint8m4_t op1, int8_t
    op2, size_t vl);
vint8m8_t vmerge_vvm_i8m8 (vbool1_t mask, vint8m8_t op1,
    vint8m8_t op2, size_t vl);
vint8m8_t vmerge_vxm_i8m8 (vbool1_t mask, vint8m8_t op1, int8_t
    op2, size_t vl);
vint16mf4_t vmerge_vvm_i16mf4 (vbool64_t mask, vint16mf4_t op1,
    vint16mf4_t op2, size_t vl);
vint16mf4_t vmerge_vxm_i16mf4 (vbool64_t mask, vint16mf4_t op1,
    int16_t op2, size_t vl);
vint16mf2_t vmerge_vvm_i16mf2 (vbool32_t mask, vint16mf2_t op1,
    vint16mf2_t op2, size_t vl);
vint16mf2_t vmerge_vxm_i16mf2 (vbool32_t mask, vint16mf2_t op1,
    int16_t op2, size_t vl);
vint16m1_t vmerge_vvm_i16m1 (vbool16_t mask, vint16m1_t op1,
    vint16m1_t op2, size_t vl);
vint16m1_t vmerge_vxm_i16m1 (vbool16_t mask, vint16m1_t op1,
    int16_t op2, size_t vl);
vint16m2_t vmerge_vvm_i16m2 (vbool8_t mask, vint16m2_t op1,
    vint16m2_t op2, size_t vl);
```

```
vint16m2_t vmerge_vxm_i16m2 (vbool8_t mask, vint16m2_t op1,
    int16_t op2, size_t vl);
vint16m4_t vmerge_vvm_i16m4 (vbool4_t mask, vint16m4_t op1,
    vint16m4_t op2, size_t vl);
vint16m4_t vmerge_vxm_i16m4 (vbool4_t mask, vint16m4_t op1,
    int16_t op2, size_t vl);
vint16m8_t vmerge_vvm_i16m8 (vbool2_t mask, vint16m8_t op1,
    vint16m8_t op2, size_t vl);
vint16m8_t vmerge_vxm_i16m8 (vbool2_t mask, vint16m8_t op1,
    int16_t op2, size_t vl);
vint32mf2_t vmerge_vvm_i32mf2 (vbool64_t mask, vint32mf2_t op1,
    vint32mf2_t op2, size_t vl);
vint32mf2_t vmerge_vxm_i32mf2 (vbool64_t mask, vint32mf2_t op1,
    int32_t op2, size_t vl);
vint32m1_t vmerge_vvm_i32m1 (vbool32_t mask, vint32m1_t op1,
    vint32m1_t op2, size_t vl);
vint32m1_t vmerge_vxm_i32m1 (vbool32_t mask, vint32m1_t op1,
    int32_t op2, size_t vl);
vint32m2_t vmerge_vvm_i32m2 (vbool16_t mask, vint32m2_t op1,
    vint32m2_t op2, size_t vl);
vint32m2_t vmerge_vxm_i32m2 (vbool16_t mask, vint32m2_t op1,
    int32_t op2, size_t vl);
vint32m4_t vmerge_vvm_i32m4 (vbool8_t mask, vint32m4_t op1,
    vint32m4_t op2, size_t vl);
vint32m4_t vmerge_vxm_i32m4 (vbool8_t mask, vint32m4_t op1,
    int32_t op2, size_t vl);
vint32m8_t vmerge_vvm_i32m8 (vbool4_t mask, vint32m8_t op1,
    vint32m8_t op2, size_t vl);
vint32m8_t vmerge_vxm_i32m8 (vbool4_t mask, vint32m8_t op1,
    int32_t op2, size_t vl);
vint64m1_t vmerge_vvm_i64m1 (vbool64_t mask, vint64m1_t op1,
    vint64m1_t op2, size_t vl);
vint64m1_t vmerge_vxm_i64m1 (vbool64_t mask, vint64m1_t op1,
    int64_t op2, size_t vl);
vint64m2_t vmerge_vvm_i64m2 (vbool32_t mask, vint64m2_t op1,
    vint64m2_t op2, size_t vl);
vint64m2_t vmerge_vxm_i64m2 (vbool32_t mask, vint64m2_t op1,
    int64_t op2, size_t vl);
vint64m4_t vmerge_vvm_i64m4 (vbool16_t mask, vint64m4_t op1,
    vint64m4_t op2, size_t vl);
vint64m4_t vmerge_vxm_i64m4 (vbool16_t mask, vint64m4_t op1,
    int64_t op2, size_t vl);
vint64m8_t vmerge_vvm_i64m8 (vbool8_t mask, vint64m8_t op1,
    vint64m8_t op2, size_t vl);
vint64m8_t vmerge_vxm_i64m8 (vbool8_t mask, vint64m8_t op1,
    int64_t op2, size_t vl);
```

```
vuint8mf8_t vmerge_vvm_u8mf8 (vbool64_t mask, vuint8mf8_t op1,
    vuint8mf8_t op2, size_t vl);
vuint8mf8_t vmerge_vxm_u8mf8 (vbool64_t mask, vuint8mf8_t op1,
    uint8_t op2, size_t vl);
vuint8mf4_t vmerge_vvm_u8mf4 (vbool32_t mask, vuint8mf4_t op1,
    vuint8mf4_t op2, size_t vl);
vuint8mf4_t vmerge_vxm_u8mf4 (vbool32_t mask, vuint8mf4_t op1,
    uint8_t op2, size_t vl);
vuint8mf2_t vmerge_vvm_u8mf2 (vbool16_t mask, vuint8mf2_t op1,
    vuint8mf2_t op2, size_t vl);
vuint8mf2_t vmerge_vxm_u8mf2 (vbool16_t mask, vuint8mf2_t op1,
    uint8_t op2, size_t vl);
vuint8m1_t vmerge_vvm_u8m1 (vbool8_t mask, vuint8m1_t op1,
    vuint8m1_t op2, size_t vl);
vuint8m1_t vmerge_vxm_u8m1 (vbool8_t mask, vuint8m1_t op1,
    uint8_t op2, size_t vl);
vuint8m2_t vmerge_vvm_u8m2 (vbool4_t mask, vuint8m2_t op1,
    vuint8m2_t op2, size_t vl);
vuint8m2_t vmerge_vxm_u8m2 (vbool4_t mask, vuint8m2_t op1,
    uint8_t op2, size_t vl);
vuint8m4_t vmerge_vvm_u8m4 (vbool2_t mask, vuint8m4_t op1,
    vuint8m4_t op2, size_t vl);
vuint8m4_t vmerge_vxm_u8m4 (vbool2_t mask, vuint8m4_t op1,
    uint8_t op2, size_t vl);
vuint8m8_t vmerge_vvm_u8m8 (vbool1_t mask, vuint8m8_t op1,
    vuint8m8_t op2, size_t vl);
vuint8m8_t vmerge_vxm_u8m8 (vbool1_t mask, vuint8m8_t op1,
    uint8_t op2, size_t vl);
vuint16mf4_t vmerge_vvm_u16mf4 (vbool64_t mask, vuint16mf4_t
    op1, vuint16mf4_t op2, size_t vl);
vuint16mf4_t vmerge_vxm_u16mf4 (vbool64_t mask, vuint16mf4_t
    op1, uint16_t op2, size_t vl);
vuint16mf2_t vmerge_vvm_u16mf2 (vbool32_t mask, vuint16mf2_t
    op1, vuint16mf2_t op2, size_t vl);
vuint16mf2_t vmerge_vxm_u16mf2 (vbool32_t mask, vuint16mf2_t
    op1, uint16_t op2, size_t vl);
vuint16m1_t vmerge_vvm_u16m1 (vbool16_t mask, vuint16m1_t op1,
    vuint16m1_t op2, size_t vl);
vuint16m1_t vmerge_vxm_u16m1 (vbool16_t mask, vuint16m1_t op1,
    uint16_t op2, size_t vl);
vuint16m2_t vmerge_vvm_u16m2 (vbool8_t mask, vuint16m2_t op1,
    vuint16m2_t op2, size_t vl);
vuint16m2_t vmerge_vxm_u16m2 (vbool8_t mask, vuint16m2_t op1,
    uint16_t op2, size_t vl);
vuint16m4_t vmerge_vvm_u16m4 (vbool4_t mask, vuint16m4_t op1,
    vuint16m4_t op2, size_t vl);
```

```
vuint16m4_t vmerge_vxm_u16m4 (vbool4_t mask, vuint16m4_t op1,
    uint16_t op2, size_t vl);
vuint16m8_t vmerge_vvm_u16m8 (vbool2_t mask, vuint16m8_t op1,
    vuint16m8_t op2, size_t vl);
vuint16m8_t vmerge_vxm_u16m8 (vbool2_t mask, vuint16m8_t op1,
    uint16_t op2, size_t vl);
vuint32mf2_t vmerge_vvm_u32mf2 (vbool64_t mask, vuint32mf2_t
    op1, vuint32mf2_t op2, size_t vl);
vuint32mf2_t vmerge_vxm_u32mf2 (vbool64_t mask, vuint32mf2_t
    op1, uint32_t op2, size_t vl);
vuint32m1_t vmerge_vvm_u32m1 (vbool32_t mask, vuint32m1_t op1,
    vuint32m1_t op2, size_t vl);
vuint32m1_t vmerge_vxm_u32m1 (vbool32_t mask, vuint32m1_t op1,
    uint32_t op2, size_t vl);
vuint32m2_t vmerge_vvm_u32m2 (vbool16_t mask, vuint32m2_t op1,
    vuint32m2_t op2, size_t vl);
vuint32m2_t vmerge_vxm_u32m2 (vbool16_t mask, vuint32m2_t op1,
    uint32_t op2, size_t vl);
vuint32m4_t vmerge_vvm_u32m4 (vbool8_t mask, vuint32m4_t op1,
    vuint32m4_t op2, size_t vl);
vuint32m4_t vmerge_vxm_u32m4 (vbool8_t mask, vuint32m4_t op1,
    uint32_t op2, size_t vl);
vuint32m8_t vmerge_vvm_u32m8 (vbool4_t mask, vuint32m8_t op1,
    vuint32m8_t op2, size_t vl);
vuint32m8_t vmerge_vxm_u32m8 (vbool4_t mask, vuint32m8_t op1,
    uint32_t op2, size_t vl);
vuint64m1_t vmerge_vvm_u64m1 (vbool64_t mask, vuint64m1_t op1,
    vuint64m1_t op2, size_t vl);
vuint64m1_t vmerge_vxm_u64m1 (vbool64_t mask, vuint64m1_t op1,
    uint64_t op2, size_t vl);
vuint64m2_t vmerge_vvm_u64m2 (vbool32_t mask, vuint64m2_t op1,
    vuint64m2_t op2, size_t vl);
vuint64m2_t vmerge_vxm_u64m2 (vbool32_t mask, vuint64m2_t op1,
    uint64_t op2, size_t vl);
vuint64m4_t vmerge_vvm_u64m4 (vbool16_t mask, vuint64m4_t op1,
    vuint64m4_t op2, size_t vl);
vuint64m4_t vmerge_vxm_u64m4 (vbool16_t mask, vuint64m4_t op1,
    uint64_t op2, size_t vl);
vuint64m8_t vmerge_vvm_u64m8 (vbool8_t mask, vuint64m8_t op1,
    vuint64m8_t op2, size_t vl);
vuint64m8_t vmerge_vxm_u64m8 (vbool8_t mask, vuint64m8_t op1,
    uint64_t op2, size_t vl);
```

Vector Integer Move Functions:

Prototypes:

```
vint8mf8_t vmv_v_v_i8mf8 (vint8mf8_t src, size_t vl);
vint8mf8_t vmv_v_x_i8mf8 (int8_t src, size_t vl);
vint8mf4_t vmv_v_v_i8mf4 (vint8mf4_t src, size_t vl);
vint8mf4_t vmv_v_x_i8mf4 (int8_t src, size_t vl);
vint8mf2_t vmv_v_v_i8mf2 (vint8mf2_t src, size_t vl);
vint8mf2_t vmv_v_x_i8mf2 (int8_t src, size_t vl);
vint8m1_t vmv_v_v_i8m1 (vint8m1_t src, size_t vl);
vint8m1_t vmv_v_x_i8m1 (int8_t src, size_t vl);
vint8m2_t vmv_v_v_i8m2 (vint8m2_t src, size_t vl);
vint8m2_t vmv_v_x_i8m2 (int8_t src, size_t vl);
vint8m4_t vmv_v_v_i8m4 (vint8m4_t src, size_t vl);
vint8m4_t vmv_v_x_i8m4 (int8_t src, size_t vl);
vint8m8_t vmv_v_v_i8m8 (vint8m8_t src, size_t vl);
vint8m8_t vmv_v_x_i8m8 (int8_t src, size_t vl);
vint16mf4_t vmv_v_v_i16mf4 (vint16mf4_t src, size_t vl);
vint16mf4_t vmv_v_x_i16mf4 (int16_t src, size_t vl);
vint16mf2_t vmv_v_v_i16mf2 (vint16mf2_t src, size_t vl);
vint16mf2_t vmv_v_x_i16mf2 (int16_t src, size_t vl);
vint16m1_t vmv_v_v_i16m1 (vint16m1_t src, size_t vl);
vint16m1_t vmv_v_x_i16m1 (int16_t src, size_t vl);
vint16m2_t vmv_v_v_i16m2 (vint16m2_t src, size_t vl);
vint16m2_t vmv_v_x_i16m2 (int16_t src, size_t vl);
vint16m4_t vmv_v_v_i16m4 (vint16m4_t src, size_t vl);
vint16m4_t vmv_v_x_i16m4 (int16_t src, size_t vl);
vint16m8_t vmv_v_v_i16m8 (vint16m8_t src, size_t vl);
vint16m8_t vmv_v_x_i16m8 (int16_t src, size_t vl);
vint32mf2_t vmv_v_v_i32mf2 (vint32mf2_t src, size_t vl);
vint32mf2_t vmv_v_x_i32mf2 (int32_t src, size_t vl);
vint32m1_t vmv_v_v_i32m1 (vint32m1_t src, size_t vl);
vint32m1_t vmv_v_x_i32m1 (int32_t src, size_t vl);
vint32m2_t vmv_v_v_i32m2 (vint32m2_t src, size_t vl);
vint32m2_t vmv_v_x_i32m2 (int32_t src, size_t vl);
vint32m4_t vmv_v_v_i32m4 (vint32m4_t src, size_t vl);
vint32m4_t vmv_v_x_i32m4 (int32_t src, size_t vl);
vint32m8_t vmv_v_v_i32m8 (vint32m8_t src, size_t vl);
vint32m8_t vmv_v_x_i32m8 (int32_t src, size_t vl);
vint64m1_t vmv_v_v_i64m1 (vint64m1_t src, size_t vl);
vint64m1_t vmv_v_x_i64m1 (int64_t src, size_t vl);
vint64m2_t vmv_v_v_i64m2 (vint64m2_t src, size_t vl);
vint64m2_t vmv_v_x_i64m2 (int64_t src, size_t vl);
vint64m4_t vmv_v_v_i64m4 (vint64m4_t src, size_t vl);
vint64m4_t vmv_v_x_i64m4 (int64_t src, size_t vl);
vint64m8_t vmv_v_v_i64m8 (vint64m8_t src, size_t vl);
vint64m8_t vmv_v_x_i64m8 (int64_t src, size_t vl);
vuint8mf8_t vmv_v_v_u8mf8 (vuint8mf8_t src, size_t vl);
vuint8mf8_t vmv_v_x_u8mf8 (uint8_t src, size_t vl);
```

```
vuint8mf4_t vmv_v_v_u8mf4 (vuint8mf4_t src, size_t vl);
vuint8mf4_t vmv_v_x_u8mf4 (uint8_t src, size_t vl);
vuint8mf2_t vmv_v_v_u8mf2 (vuint8mf2_t src, size_t vl);
vuint8mf2_t vmv_v_x_u8mf2 (uint8_t src, size_t vl);
vuint8m1_t vmv_v_v_u8m1 (vuint8m1_t src, size_t vl);
vuint8m1_t vmv_v_x_u8m1 (uint8_t src, size_t vl);
vuint8m2_t vmv_v_v_u8m2 (vuint8m2_t src, size_t vl);
vuint8m2_t vmv_v_x_u8m2 (uint8_t src, size_t vl);
vuint8m4_t vmv_v_v_u8m4 (vuint8m4_t src, size_t vl);
vuint8m4_t vmv_v_x_u8m4 (uint8_t src, size_t vl);
vuint8m8_t vmv_v_v_u8m8 (vuint8m8_t src, size_t vl);
vuint8m8_t vmv_v_x_u8m8 (uint8_t src, size_t vl);
vuint16mf4_t vmv_v_v_u16mf4 (vuint16mf4_t src, size_t vl);
vuint16mf4_t vmv_v_x_u16mf4 (uint16_t src, size_t vl);
vuint16mf2_t vmv_v_v_u16mf2 (vuint16mf2_t src, size_t vl);
vuint16mf2_t vmv_v_x_u16mf2 (uint16_t src, size_t vl);
vuint16m1_t vmv_v_v_u16m1 (vuint16m1_t src, size_t vl);
vuint16m1_t vmv_v_x_u16m1 (uint16_t src, size_t vl);
vuint16m2_t vmv_v_v_u16m2 (vuint16m2_t src, size_t vl);
vuint16m2_t vmv_v_x_u16m2 (uint16_t src, size_t vl);
vuint16m4_t vmv_v_v_u16m4 (vuint16m4_t src, size_t vl);
vuint16m4_t vmv_v_x_u16m4 (uint16_t src, size_t vl);
vuint16m8_t vmv_v_v_u16m8 (vuint16m8_t src, size_t vl);
vuint16m8_t vmv_v_x_u16m8 (uint16_t src, size_t vl);
vuint32mf2_t vmv_v_v_u32mf2 (vuint32mf2_t src, size_t vl);
vuint32mf2_t vmv_v_x_u32mf2 (uint32_t src, size_t vl);
vuint32m1_t vmv_v_v_u32m1 (vuint32m1_t src, size_t vl);
vuint32m1_t vmv_v_x_u32m1 (uint32_t src, size_t vl);
vuint32m2_t vmv_v_v_u32m2 (vuint32m2_t src, size_t vl);
vuint32m2_t vmv_v_x_u32m2 (uint32_t src, size_t vl);
vuint32m4_t vmv_v_v_u32m4 (vuint32m4_t src, size_t vl);
vuint32m4_t vmv_v_x_u32m4 (uint32_t src, size_t vl);
vuint32m8_t vmv_v_v_u32m8 (vuint32m8_t src, size_t vl);
vuint32m8_t vmv_v_x_u32m8 (uint32_t src, size_t vl);
vuint64m1_t vmv_v_v_u64m1 (vuint64m1_t src, size_t vl);
vuint64m1_t vmv_v_x_u64m1 (uint64_t src, size_t vl);
vuint64m2_t vmv_v_v_u64m2 (vuint64m2_t src, size_t vl);
vuint64m2_t vmv_v_x_u64m2 (uint64_t src, size_t vl);
vuint64m4_t vmv_v_v_u64m4 (vuint64m4_t src, size_t vl);
vuint64m4_t vmv_v_x_u64m4 (uint64_t src, size_t vl);
vuint64m8_t vmv_v_v_u64m8 (vuint64m8_t src, size_t vl);
vuint64m8_t vmv_v_x_u64m8 (uint64_t src, size_t vl);
```

Vector Fixed-Point Arithmetic Functions:

Vector Single-Width Saturating Add and Subtract Functions:

Prototypes:

```
vint8mf8_t vsadd_vv_i8mf8 (vint8mf8_t op1, vint8mf8_t op2,
    size_t vl);
vint8mf8_t vsadd_vx_i8mf8 (vint8mf8_t op1, int8_t op2, size_t
    vl);
vint8mf4_t vsadd_vv_i8mf4 (vint8mf4_t op1, vint8mf4_t op2,
    size_t vl);
vint8mf4_t vsadd_vx_i8mf4 (vint8mf4_t op1, int8_t op2, size_t
    vl);
vint8mf2_t vsadd_vv_i8mf2 (vint8mf2_t op1, vint8mf2_t op2,
    size_t vl);
vint8mf2_t vsadd_vx_i8mf2 (vint8mf2_t op1, int8_t op2, size_t
    vl);
vint8m1_t vsadd_vv_i8m1 (vint8m1_t op1, vint8m1_t op2, size_t
    vl);
vint8m1_t vsadd_vx_i8m1 (vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vsadd_vv_i8m2 (vint8m2_t op1, vint8m2_t op2, size_t
    vl);
vint8m2_t vsadd_vx_i8m2 (vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vsadd_vv_i8m4 (vint8m4_t op1, vint8m4_t op2, size_t
    vl);
vint8m4_t vsadd_vx_i8m4 (vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vsadd_vv_i8m8 (vint8m8_t op1, vint8m8_t op2, size_t
    vl);
vint8m8_t vsadd_vx_i8m8 (vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vsadd_vv_i16mf4 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vint16mf4_t vsadd_vx_i16mf4 (vint16mf4_t op1, int16_t op2,
    size_t vl);
vint16mf2_t vsadd_vv_i16mf2 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vint16mf2_t vsadd_vx_i16mf2 (vint16mf2_t op1, int16_t op2,
    size_t vl);
vint16m1_t vsadd_vv_i16m1 (vint16m1_t op1, vint16m1_t op2,
    size_t vl);
vint16m1_t vsadd_vx_i16m1 (vint16m1_t op1, int16_t op2, size_t
    vl);
vint16m2_t vsadd_vv_i16m2 (vint16m2_t op1, vint16m2_t op2,
    size_t vl);
vint16m2_t vsadd_vx_i16m2 (vint16m2_t op1, int16_t op2, size_t
    vl);
vint16m4_t vsadd_vv_i16m4 (vint16m4_t op1, vint16m4_t op2,
    size_t vl);
```

```
vint16m4_t vsadd_vx_i16m4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vint16m8_t vsadd_vv_i16m8 (vint16m8_t op1, vint16m8_t op2,
    size_t vl);
vint16m8_t vsadd_vx_i16m8 (vint16m8_t op1, int16_t op2, size_t
    vl);
vint32mf2_t vsadd_vv_i32mf2 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vint32mf2_t vsadd_vx_i32mf2 (vint32mf2_t op1, int32_t op2,
    size_t vl);
vint32m1_t vsadd_vv_i32m1 (vint32m1_t op1, vint32m1_t op2,
    size_t vl);
vint32m1_t vsadd_vx_i32m1 (vint32m1_t op1, int32_t op2, size_t
    vl);
vint32m2_t vsadd_vv_i32m2 (vint32m2_t op1, vint32m2_t op2,
    size_t vl);
vint32m2_t vsadd_vx_i32m2 (vint32m2_t op1, int32_t op2, size_t
    vl);
vint32m4_t vsadd_vv_i32m4 (vint32m4_t op1, vint32m4_t op2,
    size_t vl);
vint32m4_t vsadd_vx_i32m4 (vint32m4_t op1, int32_t op2, size_t
    vl);
vint32m8_t vsadd_vv_i32m8 (vint32m8_t op1, vint32m8_t op2,
    size_t vl);
vint32m8_t vsadd_vx_i32m8 (vint32m8_t op1, int32_t op2, size_t
    vl);
vint64m1_t vsadd_vv_i64m1 (vint64m1_t op1, vint64m1_t op2,
    size_t vl);
vint64m1_t vsadd_vx_i64m1 (vint64m1_t op1, int64_t op2, size_t
    vl);
vint64m2_t vsadd_vv_i64m2 (vint64m2_t op1, vint64m2_t op2,
    size_t vl);
vint64m2_t vsadd_vx_i64m2 (vint64m2_t op1, int64_t op2, size_t
    vl);
vint64m4_t vsadd_vv_i64m4 (vint64m4_t op1, vint64m4_t op2,
    size_t vl);
vint64m4_t vsadd_vx_i64m4 (vint64m4_t op1, int64_t op2, size_t
    vl);
vint64m8_t vsadd_vv_i64m8 (vint64m8_t op1, vint64m8_t op2,
    size_t vl);
vint64m8_t vsadd_vx_i64m8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vuint8mf8_t vsaddu_vv_u8mf8 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vuint8mf8_t vsaddu_vx_u8mf8 (vuint8mf8_t op1, uint8_t op2,
    size_t vl);
```

```
vuint8mf4_t vsaddu_vv_u8mf4 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vuint8mf4_t vsaddu_vx_u8mf4 (vuint8mf4_t op1, uint8_t op2,
    size_t vl);
vuint8mf2_t vsaddu_vv_u8mf2 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vuint8mf2_t vsaddu_vx_u8mf2 (vuint8mf2_t op1, uint8_t op2,
    size_t vl);
vuint8m1_t vsaddu_vv_u8m1 (vuint8m1_t op1, vuint8m1_t op2,
    size_t vl);
vuint8m1_t vsaddu_vx_u8m1 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vuint8m2_t vsaddu_vv_u8m2 (vuint8m2_t op1, vuint8m2_t op2,
    size_t vl);
vuint8m2_t vsaddu_vx_u8m2 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vuint8m4_t vsaddu_vv_u8m4 (vuint8m4_t op1, vuint8m4_t op2,
    size_t vl);
vuint8m4_t vsaddu_vx_u8m4 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
vuint8m8_t vsaddu_vv_u8m8 (vuint8m8_t op1, vuint8m8_t op2,
    size_t vl);
vuint8m8_t vsaddu_vx_u8m8 (vuint8m8_t op1, uint8_t op2, size_t
    vl);
vuint16mf4_t vsaddu_vv_u16mf4 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vuint16mf4_t vsaddu_vx_u16mf4 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vuint16mf2_t vsaddu_vv_u16mf2 (vuint16mf2_t op1, vuint16mf2_t
    op2, size_t vl);
vuint16mf2_t vsaddu_vx_u16mf2 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vuint16m1_t vsaddu_vv_u16m1 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vuint16m1_t vsaddu_vx_u16m1 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vuint16m2_t vsaddu_vv_u16m2 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vuint16m2_t vsaddu_vx_u16m2 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vuint16m4_t vsaddu_vv_u16m4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vuint16m4_t vsaddu_vx_u16m4 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
vuint16m8_t vsaddu_vv_u16m8 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
```

```
vuint16m8_t vsaddu_vx_u16m8 (vuint16m8_t op1, uint16_t op2,
    size_t vl);
vuint32mf2_t vsaddu_vv_u32mf2 (vuint32mf2_t op1, vuint32mf2_t
    op2, size_t vl);
vuint32mf2_t vsaddu_vx_u32mf2 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vuint32m1_t vsaddu_vv_u32m1 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vuint32m1_t vsaddu_vx_u32m1 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vuint32m2_t vsaddu_vv_u32m2 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vuint32m2_t vsaddu_vx_u32m2 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vuint32m4_t vsaddu_vv_u32m4 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vuint32m4_t vsaddu_vx_u32m4 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
vuint32m8_t vsaddu_vv_u32m8 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vuint32m8_t vsaddu_vx_u32m8 (vuint32m8_t op1, uint32_t op2,
    size_t vl);
vuint64m1_t vsaddu_vv_u64m1 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vuint64m1_t vsaddu_vx_u64m1 (vuint64m1_t op1, uint64_t op2,
    size_t vl);
vuint64m2_t vsaddu_vv_u64m2 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vuint64m2_t vsaddu_vx_u64m2 (vuint64m2_t op1, uint64_t op2,
    size_t vl);
vuint64m4_t vsaddu_vv_u64m4 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vuint64m4_t vsaddu_vx_u64m4 (vuint64m4_t op1, uint64_t op2,
    size_t vl);
vuint64m8_t vsaddu_vv_u64m8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vuint64m8_t vsaddu_vx_u64m8 (vuint64m8_t op1, uint64_t op2,
    size_t vl);
vint8mf8_t vssub_vv_i8mf8 (vint8mf8_t op1, vint8mf8_t op2,
    size_t vl);
vint8mf8_t vssub_vx_i8mf8 (vint8mf8_t op1, int8_t op2, size_t
    vl);
vint8mf4_t vssub_vv_i8mf4 (vint8mf4_t op1, vint8mf4_t op2,
    size_t vl);
vint8mf4_t vssub_vx_i8mf4 (vint8mf4_t op1, int8_t op2, size_t
    vl);
```

```
vint8mf2_t vssub_vv_i8mf2 (vint8mf2_t op1, vint8mf2_t op2,
    size_t vl);
vint8mf2_t vssub_vx_i8mf2 (vint8mf2_t op1, int8_t op2, size_t
    vl);
vint8m1_t vssub_vv_i8m1 (vint8m1_t op1, vint8m1_t op2, size_t
    vl);
vint8m1_t vssub_vx_i8m1 (vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vssub_vv_i8m2 (vint8m2_t op1, vint8m2_t op2, size_t
    vl);
vint8m2_t vssub_vx_i8m2 (vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vssub_vv_i8m4 (vint8m4_t op1, vint8m4_t op2, size_t
    vl);
vint8m4_t vssub_vx_i8m4 (vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vssub_vv_i8m8 (vint8m8_t op1, vint8m8_t op2, size_t
    vl);
vint8m8_t vssub_vx_i8m8 (vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vssub_vv_i16mf4 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vint16mf4_t vssub_vx_i16mf4 (vint16mf4_t op1, int16_t op2,
    size_t vl);
vint16mf2_t vssub_vv_i16mf2 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vint16mf2_t vssub_vx_i16mf2 (vint16mf2_t op1, int16_t op2,
    size_t vl);
vint16m1_t vssub_vv_i16m1 (vint16m1_t op1, vint16m1_t op2,
    size_t vl);
vint16m1_t vssub_vx_i16m1 (vint16m1_t op1, int16_t op2, size_t
    vl);
vint16m2_t vssub_vv_i16m2 (vint16m2_t op1, vint16m2_t op2,
    size_t vl);
vint16m2_t vssub_vx_i16m2 (vint16m2_t op1, int16_t op2, size_t
    vl);
vint16m4_t vssub_vv_i16m4 (vint16m4_t op1, vint16m4_t op2,
    size_t vl);
vint16m4_t vssub_vx_i16m4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vint16m8_t vssub_vv_i16m8 (vint16m8_t op1, vint16m8_t op2,
    size_t vl);
vint16m8_t vssub_vx_i16m8 (vint16m8_t op1, int16_t op2, size_t
    vl);
vint32mf2_t vssub_vv_i32mf2 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vint32mf2_t vssub_vx_i32mf2 (vint32mf2_t op1, int32_t op2,
    size_t vl);
vint32m1_t vssub_vv_i32m1 (vint32m1_t op1, vint32m1_t op2,
    size_t vl);
```

```
vint32m1_t vssub_vx_i32m1 (vint32m1_t op1, int32_t op2, size_t
    vl);
vint32m2_t vssub_vv_i32m2 (vint32m2_t op1, vint32m2_t op2,
    size_t vl);
vint32m2_t vssub_vx_i32m2 (vint32m2_t op1, int32_t op2, size_t
    vl);
vint32m4_t vssub_vv_i32m4 (vint32m4_t op1, vint32m4_t op2,
    size_t vl);
vint32m4_t vssub_vx_i32m4 (vint32m4_t op1, int32_t op2, size_t
    vl);
vint32m8_t vssub_vv_i32m8 (vint32m8_t op1, vint32m8_t op2,
    size_t vl);
vint32m8_t vssub_vx_i32m8 (vint32m8_t op1, int32_t op2, size_t
    vl);
vint64m1_t vssub_vv_i64m1 (vint64m1_t op1, vint64m1_t op2,
    size_t vl);
vint64m1_t vssub_vx_i64m1 (vint64m1_t op1, int64_t op2, size_t
    vl);
vint64m2_t vssub_vv_i64m2 (vint64m2_t op1, vint64m2_t op2,
    size_t vl);
vint64m2_t vssub_vx_i64m2 (vint64m2_t op1, int64_t op2, size_t
    vl);
vint64m4_t vssub_vv_i64m4 (vint64m4_t op1, vint64m4_t op2,
    size_t vl);
vint64m4_t vssub_vx_i64m4 (vint64m4_t op1, int64_t op2, size_t
    vl);
vint64m8_t vssub_vv_i64m8 (vint64m8_t op1, vint64m8_t op2,
    size_t vl);
vint64m8_t vssub_vx_i64m8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vuint8mf8_t vssubu_vv_u8mf8 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vuint8mf8_t vssubu_vx_u8mf8 (vuint8mf8_t op1, uint8_t op2,
    size_t vl);
vuint8mf4_t vssubu_vv_u8mf4 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vuint8mf4_t vssubu_vx_u8mf4 (vuint8mf4_t op1, uint8_t op2,
    size_t vl);
vuint8mf2_t vssubu_vv_u8mf2 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vuint8mf2_t vssubu_vx_u8mf2 (vuint8mf2_t op1, uint8_t op2,
    size_t vl);
vuint8m1_t vssubu_vv_u8m1 (vuint8m1_t op1, vuint8m1_t op2,
    size_t vl);
vuint8m1_t vssubu_vx_u8m1 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
```

```
vuint8m2_t vssubu_vv_u8m2 (vuint8m2_t op1, vuint8m2_t op2,
    size_t vl);
vuint8m2_t vssubu_vx_u8m2 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vuint8m4_t vssubu_vv_u8m4 (vuint8m4_t op1, vuint8m4_t op2,
    size_t vl);
vuint8m4_t vssubu_vx_u8m4 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
vuint8m8_t vssubu_vv_u8m8 (vuint8m8_t op1, vuint8m8_t op2,
    size_t vl);
vuint8m8_t vssubu_vx_u8m8 (vuint8m8_t op1, uint8_t op2, size_t
    vl);
vuint16mf4_t vssubu_vv_u16mf4 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vuint16mf4_t vssubu_vx_u16mf4 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vuint16mf2_t vssubu_vv_u16mf2 (vuint16mf2_t op1, vuint16mf2_t
    op2, size_t vl);
vuint16mf2_t vssubu_vx_u16mf2 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vuint16m1_t vssubu_vv_u16m1 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vuint16m1_t vssubu_vx_u16m1 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vuint16m2_t vssubu_vv_u16m2 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vuint16m2_t vssubu_vx_u16m2 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vuint16m4_t vssubu_vv_u16m4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vuint16m4_t vssubu_vx_u16m4 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
vuint16m8_t vssubu_vv_u16m8 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vuint16m8_t vssubu_vx_u16m8 (vuint16m8_t op1, uint16_t op2,
    size_t vl);
vuint32mf2_t vssubu_vv_u32mf2 (vuint32mf2_t op1, vuint32mf2_t
    op2, size_t vl);
vuint32mf2_t vssubu_vx_u32mf2 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vuint32m1_t vssubu_vv_u32m1 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vuint32m1_t vssubu_vx_u32m1 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vuint32m2_t vssubu_vv_u32m2 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
```

```
vuint32m2_t vssubu_vx_u32m2 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vuint32m4_t vssubu_vv_u32m4 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vuint32m4_t vssubu_vx_u32m4 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
vuint32m8_t vssubu_vv_u32m8 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vuint32m8_t vssubu_vx_u32m8 (vuint32m8_t op1, uint32_t op2,
    size_t vl);
vuint64m1_t vssubu_vv_u64m1 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vuint64m1_t vssubu_vx_u64m1 (vuint64m1_t op1, uint64_t op2,
    size_t vl);
vuint64m2_t vssubu_vv_u64m2 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vuint64m2_t vssubu_vx_u64m2 (vuint64m2_t op1, uint64_t op2,
    size_t vl);
vuint64m4_t vssubu_vv_u64m4 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vuint64m4_t vssubu_vx_u64m4 (vuint64m4_t op1, uint64_t op2,
    size_t vl);
vuint64m8_t vssubu_vv_u64m8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vuint64m8_t vssubu_vx_u64m8 (vuint64m8_t op1, uint64_t op2,
    size_t vl);
// masked functions
vint8mf8_t vsadd_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vint8mf8_t vsadd_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vsadd_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint8mf4_t vsadd_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vsadd_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint8mf2_t vsadd_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vsadd_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vsadd_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vsadd_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
```

```
vint8m2_t vsadd_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vsadd_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vsadd_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vsadd_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vsadd_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vsadd_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vint16mf4_t vsadd_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vint16mf2_t vsadd_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vint16mf2_t vsadd_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vint16m1_t vsadd_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vint16m1_t vsadd_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vint16m2_t vsadd_vv_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, vint16m2_t op2, size_t vl);
vint16m2_t vsadd_vx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, int16_t op2, size_t vl);
vint16m4_t vsadd_vv_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, vint16m4_t op2, size_t vl);
vint16m4_t vsadd_vx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, int16_t op2, size_t vl);
vint16m8_t vsadd_vv_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, vint16m8_t op2, size_t vl);
vint16m8_t vsadd_vx_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, int16_t op2, size_t vl);
vint32mf2_t vsadd_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vint32mf2_t vsadd_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vint32m1_t vsadd_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vint32m1_t vsadd_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vint32m2_t vsadd_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vint32m2_t vsadd_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
```

```
vint32m4_t vsadd_vv_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, vint32m4_t op2, size_t vl);
vint32m4_t vsadd_vx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, int32_t op2, size_t vl);
vint32m8_t vsadd_vv_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, vint32m8_t op2, size_t vl);
vint32m8_t vsadd_vx_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, int32_t op2, size_t vl);
vint64m1_t vsadd_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vint64m1_t vsadd_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vint64m2_t vsadd_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vint64m2_t vsadd_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vint64m4_t vsadd_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vint64m4_t vsadd_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vint64m8_t vsadd_vv_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, vint64m8_t op2, size_t vl);
vint64m8_t vsadd_vx_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, int64_t op2, size_t vl);
vuint8mf8_t vsaddu_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vuint8mf8_t vsaddu_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vuint8mf4_t vsaddu_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vuint8mf4_t vsaddu_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vuint8mf2_t vsaddu_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vuint8mf2_t vsaddu_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vuint8m1_t vsaddu_vv_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vuint8m1_t vsaddu_vx_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vsaddu_vv_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vuint8m2_t vsaddu_vx_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vsaddu_vv_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint8m4_t op1, vuint8m4_t op2, size_t vl);
```

```
vuint8m4_t vsaddu_vx_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vsaddu_vv_u8m8_m (vbool1_t mask, vuint8m8_t
    maskedoff, vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vuint8m8_t vsaddu_vx_u8m8_m (vbool1_t mask, vuint8m8_t
    maskedoff, vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vsaddu_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vuint16mf4_t vsaddu_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vuint16mf2_t vsaddu_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vuint16mf2_t vsaddu_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vuint16m1_t vsaddu_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vuint16m1_t vsaddu_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vuint16m2_t vsaddu_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vuint16m2_t vsaddu_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vuint16m4_t vsaddu_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vuint16m4_t vsaddu_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vuint16m8_t vsaddu_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vuint16m8_t vsaddu_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vuint32mf2_t vsaddu_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vuint32mf2_t vsaddu_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vuint32m1_t vsaddu_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vuint32m1_t vsaddu_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vuint32m2_t vsaddu_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vuint32m2_t vsaddu_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vuint32m4_t vsaddu_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vuint32m4_t vsaddu_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
```

```
vuint32m8_t vsaddu_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vuint32m8_t vsaddu_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vuint64m1_t vsaddu_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vuint64m1_t vsaddu_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
vuint64m2_t vsaddu_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vuint64m2_t vsaddu_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vuint64m4_t vsaddu_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vuint64m4_t vsaddu_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vuint64m8_t vsaddu_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vuint64m8_t vsaddu_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
vint8mf8_t vssub_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vint8mf8_t vssub_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vssub_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint8mf4_t vssub_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vssub_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint8mf2_t vssub_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vssub_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vssub_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vssub_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vssub_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vssub_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vssub_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vssub_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
```

```
vint8m8_t vssub_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vssub_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vint16mf4_t vssub_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vint16mf2_t vssub_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vint16mf2_t vssub_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vint16m1_t vssub_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vint16m1_t vssub_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vint16m2_t vssub_vv_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, vint16m2_t op2, size_t vl);
vint16m2_t vssub_vx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, int16_t op2, size_t vl);
vint16m4_t vssub_vv_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, vint16m4_t op2, size_t vl);
vint16m4_t vssub_vx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, int16_t op2, size_t vl);
vint16m8_t vssub_vv_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, vint16m8_t op2, size_t vl);
vint16m8_t vssub_vx_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, int16_t op2, size_t vl);
vint32mf2_t vssub_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vint32mf2_t vssub_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vint32m1_t vssub_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vint32m1_t vssub_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vint32m2_t vssub_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vint32m2_t vssub_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vint32m4_t vssub_vv_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, vint32m4_t op2, size_t vl);
vint32m4_t vssub_vx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, int32_t op2, size_t vl);
vint32m8_t vssub_vv_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, vint32m8_t op2, size_t vl);
vint32m8_t vssub_vx_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, int32_t op2, size_t vl);
```

```
vint64m1_t vssub_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vint64m1_t vssub_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vint64m2_t vssub_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vint64m2_t vssub_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vint64m4_t vssub_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vint64m4_t vssub_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vint64m8_t vssub_vv_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, vint64m8_t op2, size_t vl);
vint64m8_t vssub_vx_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, int64_t op2, size_t vl);
vuint8mf8_t vssubu_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vuint8mf8_t vssubu_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vuint8mf4_t vssubu_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vuint8mf4_t vssubu_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vuint8mf2_t vssubu_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vuint8mf2_t vssubu_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vuint8m1_t vssubu_vv_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vuint8m1_t vssubu_vx_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vssubu_vv_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vuint8m2_t vssubu_vx_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vssubu_vv_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vuint8m4_t vssubu_vx_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vssubu_vv_u8m8_m (vbool1_t mask, vuint8m8_t
    maskedoff, vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vuint8m8_t vssubu_vx_u8m8_m (vbool1_t mask, vuint8m8_t
    maskedoff, vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vssubu_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
```

```
vuint16mf4_t vssubu_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vuint16mf2_t vssubu_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vuint16mf2_t vssubu_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vuint16m1_t vssubu_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vuint16m1_t vssubu_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vuint16m2_t vssubu_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vuint16m2_t vssubu_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vuint16m4_t vssubu_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vuint16m4_t vssubu_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vuint16m8_t vssubu_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vuint16m8_t vssubu_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vuint32mf2_t vssubu_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vuint32mf2_t vssubu_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vuint32m1_t vssubu_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vuint32m1_t vssubu_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vuint32m2_t vssubu_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vuint32m2_t vssubu_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vuint32m4_t vssubu_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vuint32m4_t vssubu_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vuint32m8_t vssubu_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vuint32m8_t vssubu_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vuint64m1_t vssubu_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vuint64m1_t vssubu_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
```

```
vuint64m2_t vssubu_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vuint64m2_t vssubu_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vuint64m4_t vssubu_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vuint64m4_t vssubu_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vuint64m8_t vssubu_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vuint64m8_t vssubu_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
```

Vector Single-Width Averaging Add and Subtract Functions:

Prototypes:

```
vint8mf8_t vaadd_vv_i8mf8 (vint8mf8_t op1, vint8mf8_t op2,
    size_t vl);
vint8mf8_t vaadd_vx_i8mf8 (vint8mf8_t op1, int8_t op2, size_t
    vl);
vint8mf4_t vaadd_vv_i8mf4 (vint8mf4_t op1, vint8mf4_t op2,
    size_t vl);
vint8mf4_t vaadd_vx_i8mf4 (vint8mf4_t op1, int8_t op2, size_t
    vl);
vint8mf2_t vaadd_vv_i8mf2 (vint8mf2_t op1, vint8mf2_t op2,
    size_t vl);
vint8mf2_t vaadd_vx_i8mf2 (vint8mf2_t op1, int8_t op2, size_t
    vl);
vint8m1_t vaadd_vv_i8m1 (vint8m1_t op1, vint8m1_t op2, size_t
    vl);
vint8m1_t vaadd_vx_i8m1 (vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vaadd_vv_i8m2 (vint8m2_t op1, vint8m2_t op2, size_t
    vl);
vint8m2_t vaadd_vx_i8m2 (vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vaadd_vv_i8m4 (vint8m4_t op1, vint8m4_t op2, size_t
    vl);
vint8m4_t vaadd_vx_i8m4 (vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vaadd_vv_i8m8 (vint8m8_t op1, vint8m8_t op2, size_t
    vl);
vint8m8_t vaadd_vx_i8m8 (vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vaadd_vv_i16mf4 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vint16mf4_t vaadd_vx_i16mf4 (vint16mf4_t op1, int16_t op2,
    size_t vl);
```

```
vint16mf2_t vaadd_vv_i16mf2 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vint16mf2_t vaadd_vx_i16mf2 (vint16mf2_t op1, int16_t op2,
    size_t vl);
vint16m1_t vaadd_vv_i16m1 (vint16m1_t op1, vint16m1_t op2,
    size_t vl);
vint16m1_t vaadd_vx_i16m1 (vint16m1_t op1, int16_t op2, size_t
    vl);
vint16m2_t vaadd_vv_i16m2 (vint16m2_t op1, vint16m2_t op2,
    size_t vl);
vint16m2_t vaadd_vx_i16m2 (vint16m2_t op1, int16_t op2, size_t
    vl);
vint16m4_t vaadd_vv_i16m4 (vint16m4_t op1, vint16m4_t op2,
    size_t vl);
vint16m4_t vaadd_vx_i16m4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vint16m8_t vaadd_vv_i16m8 (vint16m8_t op1, vint16m8_t op2,
    size_t vl);
vint16m8_t vaadd_vx_i16m8 (vint16m8_t op1, int16_t op2, size_t
    vl);
vint32mf2_t vaadd_vv_i32mf2 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vint32mf2_t vaadd_vx_i32mf2 (vint32mf2_t op1, int32_t op2,
    size_t vl);
vint32m1_t vaadd_vv_i32m1 (vint32m1_t op1, vint32m1_t op2,
    size_t vl);
vint32m1_t vaadd_vx_i32m1 (vint32m1_t op1, int32_t op2, size_t
    vl);
vint32m2_t vaadd_vv_i32m2 (vint32m2_t op1, vint32m2_t op2,
    size_t vl);
vint32m2_t vaadd_vx_i32m2 (vint32m2_t op1, int32_t op2, size_t
    vl);
vint32m4_t vaadd_vv_i32m4 (vint32m4_t op1, vint32m4_t op2,
    size_t vl);
vint32m4_t vaadd_vx_i32m4 (vint32m4_t op1, int32_t op2, size_t
    vl);
vint32m8_t vaadd_vv_i32m8 (vint32m8_t op1, vint32m8_t op2,
    size_t vl);
vint32m8_t vaadd_vx_i32m8 (vint32m8_t op1, int32_t op2, size_t
    vl);
vint64m1_t vaadd_vv_i64m1 (vint64m1_t op1, vint64m1_t op2,
    size_t vl);
vint64m1_t vaadd_vx_i64m1 (vint64m1_t op1, int64_t op2, size_t
    vl);
vint64m2_t vaadd_vv_i64m2 (vint64m2_t op1, vint64m2_t op2,
    size_t vl);
```

```
vint64m2_t vaadd_vx_i64m2 (vint64m2_t op1, int64_t op2, size_t
    vl);
vint64m4_t vaadd_vv_i64m4 (vint64m4_t op1, vint64m4_t op2,
    size_t vl);
vint64m4_t vaadd_vx_i64m4 (vint64m4_t op1, int64_t op2, size_t
    vl);
vint64m8_t vaadd_vv_i64m8 (vint64m8_t op1, vint64m8_t op2,
    size_t vl);
vint64m8_t vaadd_vx_i64m8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vuint8mf8_t vaaddu_vv_u8mf8 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
vuint8mf8_t vaaddu_vx_u8mf8 (vuint8mf8_t op1, uint8_t op2,
    size_t vl);
vuint8mf4_t vaaddu_vv_u8mf4 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vuint8mf4_t vaaddu_vx_u8mf4 (vuint8mf4_t op1, uint8_t op2,
    size_t vl);
vuint8mf2_t vaaddu_vv_u8mf2 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vuint8mf2_t vaaddu_vx_u8mf2 (vuint8mf2_t op1, uint8_t op2,
    size_t vl);
vuint8m1_t vaaddu_vv_u8m1 (vuint8m1_t op1, vuint8m1_t op2,
    size_t vl);
vuint8m1_t vaaddu_vx_u8m1 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vuint8m2_t vaaddu_vv_u8m2 (vuint8m2_t op1, vuint8m2_t op2,
    size_t vl);
vuint8m2_t vaaddu_vx_u8m2 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vuint8m4_t vaaddu_vv_u8m4 (vuint8m4_t op1, vuint8m4_t op2,
    size_t vl);
vuint8m4_t vaaddu_vx_u8m4 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
vuint8m8_t vaaddu_vv_u8m8 (vuint8m8_t op1, vuint8m8_t op2,
    size_t vl);
vuint8m8_t vaaddu_vx_u8m8 (vuint8m8_t op1, uint8_t op2, size_t
    vl);
vuint16mf4_t vaaddu_vv_u16mf4 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vuint16mf4_t vaaddu_vx_u16mf4 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vuint16mf2_t vaaddu_vv_u16mf2 (vuint16mf2_t op1, vuint16mf2_t
    op2, size_t vl);
vuint16mf2_t vaaddu_vx_u16mf2 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
```

```
vuint16m1_t vaaddu_vv_u16m1 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vuint16m1_t vaaddu_vx_u16m1 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vuint16m2_t vaaddu_vv_u16m2 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vuint16m2_t vaaddu_vx_u16m2 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vuint16m4_t vaaddu_vv_u16m4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vuint16m4_t vaaddu_vx_u16m4 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
vuint16m8_t vaaddu_vv_u16m8 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vuint16m8_t vaaddu_vx_u16m8 (vuint16m8_t op1, uint16_t op2,
    size_t vl);
vuint32mf2_t vaaddu_vv_u32mf2 (vuint32mf2_t op1, vuint32mf2_t
    op2, size_t vl);
vuint32mf2_t vaaddu_vx_u32mf2 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vuint32m1_t vaaddu_vv_u32m1 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vuint32m1_t vaaddu_vx_u32m1 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vuint32m2_t vaaddu_vv_u32m2 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vuint32m2_t vaaddu_vx_u32m2 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vuint32m4_t vaaddu_vv_u32m4 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vuint32m4_t vaaddu_vx_u32m4 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
vuint32m8_t vaaddu_vv_u32m8 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vuint32m8_t vaaddu_vx_u32m8 (vuint32m8_t op1, uint32_t op2,
    size_t vl);
vuint64m1_t vaaddu_vv_u64m1 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vuint64m1_t vaaddu_vx_u64m1 (vuint64m1_t op1, uint64_t op2,
    size_t vl);
vuint64m2_t vaaddu_vv_u64m2 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vuint64m2_t vaaddu_vx_u64m2 (vuint64m2_t op1, uint64_t op2,
    size_t vl);
vuint64m4_t vaaddu_vv_u64m4 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
```

```
vuint64m4_t vaaddu_vx_u64m4 (vuint64m4_t op1, uint64_t op2,
    size_t vl);
vuint64m8_t vaaddu_vv_u64m8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vuint64m8_t vaaddu_vx_u64m8 (vuint64m8_t op1, uint64_t op2,
    size_t vl);
vint8mf8_t vasub_vv_i8mf8 (vint8mf8_t op1, vint8mf8_t op2,
    size_t vl);
vint8mf8_t vasub_vx_i8mf8 (vint8mf8_t op1, int8_t op2, size_t
    vl);
vint8mf4_t vasub_vv_i8mf4 (vint8mf4_t op1, vint8mf4_t op2,
    size_t vl);
vint8mf4_t vasub_vx_i8mf4 (vint8mf4_t op1, int8_t op2, size_t
    vl);
vint8mf2_t vasub_vv_i8mf2 (vint8mf2_t op1, vint8mf2_t op2,
    size_t vl);
vint8mf2_t vasub_vx_i8mf2 (vint8mf2_t op1, int8_t op2, size_t
    vl);
vint8m1_t vasub_vv_i8m1 (vint8m1_t op1, vint8m1_t op2, size_t
    vl);
vint8m1_t vasub_vx_i8m1 (vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vasub_vv_i8m2 (vint8m2_t op1, vint8m2_t op2, size_t
    vl);
vint8m2_t vasub_vx_i8m2 (vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vasub_vv_i8m4 (vint8m4_t op1, vint8m4_t op2, size_t
    vl);
vint8m4_t vasub_vx_i8m4 (vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vasub_vv_i8m8 (vint8m8_t op1, vint8m8_t op2, size_t
    vl);
vint8m8_t vasub_vx_i8m8 (vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vasub_vv_i16mf4 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vint16mf4_t vasub_vx_i16mf4 (vint16mf4_t op1, int16_t op2,
    size_t vl);
vint16mf2_t vasub_vv_i16mf2 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vint16mf2_t vasub_vx_i16mf2 (vint16mf2_t op1, int16_t op2,
    size_t vl);
vint16m1_t vasub_vv_i16m1 (vint16m1_t op1, vint16m1_t op2,
    size_t vl);
vint16m1_t vasub_vx_i16m1 (vint16m1_t op1, int16_t op2, size_t
    vl);
vint16m2_t vasub_vv_i16m2 (vint16m2_t op1, vint16m2_t op2,
    size_t vl);
vint16m2_t vasub_vx_i16m2 (vint16m2_t op1, int16_t op2, size_t
    vl);
```

```
vint16m4_t vasub_vv_i16m4 (vint16m4_t op1, vint16m4_t op2,
    size_t vl);
vint16m4_t vasub_vx_i16m4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vint16m8_t vasub_vv_i16m8 (vint16m8_t op1, vint16m8_t op2,
    size_t vl);
vint16m8_t vasub_vx_i16m8 (vint16m8_t op1, int16_t op2, size_t
    vl);
vint32mf2_t vasub_vv_i32mf2 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vint32mf2_t vasub_vx_i32mf2 (vint32mf2_t op1, int32_t op2,
    size_t vl);
vint32m1_t vasub_vv_i32m1 (vint32m1_t op1, vint32m1_t op2,
    size_t vl);
vint32m1_t vasub_vx_i32m1 (vint32m1_t op1, int32_t op2, size_t
    vl);
vint32m2_t vasub_vv_i32m2 (vint32m2_t op1, vint32m2_t op2,
    size_t vl);
vint32m2_t vasub_vx_i32m2 (vint32m2_t op1, int32_t op2, size_t
    vl);
vint32m4_t vasub_vv_i32m4 (vint32m4_t op1, vint32m4_t op2,
    size_t vl);
vint32m4_t vasub_vx_i32m4 (vint32m4_t op1, int32_t op2, size_t
    vl);
vint32m8_t vasub_vv_i32m8 (vint32m8_t op1, vint32m8_t op2,
    size_t vl);
vint32m8_t vasub_vx_i32m8 (vint32m8_t op1, int32_t op2, size_t
    vl);
vint64m1_t vasub_vv_i64m1 (vint64m1_t op1, vint64m1_t op2,
    size_t vl);
vint64m1_t vasub_vx_i64m1 (vint64m1_t op1, int64_t op2, size_t
    vl);
vint64m2_t vasub_vv_i64m2 (vint64m2_t op1, vint64m2_t op2,
    size_t vl);
vint64m2_t vasub_vx_i64m2 (vint64m2_t op1, int64_t op2, size_t
    vl);
vint64m4_t vasub_vv_i64m4 (vint64m4_t op1, vint64m4_t op2,
    size_t vl);
vint64m4_t vasub_vx_i64m4 (vint64m4_t op1, int64_t op2, size_t
    vl);
vint64m8_t vasub_vv_i64m8 (vint64m8_t op1, vint64m8_t op2,
    size_t vl);
vint64m8_t vasub_vx_i64m8 (vint64m8_t op1, int64_t op2, size_t
    vl);
vuint8mf8_t vasubu_vv_u8mf8 (vuint8mf8_t op1, vuint8mf8_t op2,
    size_t vl);
```

```
vuint8mf8_t vasubu_vx_u8mf8 (vuint8mf8_t op1, uint8_t op2,
    size_t vl);
vuint8mf4_t vasubu_vv_u8mf4 (vuint8mf4_t op1, vuint8mf4_t op2,
    size_t vl);
vuint8mf4_t vasubu_vx_u8mf4 (vuint8mf4_t op1, uint8_t op2,
    size_t vl);
vuint8mf2_t vasubu_vv_u8mf2 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vuint8mf2_t vasubu_vx_u8mf2 (vuint8mf2_t op1, uint8_t op2,
    size_t vl);
vuint8m1_t vasubu_vv_u8m1 (vuint8m1_t op1, vuint8m1_t op2,
    size_t vl);
vuint8m1_t vasubu_vx_u8m1 (vuint8m1_t op1, uint8_t op2, size_t
    vl);
vuint8m2_t vasubu_vv_u8m2 (vuint8m2_t op1, vuint8m2_t op2,
    size_t vl);
vuint8m2_t vasubu_vx_u8m2 (vuint8m2_t op1, uint8_t op2, size_t
    vl);
vuint8m4_t vasubu_vv_u8m4 (vuint8m4_t op1, vuint8m4_t op2,
    size_t vl);
vuint8m4_t vasubu_vx_u8m4 (vuint8m4_t op1, uint8_t op2, size_t
    vl);
vuint8m8_t vasubu_vv_u8m8 (vuint8m8_t op1, vuint8m8_t op2,
    size_t vl);
vuint8m8_t vasubu_vx_u8m8 (vuint8m8_t op1, uint8_t op2, size_t
    vl);
vuint16mf4_t vasubu_vv_u16mf4 (vuint16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vuint16mf4_t vasubu_vx_u16mf4 (vuint16mf4_t op1, uint16_t op2,
    size_t vl);
vuint16mf2_t vasubu_vv_u16mf2 (vuint16mf2_t op1, vuint16mf2_t
    op2, size_t vl);
vuint16mf2_t vasubu_vx_u16mf2 (vuint16mf2_t op1, uint16_t op2,
    size_t vl);
vuint16m1_t vasubu_vv_u16m1 (vuint16m1_t op1, vuint16m1_t op2,
    size_t vl);
vuint16m1_t vasubu_vx_u16m1 (vuint16m1_t op1, uint16_t op2,
    size_t vl);
vuint16m2_t vasubu_vv_u16m2 (vuint16m2_t op1, vuint16m2_t op2,
    size_t vl);
vuint16m2_t vasubu_vx_u16m2 (vuint16m2_t op1, uint16_t op2,
    size_t vl);
vuint16m4_t vasubu_vv_u16m4 (vuint16m4_t op1, vuint16m4_t op2,
    size_t vl);
vuint16m4_t vasubu_vx_u16m4 (vuint16m4_t op1, uint16_t op2,
    size_t vl);
```

```
vuint16m8_t vasubu_vv_u16m8 (vuint16m8_t op1, vuint16m8_t op2,
    size_t vl);
vuint16m8_t vasubu_vx_u16m8 (vuint16m8_t op1, uint16_t op2,
    size_t vl);
vuint32mf2_t vasubu_vv_u32mf2 (vuint32mf2_t op1, vuint32mf2_t
    op2, size_t vl);
vuint32mf2_t vasubu_vx_u32mf2 (vuint32mf2_t op1, uint32_t op2,
    size_t vl);
vuint32m1_t vasubu_vv_u32m1 (vuint32m1_t op1, vuint32m1_t op2,
    size_t vl);
vuint32m1_t vasubu_vx_u32m1 (vuint32m1_t op1, uint32_t op2,
    size_t vl);
vuint32m2_t vasubu_vv_u32m2 (vuint32m2_t op1, vuint32m2_t op2,
    size_t vl);
vuint32m2_t vasubu_vx_u32m2 (vuint32m2_t op1, uint32_t op2,
    size_t vl);
vuint32m4_t vasubu_vv_u32m4 (vuint32m4_t op1, vuint32m4_t op2,
    size_t vl);
vuint32m4_t vasubu_vx_u32m4 (vuint32m4_t op1, uint32_t op2,
    size_t vl);
vuint32m8_t vasubu_vv_u32m8 (vuint32m8_t op1, vuint32m8_t op2,
    size_t vl);
vuint32m8_t vasubu_vx_u32m8 (vuint32m8_t op1, uint32_t op2,
    size_t vl);
vuint64m1_t vasubu_vv_u64m1 (vuint64m1_t op1, vuint64m1_t op2,
    size_t vl);
vuint64m1_t vasubu_vx_u64m1 (vuint64m1_t op1, uint64_t op2,
    size_t vl);
vuint64m2_t vasubu_vv_u64m2 (vuint64m2_t op1, vuint64m2_t op2,
    size_t vl);
vuint64m2_t vasubu_vx_u64m2 (vuint64m2_t op1, uint64_t op2,
    size_t vl);
vuint64m4_t vasubu_vv_u64m4 (vuint64m4_t op1, vuint64m4_t op2,
    size_t vl);
vuint64m4_t vasubu_vx_u64m4 (vuint64m4_t op1, uint64_t op2,
    size_t vl);
vuint64m8_t vasubu_vv_u64m8 (vuint64m8_t op1, vuint64m8_t op2,
    size_t vl);
vuint64m8_t vasubu_vx_u64m8 (vuint64m8_t op1, uint64_t op2,
    size_t vl);
// masked functions
vint8mf8_t vaadd_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vint8mf8_t vaadd_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
```

```
vint8mf4_t vaadd_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint8mf4_t vaadd_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vaadd_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint8mf2_t vaadd_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vaadd_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vaadd_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vaadd_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vaadd_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vaadd_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vaadd_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vaadd_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vaadd_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vaadd_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vint16mf4_t vaadd_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vint16mf2_t vaadd_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vint16mf2_t vaadd_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vint16m1_t vaadd_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vint16m1_t vaadd_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vint16m2_t vaadd_vv_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, vint16m2_t op2, size_t vl);
vint16m2_t vaadd_vx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, int16_t op2, size_t vl);
vint16m4_t vaadd_vv_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, vint16m4_t op2, size_t vl);
vint16m4_t vaadd_vx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, int16_t op2, size_t vl);
vint16m8_t vaadd_vv_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, vint16m8_t op2, size_t vl);
```

```
vint16m8_t vaadd_vx_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, int16_t op2, size_t vl);
vint32mf2_t vaadd_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vint32mf2_t vaadd_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vint32m1_t vaadd_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vint32m1_t vaadd_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vint32m2_t vaadd_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vint32m2_t vaadd_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vint32m4_t vaadd_vv_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, vint32m4_t op2, size_t vl);
vint32m4_t vaadd_vx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, int32_t op2, size_t vl);
vint32m8_t vaadd_vv_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, vint32m8_t op2, size_t vl);
vint32m8_t vaadd_vx_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, int32_t op2, size_t vl);
vint64m1_t vaadd_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vint64m1_t vaadd_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vint64m2_t vaadd_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vint64m2_t vaadd_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vint64m4_t vaadd_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vint64m4_t vaadd_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vint64m8_t vaadd_vv_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, vint64m8_t op2, size_t vl);
vint64m8_t vaadd_vx_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, int64_t op2, size_t vl);
vuint8mf8_t vaaddu_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vuint8mf8_t vaaddu_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vuint8mf4_t vaaddu_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vuint8mf4_t vaaddu_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
```

```
vuint8mf2_t vaaddu_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vuint8mf2_t vaaddu_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vuint8m1_t vaaddu_vv_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vuint8m1_t vaaddu_vx_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint8m1_t op1, uint8_t op2, size_t vl);
vuint8m2_t vaaddu_vv_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vuint8m2_t vaaddu_vx_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vaaddu_vv_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vuint8m4_t vaaddu_vx_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vaaddu_vv_u8m8_m (vbool1_t mask, vuint8m8_t
    maskedoff, vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vuint8m8_t vaaddu_vx_u8m8_m (vbool1_t mask, vuint8m8_t
    maskedoff, vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vaaddu_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vuint16mf4_t vaaddu_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vuint16mf2_t vaaddu_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vuint16mf2_t vaaddu_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vuint16m1_t vaaddu_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vuint16m1_t vaaddu_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vuint16m2_t vaaddu_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vuint16m2_t vaaddu_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vuint16m4_t vaaddu_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vuint16m4_t vaaddu_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vuint16m8_t vaaddu_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vuint16m8_t vaaddu_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vuint32mf2_t vaaddu_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
```

```
vuint32mf2_t vaaddu_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vuint32m1_t vaaddu_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vuint32m1_t vaaddu_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vuint32m2_t vaaddu_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
vuint32m2_t vaaddu_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vuint32m4_t vaaddu_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vuint32m4_t vaaddu_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vuint32m8_t vaaddu_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vuint32m8_t vaaddu_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vuint64m1_t vaaddu_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vuint64m1_t vaaddu_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
vuint64m2_t vaaddu_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vuint64m2_t vaaddu_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vuint64m4_t vaaddu_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vuint64m4_t vaaddu_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vuint64m8_t vaaddu_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vuint64m8_t vaaddu_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
vint8mf8_t vasub_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vint8mf8_t vasub_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vasub_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint8mf4_t vasub_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vasub_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint8mf2_t vasub_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
```

```
vint8m1_t vasub_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vasub_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vasub_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vasub_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vasub_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vasub_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vasub_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vasub_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vasub_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vint16mf4_t vasub_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vint16mf2_t vasub_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vint16mf2_t vasub_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vint16m1_t vasub_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vint16m1_t vasub_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vint16m2_t vasub_vv_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, vint16m2_t op2, size_t vl);
vint16m2_t vasub_vx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, int16_t op2, size_t vl);
vint16m4_t vasub_vv_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, vint16m4_t op2, size_t vl);
vint16m4_t vasub_vx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, int16_t op2, size_t vl);
vint16m8_t vasub_vv_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, vint16m8_t op2, size_t vl);
vint16m8_t vasub_vx_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, int16_t op2, size_t vl);
vint32mf2_t vasub_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vint32mf2_t vasub_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vint32m1_t vasub_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
```

```
vint32m1_t vasub_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vint32m2_t vasub_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vint32m2_t vasub_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vint32m4_t vasub_vv_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, vint32m4_t op2, size_t vl);
vint32m4_t vasub_vx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, int32_t op2, size_t vl);
vint32m8_t vasub_vv_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, vint32m8_t op2, size_t vl);
vint32m8_t vasub_vx_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, int32_t op2, size_t vl);
vint64m1_t vasub_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vint64m1_t vasub_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vint64m2_t vasub_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vint64m2_t vasub_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vint64m4_t vasub_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vint64m4_t vasub_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vint64m8_t vasub_vv_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, vint64m8_t op2, size_t vl);
vint64m8_t vasub_vx_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, int64_t op2, size_t vl);
vuint8mf8_t vasubu_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vuint8mf8_t vasubu_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
vuint8mf4_t vasubu_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vuint8mf4_t vasubu_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vuint8mf2_t vasubu_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vuint8mf2_t vasubu_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vuint8m1_t vasubu_vv_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vuint8m1_t vasubu_vx_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint8m1_t op1, uint8_t op2, size_t vl);
```

```
vuint8m2_t vasubu_vv_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vuint8m2_t vasubu_vx_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint8m2_t op1, uint8_t op2, size_t vl);
vuint8m4_t vasubu_vv_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vuint8m4_t vasubu_vx_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint8m4_t op1, uint8_t op2, size_t vl);
vuint8m8_t vasubu_vv_u8m8_m (vbool1_t mask, vuint8m8_t
    maskedoff, vuint8m8_t op1, vuint8m8_t op2, size_t vl);
vuint8m8_t vasubu_vx_u8m8_m (vbool1_t mask, vuint8m8_t
    maskedoff, vuint8m8_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vasubu_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t op2, size_t vl);
vuint16mf4_t vasubu_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, uint16_t op2, size_t vl);
vuint16mf2_t vasubu_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t op2, size_t vl);
vuint16mf2_t vasubu_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, uint16_t op2, size_t vl);
vuint16m1_t vasubu_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vuint16m1_t vasubu_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, uint16_t op2, size_t vl);
vuint16m2_t vasubu_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vuint16m2_t vasubu_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, uint16_t op2, size_t vl);
vuint16m4_t vasubu_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vuint16m4_t vasubu_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, uint16_t op2, size_t vl);
vuint16m8_t vasubu_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vuint16m8_t vasubu_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, uint16_t op2, size_t vl);
vuint32mf2_t vasubu_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t op2, size_t vl);
vuint32mf2_t vasubu_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, uint32_t op2, size_t vl);
vuint32m1_t vasubu_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint32m1_t op2, size_t vl);
vuint32m1_t vasubu_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, uint32_t op2, size_t vl);
vuint32m2_t vasubu_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint32m2_t op2, size_t vl);
```

```
vuint32m2_t vasubu_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, uint32_t op2, size_t vl);
vuint32m4_t vasubu_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint32m4_t op2, size_t vl);
vuint32m4_t vasubu_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, uint32_t op2, size_t vl);
vuint32m8_t vasubu_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint32m8_t op2, size_t vl);
vuint32m8_t vasubu_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, uint32_t op2, size_t vl);
vuint64m1_t vasubu_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint64m1_t op2, size_t vl);
vuint64m1_t vasubu_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, uint64_t op2, size_t vl);
vuint64m2_t vasubu_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint64m2_t op2, size_t vl);
vuint64m2_t vasubu_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, uint64_t op2, size_t vl);
vuint64m4_t vasubu_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint64m4_t op2, size_t vl);
vuint64m4_t vasubu_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, uint64_t op2, size_t vl);
vuint64m8_t vasubu_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t op2, size_t vl);
vuint64m8_t vasubu_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, uint64_t op2, size_t vl);
```

Vector Single-Width Fractional Multiply with Rounding and Saturation Functions:

Prototypes:

```
vint8mf8_t vsmul_vv_i8mf8 (vint8mf8_t op1, vint8mf8_t op2,
    size_t vl);
vint8mf8_t vsmul_vx_i8mf8 (vint8mf8_t op1, int8_t op2, size_t
    vl);
vint8mf4_t vsmul_vv_i8mf4 (vint8mf4_t op1, vint8mf4_t op2,
    size_t vl);
vint8mf4_t vsmul_vx_i8mf4 (vint8mf4_t op1, int8_t op2, size_t
    vl);
vint8mf2_t vsmul_vv_i8mf2 (vint8mf2_t op1, vint8mf2_t op2,
    size_t vl);
vint8mf2_t vsmul_vx_i8mf2 (vint8mf2_t op1, int8_t op2, size_t
    vl);
vint8m1_t vsmul_vv_i8m1 (vint8m1_t op1, vint8m1_t op2, size_t
    vl);
```

```
vint8m1_t vsmul_vx_i8m1 (vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vsmul_vv_i8m2 (vint8m2_t op1, vint8m2_t op2, size_t
    vl);
vint8m2_t vsmul_vx_i8m2 (vint8m2_t op1, int8_t op2, size_t vl);
vint8m4_t vsmul_vv_i8m4 (vint8m4_t op1, vint8m4_t op2, size_t
    vl);
vint8m4_t vsmul_vx_i8m4 (vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vsmul_vv_i8m8 (vint8m8_t op1, vint8m8_t op2, size_t
    vl);
vint8m8_t vsmul_vx_i8m8 (vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vsmul_vv_i16mf4 (vint16mf4_t op1, vint16mf4_t op2,
    size_t vl);
vint16mf4_t vsmul_vx_i16mf4 (vint16mf4_t op1, int16_t op2,
    size_t vl);
vint16mf2_t vsmul_vv_i16mf2 (vint16mf2_t op1, vint16mf2_t op2,
    size_t vl);
vint16mf2_t vsmul_vx_i16mf2 (vint16mf2_t op1, int16_t op2,
    size_t vl);
vint16m1_t vsmul_vv_i16m1 (vint16m1_t op1, vint16m1_t op2,
    size_t vl);
vint16m1_t vsmul_vx_i16m1 (vint16m1_t op1, int16_t op2, size_t
    vl);
vint16m2_t vsmul_vv_i16m2 (vint16m2_t op1, vint16m2_t op2,
    size_t vl);
vint16m2_t vsmul_vx_i16m2 (vint16m2_t op1, int16_t op2, size_t
    vl);
vint16m4_t vsmul_vv_i16m4 (vint16m4_t op1, vint16m4_t op2,
    size_t vl);
vint16m4_t vsmul_vx_i16m4 (vint16m4_t op1, int16_t op2, size_t
    vl);
vint16m8_t vsmul_vv_i16m8 (vint16m8_t op1, vint16m8_t op2,
    size_t vl);
vint16m8_t vsmul_vx_i16m8 (vint16m8_t op1, int16_t op2, size_t
    vl);
vint32mf2_t vsmul_vv_i32mf2 (vint32mf2_t op1, vint32mf2_t op2,
    size_t vl);
vint32mf2_t vsmul_vx_i32mf2 (vint32mf2_t op1, int32_t op2,
    size_t vl);
vint32m1_t vsmul_vv_i32m1 (vint32m1_t op1, vint32m1_t op2,
    size_t vl);
vint32m1_t vsmul_vx_i32m1 (vint32m1_t op1, int32_t op2, size_t
    vl);
vint32m2_t vsmul_vv_i32m2 (vint32m2_t op1, vint32m2_t op2,
    size_t vl);
vint32m2_t vsmul_vx_i32m2 (vint32m2_t op1, int32_t op2, size_t
    vl);
```

```
vint32m4_t vsmul_vv_i32m4 (vint32m4_t op1, vint32m4_t op2,
    size_t vl);
vint32m4_t vsmul_vx_i32m4 (vint32m4_t op1, int32_t op2, size_t
    vl);
vint32m8_t vsmul_vv_i32m8 (vint32m8_t op1, vint32m8_t op2,
    size_t vl);
vint32m8_t vsmul_vx_i32m8 (vint32m8_t op1, int32_t op2, size_t
    vl);
vint64m1_t vsmul_vv_i64m1 (vint64m1_t op1, vint64m1_t op2,
    size_t vl);
vint64m1_t vsmul_vx_i64m1 (vint64m1_t op1, int64_t op2, size_t
    vl);
vint64m2_t vsmul_vv_i64m2 (vint64m2_t op1, vint64m2_t op2,
    size_t vl);
vint64m2_t vsmul_vx_i64m2 (vint64m2_t op1, int64_t op2, size_t
    vl);
vint64m4_t vsmul_vv_i64m4 (vint64m4_t op1, vint64m4_t op2,
    size_t vl);
vint64m4_t vsmul_vx_i64m4 (vint64m4_t op1, int64_t op2, size_t
    vl);
vint64m8_t vsmul_vv_i64m8 (vint64m8_t op1, vint64m8_t op2,
    size_t vl);
vint64m8_t vsmul_vx_i64m8 (vint64m8_t op1, int64_t op2, size_t
    vl);
// masked functions
vint8mf8_t vsmul_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vint8mf8_t vsmul_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vint8mf4_t vsmul_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint8mf4_t vsmul_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vint8mf2_t vsmul_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint8mf2_t vsmul_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vint8m1_t vsmul_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vint8m1_t op2, size_t vl);
vint8m1_t vsmul_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, int8_t op2, size_t vl);
vint8m2_t vsmul_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vint8m2_t op2, size_t vl);
vint8m2_t vsmul_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, int8_t op2, size_t vl);
```

```
vint8m4_t vsmul_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vint8m4_t op2, size_t vl);
vint8m4_t vsmul_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, int8_t op2, size_t vl);
vint8m8_t vsmul_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vint8m8_t op2, size_t vl);
vint8m8_t vsmul_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, int8_t op2, size_t vl);
vint16mf4_t vsmul_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vint16mf4_t op2, size_t vl);
vint16mf4_t vsmul_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, int16_t op2, size_t vl);
vint16mf2_t vsmul_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vint16mf2_t op2, size_t vl);
vint16mf2_t vsmul_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, int16_t op2, size_t vl);
vint16m1_t vsmul_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vint16m1_t op2, size_t vl);
vint16m1_t vsmul_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, int16_t op2, size_t vl);
vint16m2_t vsmul_vv_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, vint16m2_t op2, size_t vl);
vint16m2_t vsmul_vx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, int16_t op2, size_t vl);
vint16m4_t vsmul_vv_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, vint16m4_t op2, size_t vl);
vint16m4_t vsmul_vx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, int16_t op2, size_t vl);
vint16m8_t vsmul_vv_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, vint16m8_t op2, size_t vl);
vint16m8_t vsmul_vx_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, int16_t op2, size_t vl);
vint32mf2_t vsmul_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vint32mf2_t op2, size_t vl);
vint32mf2_t vsmul_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, int32_t op2, size_t vl);
vint32m1_t vsmul_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vint32m1_t op2, size_t vl);
vint32m1_t vsmul_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, int32_t op2, size_t vl);
vint32m2_t vsmul_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vint32m2_t op2, size_t vl);
vint32m2_t vsmul_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, int32_t op2, size_t vl);
vint32m4_t vsmul_vv_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, vint32m4_t op2, size_t vl);
```

```
vint32m4_t vsmul_vx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, int32_t op2, size_t vl);
vint32m8_t vsmul_vv_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, vint32m8_t op2, size_t vl);
vint32m8_t vsmul_vx_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, int32_t op2, size_t vl);
vint64m1_t vsmul_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vint64m1_t op2, size_t vl);
vint64m1_t vsmul_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, int64_t op2, size_t vl);
vint64m2_t vsmul_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vint64m2_t op2, size_t vl);
vint64m2_t vsmul_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, int64_t op2, size_t vl);
vint64m4_t vsmul_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vint64m4_t op2, size_t vl);
vint64m4_t vsmul_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, int64_t op2, size_t vl);
vint64m8_t vsmul_vv_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, vint64m8_t op2, size_t vl);
vint64m8_t vsmul_vx_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, int64_t op2, size_t vl);
```

Vector Single-Width Scaling Shift Functions:

Prototypes:

```
vuint8mf8_t vssrl_vv_u8mf8 (vuint8mf8_t op1, vuint8mf8_t shift,
    size_t vl);
vuint8mf8_t vssrl_vx_u8mf8 (vuint8mf8_t op1, size_t shift,
    size_t vl);
vuint8mf4_t vssrl_vv_u8mf4 (vuint8mf4_t op1, vuint8mf4_t shift,
    size_t vl);
vuint8mf4_t vssrl_vx_u8mf4 (vuint8mf4_t op1, size_t shift,
    size_t vl);
vuint8mf2_t vssrl_vv_u8mf2 (vuint8mf2_t op1, vuint8mf2_t shift,
    size_t vl);
vuint8mf2_t vssrl_vx_u8mf2 (vuint8mf2_t op1, size_t shift,
    size_t vl);
vuint8m1_t vssrl_vv_u8m1 (vuint8m1_t op1, vuint8m1_t shift,
    size_t vl);
vuint8m1_t vssrl_vx_u8m1 (vuint8m1_t op1, size_t shift, size_t
    vl);
vuint8m2_t vssrl_vv_u8m2 (vuint8m2_t op1, vuint8m2_t shift,
    size_t vl);
```

```
vuint8m2_t vssrl_vx_u8m2 (vuint8m2_t op1, size_t shift, size_t
    vl);
vuint8m4_t vssrl_vv_u8m4 (vuint8m4_t op1, vuint8m4_t shift,
    size_t vl);
vuint8m4_t vssrl_vx_u8m4 (vuint8m4_t op1, size_t shift, size_t
    vl);
vuint8m8_t vssrl_vv_u8m8 (vuint8m8_t op1, vuint8m8_t shift,
    size_t vl);
vuint8m8_t vssrl_vx_u8m8 (vuint8m8_t op1, size_t shift, size_t
    vl);
vuint16mf4_t vssrl_vv_u16mf4 (vuint16mf4_t op1, vuint16mf4_t
    shift, size_t vl);
vuint16mf4_t vssrl_vx_u16mf4 (vuint16mf4_t op1, size_t shift,
    size_t vl);
vuint16mf2_t vssrl_vv_u16mf2 (vuint16mf2_t op1, vuint16mf2_t
    shift, size_t vl);
vuint16mf2_t vssrl_vx_u16mf2 (vuint16mf2_t op1, size_t shift,
    size_t vl);
vuint16m1_t vssrl_vv_u16m1 (vuint16m1_t op1, vuint16m1_t shift,
    size_t vl);
vuint16m1_t vssrl_vx_u16m1 (vuint16m1_t op1, size_t shift,
    size_t vl);
vuint16m2_t vssrl_vv_u16m2 (vuint16m2_t op1, vuint16m2_t shift,
    size_t vl);
vuint16m2_t vssrl_vx_u16m2 (vuint16m2_t op1, size_t shift,
    size_t vl);
vuint16m4_t vssrl_vv_u16m4 (vuint16m4_t op1, vuint16m4_t shift,
    size_t vl);
vuint16m4_t vssrl_vx_u16m4 (vuint16m4_t op1, size_t shift,
    size_t vl);
vuint16m8_t vssrl_vv_u16m8 (vuint16m8_t op1, vuint16m8_t shift,
    size_t vl);
vuint16m8_t vssrl_vx_u16m8 (vuint16m8_t op1, size_t shift,
    size_t vl);
vuint32mf2_t vssrl_vv_u32mf2 (vuint32mf2_t op1, vuint32mf2_t
    shift, size_t vl);
vuint32mf2_t vssrl_vx_u32mf2 (vuint32mf2_t op1, size_t shift,
    size_t vl);
vuint32m1_t vssrl_vv_u32m1 (vuint32m1_t op1, vuint32m1_t shift,
    size_t vl);
vuint32m1_t vssrl_vx_u32m1 (vuint32m1_t op1, size_t shift,
    size_t vl);
vuint32m2_t vssrl_vv_u32m2 (vuint32m2_t op1, vuint32m2_t shift,
    size_t vl);
vuint32m2_t vssrl_vx_u32m2 (vuint32m2_t op1, size_t shift,
    size_t vl);
```

```
vuint32m4_t vssrl_vv_u32m4 (vuint32m4_t op1, vuint32m4_t shift,
    size_t vl);
vuint32m4_t vssrl_vx_u32m4 (vuint32m4_t op1, size_t shift,
    size_t vl);
vuint32m8_t vssrl_vv_u32m8 (vuint32m8_t op1, vuint32m8_t shift,
    size_t vl);
vuint32m8_t vssrl_vx_u32m8 (vuint32m8_t op1, size_t shift,
    size_t vl);
vuint64m1_t vssrl_vv_u64m1 (vuint64m1_t op1, vuint64m1_t shift,
    size_t vl);
vuint64m1_t vssrl_vx_u64m1 (vuint64m1_t op1, size_t shift,
    size_t vl);
vuint64m2_t vssrl_vv_u64m2 (vuint64m2_t op1, vuint64m2_t shift,
    size_t vl);
vuint64m2_t vssrl_vx_u64m2 (vuint64m2_t op1, size_t shift,
    size_t vl);
vuint64m4_t vssrl_vv_u64m4 (vuint64m4_t op1, vuint64m4_t shift,
    size_t vl);
vuint64m4_t vssrl_vx_u64m4 (vuint64m4_t op1, size_t shift,
    size_t vl);
vuint64m8_t vssrl_vv_u64m8 (vuint64m8_t op1, vuint64m8_t shift,
    size_t vl);
vuint64m8_t vssrl_vx_u64m8 (vuint64m8_t op1, size_t shift,
    size_t vl);
vint8mf8_t vssra_vv_i8mf8 (vint8mf8_t op1, vuint8mf8_t shift,
    size_t vl);
vint8mf8_t vssra_vx_i8mf8 (vint8mf8_t op1, size_t shift, size_t
    vl);
vint8mf4_t vssra_vv_i8mf4 (vint8mf4_t op1, vuint8mf4_t shift,
    size_t vl);
vint8mf4_t vssra_vx_i8mf4 (vint8mf4_t op1, size_t shift, size_t
    vl);
vint8mf2_t vssra_vv_i8mf2 (vint8mf2_t op1, vuint8mf2_t shift,
    size_t vl);
vint8mf2_t vssra_vx_i8mf2 (vint8mf2_t op1, size_t shift, size_t
    vl);
vint8m1_t vssra_vv_i8m1 (vint8m1_t op1, vuint8m1_t shift, size_t
    vl);
vint8m1_t vssra_vx_i8m1 (vint8m1_t op1, size_t shift, size_t vl);
vint8m2_t vssra_vv_i8m2 (vint8m2_t op1, vuint8m2_t shift, size_t
    vl);
vint8m2_t vssra_vx_i8m2 (vint8m2_t op1, size_t shift, size_t vl);
vint8m4_t vssra_vv_i8m4 (vint8m4_t op1, vuint8m4_t shift, size_t
    vl);
vint8m4_t vssra_vx_i8m4 (vint8m4_t op1, size_t shift, size_t vl);
```

```
vint8m8_t vssra_vv_i8m8 (vint8m8_t op1, vuint8m8_t shift, size_t
    vl);
vint8m8_t vssra_vx_i8m8 (vint8m8_t op1, size_t shift, size_t vl);
vint16mf4_t vssra_vv_i16mf4 (vint16mf4_t op1, vuint16mf4_t
    shift, size_t vl);
vint16mf4_t vssra_vx_i16mf4 (vint16mf4_t op1, size_t shift,
    size_t vl);
vint16mf2_t vssra_vv_i16mf2 (vint16mf2_t op1, vuint16mf2_t
    shift, size_t vl);
vint16mf2_t vssra_vx_i16mf2 (vint16mf2_t op1, size_t shift,
    size_t vl);
vint16m1_t vssra_vv_i16m1 (vint16m1_t op1, vuint16m1_t shift,
    size_t vl);
vint16m1_t vssra_vx_i16m1 (vint16m1_t op1, size_t shift, size_t
    vl);
vint16m2_t vssra_vv_i16m2 (vint16m2_t op1, vuint16m2_t shift,
    size_t vl);
vint16m2_t vssra_vx_i16m2 (vint16m2_t op1, size_t shift, size_t
    vl);
vint16m4_t vssra_vv_i16m4 (vint16m4_t op1, vuint16m4_t shift,
    size_t vl);
vint16m4_t vssra_vx_i16m4 (vint16m4_t op1, size_t shift, size_t
    vl);
vint16m8_t vssra_vv_i16m8 (vint16m8_t op1, vuint16m8_t shift,
    size_t vl);
vint16m8_t vssra_vx_i16m8 (vint16m8_t op1, size_t shift, size_t
    vl);
vint32mf2_t vssra_vv_i32mf2 (vint32mf2_t op1, vuint32mf2_t
    shift, size_t vl);
vint32mf2_t vssra_vx_i32mf2 (vint32mf2_t op1, size_t shift,
    size_t vl);
vint32m1_t vssra_vv_i32m1 (vint32m1_t op1, vuint32m1_t shift,
    size_t vl);
vint32m1_t vssra_vx_i32m1 (vint32m1_t op1, size_t shift, size_t
    vl);
vint32m2_t vssra_vv_i32m2 (vint32m2_t op1, vuint32m2_t shift,
    size_t vl);
vint32m2_t vssra_vx_i32m2 (vint32m2_t op1, size_t shift, size_t
    vl);
vint32m4_t vssra_vv_i32m4 (vint32m4_t op1, vuint32m4_t shift,
    size_t vl);
vint32m4_t vssra_vx_i32m4 (vint32m4_t op1, size_t shift, size_t
    vl);
vint32m8_t vssra_vv_i32m8 (vint32m8_t op1, vuint32m8_t shift,
    size_t vl);
```

```
vint32m8_t vssra_vx_i32m8 (vint32m8_t op1, size_t shift, size_t
    vl);
vint64m1_t vssra_vv_i64m1 (vint64m1_t op1, vuint64m1_t shift,
    size_t vl);
vint64m1_t vssra_vx_i64m1 (vint64m1_t op1, size_t shift, size_t
    vl);
vint64m2_t vssra_vv_i64m2 (vint64m2_t op1, vuint64m2_t shift,
    size_t vl);
vint64m2_t vssra_vx_i64m2 (vint64m2_t op1, size_t shift, size_t
    vl);
vint64m4_t vssra_vv_i64m4 (vint64m4_t op1, vuint64m4_t shift,
    size_t vl);
vint64m4_t vssra_vx_i64m4 (vint64m4_t op1, size_t shift, size_t
    vl);
vint64m8_t vssra_vv_i64m8 (vint64m8_t op1, vuint64m8_t shift,
    size_t vl);
vint64m8_t vssra_vx_i64m8 (vint64m8_t op1, size_t shift, size_t
    vl);
// masked functions
vuint8mf8_t vssrl_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t shift, size_t vl);
vuint8mf8_t vssrl_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, size_t shift, size_t vl);
vuint8mf4_t vssrl_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t shift, size_t vl);
vuint8mf4_t vssrl_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, size_t shift, size_t vl);
vuint8mf2_t vssrl_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t shift, size_t vl);
vuint8mf2_t vssrl_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, size_t shift, size_t vl);
vuint8m1_t vssrl_vv_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, vuint8m1_t shift, size_t vl);
vuint8m1_t vssrl_vx_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vuint8m1_t op1, size_t shift, size_t vl);
vuint8m2_t vssrl_vv_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, vuint8m2_t shift, size_t vl);
vuint8m2_t vssrl_vx_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vuint8m2_t op1, size_t shift, size_t vl);
vuint8m4_t vssrl_vv_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, vuint8m4_t shift, size_t vl);
vuint8m4_t vssrl_vx_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vuint8m4_t op1, size_t shift, size_t vl);
vuint8m8_t vssrl_vv_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, vuint8m8_t shift, size_t vl);
```

```
vuint8m8_t vssrl_vx_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vuint8m8_t op1, size_t shift, size_t vl);
vuint16mf4_t vssrl_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t shift, size_t vl);
vuint16mf4_t vssrl_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, size_t shift, size_t vl);
vuint16mf2_t vssrl_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t shift, size_t vl);
vuint16mf2_t vssrl_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, size_t shift, size_t vl);
vuint16m1_t vssrl_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t shift, size_t vl);
vuint16m1_t vssrl_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, size_t shift, size_t vl);
vuint16m2_t vssrl_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t shift, size_t vl);
vuint16m2_t vssrl_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, size_t shift, size_t vl);
vuint16m4_t vssrl_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t shift, size_t vl);
vuint16m4_t vssrl_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, size_t shift, size_t vl);
vuint16m8_t vssrl_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t shift, size_t vl);
vuint16m8_t vssrl_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, size_t shift, size_t vl);
vuint32mf2_t vssrl_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t shift, size_t vl);
vuint32mf2_t vssrl_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, size_t shift, size_t vl);
vuint32m1_t vssrl_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint32m1_t shift, size_t vl);
vuint32m1_t vssrl_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, size_t shift, size_t vl);
vuint32m2_t vssrl_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint32m2_t shift, size_t vl);
vuint32m2_t vssrl_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, size_t shift, size_t vl);
vuint32m4_t vssrl_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint32m4_t shift, size_t vl);
vuint32m4_t vssrl_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, size_t shift, size_t vl);
vuint32m8_t vssrl_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint32m8_t shift, size_t vl);
vuint32m8_t vssrl_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, size_t shift, size_t vl);
```

```
vuint64m1_t vssrl_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint64m1_t shift, size_t vl);
vuint64m1_t vssrl_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, size_t shift, size_t vl);
vuint64m2_t vssrl_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint64m2_t shift, size_t vl);
vuint64m2_t vssrl_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, size_t shift, size_t vl);
vuint64m4_t vssrl_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint64m4_t shift, size_t vl);
vuint64m4_t vssrl_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, size_t shift, size_t vl);
vuint64m8_t vssrl_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t shift, size_t vl);
vuint64m8_t vssrl_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, size_t shift, size_t vl);
vint8mf8_t vssra_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vuint8mf8_t shift, size_t vl);
vint8mf8_t vssra_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, size_t shift, size_t vl);
vint8mf4_t vssra_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vuint8mf4_t shift, size_t vl);
vint8mf4_t vssra_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, size_t shift, size_t vl);
vint8mf2_t vssra_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vuint8mf2_t shift, size_t vl);
vint8mf2_t vssra_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, size_t shift, size_t vl);
vint8m1_t vssra_vv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, vuint8m1_t shift, size_t vl);
vint8m1_t vssra_vx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint8m1_t op1, size_t shift, size_t vl);
vint8m2_t vssra_vv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, vuint8m2_t shift, size_t vl);
vint8m2_t vssra_vx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint8m2_t op1, size_t shift, size_t vl);
vint8m4_t vssra_vv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, vuint8m4_t shift, size_t vl);
vint8m4_t vssra_vx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint8m4_t op1, size_t shift, size_t vl);
vint8m8_t vssra_vv_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, vuint8m8_t shift, size_t vl);
vint8m8_t vssra_vx_i8m8_m (vbool1_t mask, vint8m8_t maskedoff,
    vint8m8_t op1, size_t shift, size_t vl);
vint16mf4_t vssra_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vuint16mf4_t shift, size_t vl);
```

```
vint16mf4_t vssra_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, size_t shift, size_t vl);
vint16mf2_t vssra_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vuint16mf2_t shift, size_t vl);
vint16mf2_t vssra_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, size_t shift, size_t vl);
vint16m1_t vssra_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vuint16m1_t shift, size_t vl);
vint16m1_t vssra_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, size_t shift, size_t vl);
vint16m2_t vssra_vv_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, vuint16m2_t shift, size_t vl);
vint16m2_t vssra_vx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, size_t shift, size_t vl);
vint16m4_t vssra_vv_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, vuint16m4_t shift, size_t vl);
vint16m4_t vssra_vx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, size_t shift, size_t vl);
vint16m8_t vssra_vv_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, vuint16m8_t shift, size_t vl);
vint16m8_t vssra_vx_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, size_t shift, size_t vl);
vint32mf2_t vssra_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vuint32mf2_t shift, size_t vl);
vint32mf2_t vssra_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, size_t shift, size_t vl);
vint32m1_t vssra_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vuint32m1_t shift, size_t vl);
vint32m1_t vssra_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, size_t shift, size_t vl);
vint32m2_t vssra_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vuint32m2_t shift, size_t vl);
vint32m2_t vssra_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, size_t shift, size_t vl);
vint32m4_t vssra_vv_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, vuint32m4_t shift, size_t vl);
vint32m4_t vssra_vx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, size_t shift, size_t vl);
vint32m8_t vssra_vv_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, vuint32m8_t shift, size_t vl);
vint32m8_t vssra_vx_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, size_t shift, size_t vl);
vint64m1_t vssra_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vuint64m1_t shift, size_t vl);
vint64m1_t vssra_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, size_t shift, size_t vl);
```

```
vint64m2_t vssra_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vuint64m2_t shift, size_t vl);
vint64m2_t vssra_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, size_t shift, size_t vl);
vint64m4_t vssra_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vuint64m4_t shift, size_t vl);
vint64m4_t vssra_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, size_t shift, size_t vl);
vint64m8_t vssra_vv_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, vuint64m8_t shift, size_t vl);
vint64m8_t vssra_vx_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, size_t shift, size_t vl);
```

Vector Narrowing Fixed-Point Clip Functions:

Prototypes:

```
vint8mf8_t vnclip_wv_i8mf8 (vint16mf4_t op1, vuint8mf8_t shift,
    size_t vl);
vint8mf8_t vnclip_wx_i8mf8 (vint16mf4_t op1, size_t shift,
    size_t vl);
vint8mf4_t vnclip_wv_i8mf4 (vint16mf2_t op1, vuint8mf4_t shift,
    size_t vl);
vint8mf4_t vnclip_wx_i8mf4 (vint16mf2_t op1, size_t shift,
    size_t vl);
vint8mf2_t vnclip_wv_i8mf2 (vint16m1_t op1, vuint8mf2_t shift,
    size_t vl);
vint8mf2_t vnclip_wx_i8mf2 (vint16m1_t op1, size_t shift, size_t
    vl);
vint8m1_t vnclip_wv_i8m1 (vint16m2_t op1, vuint8m1_t shift,
    size_t vl);
vint8m1_t vnclip_wx_i8m1 (vint16m2_t op1, size_t shift, size_t
    vl);
vint8m2_t vnclip_wv_i8m2 (vint16m4_t op1, vuint8m2_t shift,
    size_t vl);
vint8m2_t vnclip_wx_i8m2 (vint16m4_t op1, size_t shift, size_t
    vl);
vint8m4_t vnclip_wv_i8m4 (vint16m8_t op1, vuint8m4_t shift,
    size_t vl);
vint8m4_t vnclip_wx_i8m4 (vint16m8_t op1, size_t shift, size_t
    vl);
vint16mf4_t vnclip_wv_i16mf4 (vint32mf2_t op1, vuint16mf4_t
    shift, size_t vl);
vint16mf4_t vnclip_wx_i16mf4 (vint32mf2_t op1, size_t shift,
    size_t vl);
```

734

```
vint16mf2_t vnclip_wv_i16mf2 (vint32m1_t op1, vuint16mf2_t
    shift, size_t vl);
vint16mf2_t vnclip_wx_i16mf2 (vint32m1_t op1, size_t shift,
    size_t vl);
vint16m1_t vnclip_wv_i16m1 (vint32m2_t op1, vuint16m1_t shift,
    size_t vl);
vint16m1_t vnclip_wx_i16m1 (vint32m2_t op1, size_t shift, size_t
    vl);
vint16m2_t vnclip_wv_i16m2 (vint32m4_t op1, vuint16m2_t shift,
    size_t vl);
vint16m2_t vnclip_wx_i16m2 (vint32m4_t op1, size_t shift, size_t
    vl);
vint16m4_t vnclip_wv_i16m4 (vint32m8_t op1, vuint16m4_t shift,
    size_t vl);
vint16m4_t vnclip_wx_i16m4 (vint32m8_t op1, size_t shift, size_t
    vl);
vint32mf2_t vnclip_wv_i32mf2 (vint64m1_t op1, vuint32mf2_t
    shift, size_t vl);
vint32mf2_t vnclip_wx_i32mf2 (vint64m1_t op1, size_t shift,
    size_t vl);
vint32m1_t vnclip_wv_i32m1 (vint64m2_t op1, vuint32m1_t shift,
    size_t vl);
vint32m1_t vnclip_wx_i32m1 (vint64m2_t op1, size_t shift, size_t
    vl);
vint32m2_t vnclip_wv_i32m2 (vint64m4_t op1, vuint32m2_t shift,
    size_t vl);
vint32m2_t vnclip_wx_i32m2 (vint64m4_t op1, size_t shift, size_t
    vl);
vint32m4_t vnclip_wv_i32m4 (vint64m8_t op1, vuint32m4_t shift,
    size_t vl);
vint32m4_t vnclip_wx_i32m4 (vint64m8_t op1, size_t shift, size_t
    vl);
vuint8mf8_t vnclipu_wv_u8mf8 (vuint16mf4_t op1, vuint8mf8_t
    shift, size_t vl);
vuint8mf8_t vnclipu_wx_u8mf8 (vuint16mf4_t op1, size_t shift,
    size_t vl);
vuint8mf4_t vnclipu_wv_u8mf4 (vuint16mf2_t op1, vuint8mf4_t
    shift, size_t vl);
vuint8mf4_t vnclipu_wx_u8mf4 (vuint16mf2_t op1, size_t shift,
    size_t vl);
vuint8mf2_t vnclipu_wv_u8mf2 (vuint16m1_t op1, vuint8mf2_t
    shift, size_t vl);
vuint8mf2_t vnclipu_wx_u8mf2 (vuint16m1_t op1, size_t shift,
    size_t vl);
vuint8m1_t vnclipu_wv_u8m1 (vuint16m2_t op1, vuint8m1_t shift,
    size_t vl);
```

```
vuint8m1_t vnclipu_wx_u8m1 (vuint16m2_t op1, size_t shift,
    size_t vl);
vuint8m2_t vnclipu_wv_u8m2 (vuint16m4_t op1, vuint8m2_t shift,
    size_t vl);
vuint8m2_t vnclipu_wx_u8m2 (vuint16m4_t op1, size_t shift,
    size_t vl);
vuint8m4_t vnclipu_wv_u8m4 (vuint16m8_t op1, vuint8m4_t shift,
    size_t vl);
vuint8m4_t vnclipu_wx_u8m4 (vuint16m8_t op1, size_t shift,
    size_t vl);
vuint16mf4_t vnclipu_wv_u16mf4 (vuint32mf2_t op1, vuint16mf4_t
    shift, size_t vl);
vuint16mf4_t vnclipu_wx_u16mf4 (vuint32mf2_t op1, size_t shift,
    size_t vl);
vuint16mf2_t vnclipu_wv_u16mf2 (vuint32m1_t op1, vuint16mf2_t
    shift, size_t vl);
vuint16mf2_t vnclipu_wx_u16mf2 (vuint32m1_t op1, size_t shift,
    size_t vl);
vuint16m1_t vnclipu_wv_u16m1 (vuint32m2_t op1, vuint16m1_t
    shift, size_t vl);
vuint16m1_t vnclipu_wx_u16m1 (vuint32m2_t op1, size_t shift,
    size_t vl);
vuint16m2_t vnclipu_wv_u16m2 (vuint32m4_t op1, vuint16m2_t
    shift, size_t vl);
vuint16m2_t vnclipu_wx_u16m2 (vuint32m4_t op1, size_t shift,
    size_t vl);
vuint16m4_t vnclipu_wv_u16m4 (vuint32m8_t op1, vuint16m4_t
    shift, size_t vl);
vuint16m4_t vnclipu_wx_u16m4 (vuint32m8_t op1, size_t shift,
    size_t vl);
vuint32mf2_t vnclipu_wv_u32mf2 (vuint64m1_t op1, vuint32mf2_t
    shift, size_t vl);
vuint32mf2_t vnclipu_wx_u32mf2 (vuint64m1_t op1, size_t shift,
    size_t vl);
vuint32m1_t vnclipu_wv_u32m1 (vuint64m2_t op1, vuint32m1_t
    shift, size_t vl);
vuint32m1_t vnclipu_wx_u32m1 (vuint64m2_t op1, size_t shift,
    size_t vl);
vuint32m2_t vnclipu_wv_u32m2 (vuint64m4_t op1, vuint32m2_t
    shift, size_t vl);
vuint32m2_t vnclipu_wx_u32m2 (vuint64m4_t op1, size_t shift,
    size_t vl);
vuint32m4_t vnclipu_wv_u32m4 (vuint64m8_t op1, vuint32m4_t
    shift, size_t vl);
vuint32m4_t vnclipu_wx_u32m4 (vuint64m8_t op1, size_t shift,
    size_t vl);
```

```
// masked functions
vint8mf8_t vnclip_wv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint16mf4_t op1, vuint8mf8_t shift, size_t vl);
vint8mf8_t vnclip_wx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint16mf4_t op1, size_t shift, size_t vl);
vint8mf4_t vnclip_wv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint16mf2_t op1, vuint8mf4_t shift, size_t vl);
vint8mf4_t vnclip_wx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint16mf2_t op1, size_t shift, size_t vl);
vint8mf2_t vnclip_wv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint16m1_t op1, vuint8mf2_t shift, size_t vl);
vint8mf2_t vnclip_wx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint16m1_t op1, size_t shift, size_t vl);
vint8m1_t vnclip_wv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint16m2_t op1, vuint8m1_t shift, size_t vl);
vint8m1_t vnclip_wx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint16m2_t op1, size_t shift, size_t vl);
vint8m2_t vnclip_wv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint16m4_t op1, vuint8m2_t shift, size_t vl);
vint8m2_t vnclip_wx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint16m4_t op1, size_t shift, size_t vl);
vint8m4_t vnclip_wv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint16m8_t op1, vuint8m4_t shift, size_t vl);
vint8m4_t vnclip_wx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint16m8_t op1, size_t shift, size_t vl);
vint16mf4_t vnclip_wv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint32mf2_t op1, vuint16mf4_t shift, size_t vl);
vint16mf4_t vnclip_wx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint32mf2_t op1, size_t shift, size_t vl);
vint16mf2_t vnclip_wv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint32m1_t op1, vuint16mf2_t shift, size_t vl);
vint16mf2_t vnclip_wx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint32m1_t op1, size_t shift, size_t vl);
vint16m1_t vnclip_wv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint32m2_t op1, vuint16m1_t shift, size_t vl);
vint16m1_t vnclip_wx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint32m2_t op1, size_t shift, size_t vl);
vint16m2_t vnclip_wv_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint32m4_t op1, vuint16m2_t shift, size_t vl);
vint16m2_t vnclip_wx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint32m4_t op1, size_t shift, size_t vl);
vint16m4_t vnclip_wv_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint32m8_t op1, vuint16m4_t shift, size_t vl);
vint16m4_t vnclip_wx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint32m8_t op1, size_t shift, size_t vl);
```

```
vint32mf2_t vnclip_wv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint64m1_t op1, vuint32mf2_t shift, size_t vl);
vint32mf2_t vnclip_wx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint64m1_t op1, size_t shift, size_t vl);
vint32m1_t vnclip_wv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint64m2_t op1, vuint32m1_t shift, size_t vl);
vint32m1_t vnclip_wx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint64m2_t op1, size_t shift, size_t vl);
vint32m2_t vnclip_wv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint64m4_t op1, vuint32m2_t shift, size_t vl);
vint32m2_t vnclip_wx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint64m4_t op1, size_t shift, size_t vl);
vint32m4_t vnclip_wv_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint64m8_t op1, vuint32m4_t shift, size_t vl);
vint32m4_t vnclip_wx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint64m8_t op1, size_t shift, size_t vl);
vuint8mf8_t vnclipu_wv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint16mf4_t op1, vuint8mf8_t shift, size_t vl);
vuint8mf8_t vnclipu_wx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint16mf4_t op1, size_t shift, size_t vl);
vuint8mf4_t vnclipu_wv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint16mf2_t op1, vuint8mf4_t shift, size_t vl);
vuint8mf4_t vnclipu_wx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint16mf2_t op1, size_t shift, size_t vl);
vuint8mf2_t vnclipu_wv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint16m1_t op1, vuint8mf2_t shift, size_t vl);
vuint8mf2_t vnclipu_wx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint16m1_t op1, size_t shift, size_t vl);
vuint8m1_t vnclipu_wv_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint16m2_t op1, vuint8m1_t shift, size_t vl);
vuint8m1_t vnclipu_wx_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint16m2_t op1, size_t shift, size_t vl);
vuint8m2_t vnclipu_wv_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint16m4_t op1, vuint8m2_t shift, size_t vl);
vuint8m2_t vnclipu_wx_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint16m4_t op1, size_t shift, size_t vl);
vuint8m4_t vnclipu_wv_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint16m8_t op1, vuint8m4_t shift, size_t vl);
vuint8m4_t vnclipu_wx_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint16m8_t op1, size_t shift, size_t vl);
vuint16mf4_t vnclipu_wv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint32mf2_t op1, vuint16mf4_t shift, size_t vl);
vuint16mf4_t vnclipu_wx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint32mf2_t op1, size_t shift, size_t vl);
vuint16mf2_t vnclipu_wv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint32m1_t op1, vuint16mf2_t shift, size_t vl);
```

```
vuint16mf2_t vnclipu_wx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint32m1_t op1, size_t shift, size_t vl);
vuint16m1_t vnclipu_wv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint32m2_t op1, vuint16m1_t shift, size_t vl);
vuint16m1_t vnclipu_wx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint32m2_t op1, size_t shift, size_t vl);
vuint16m2_t vnclipu_wv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint32m4_t op1, vuint16m2_t shift, size_t vl);
vuint16m2_t vnclipu_wx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint32m4_t op1, size_t shift, size_t vl);
vuint16m4_t vnclipu_wv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint32m8_t op1, vuint16m4_t shift, size_t vl);
vuint16m4_t vnclipu_wx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint32m8_t op1, size_t shift, size_t vl);
vuint32mf2_t vnclipu_wv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint64m1_t op1, vuint32mf2_t shift, size_t vl);
vuint32mf2_t vnclipu_wx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint64m1_t op1, size_t shift, size_t vl);
vuint32m1_t vnclipu_wv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint64m2_t op1, vuint32m1_t shift, size_t vl);
vuint32m1_t vnclipu_wx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint64m2_t op1, size_t shift, size_t vl);
vuint32m2_t vnclipu_wv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint64m4_t op1, vuint32m2_t shift, size_t vl);
vuint32m2_t vnclipu_wx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint64m4_t op1, size_t shift, size_t vl);
vuint32m4_t vnclipu_wv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint64m8_t op1, vuint32m4_t shift, size_t vl);
vuint32m4_t vnclipu_wx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint64m8_t op1, size_t shift, size_t vl);
```

Vector Floating-Point Functions:

Vector Single-Width Floating-Point Add/Subtract Functions:

Prototypes:

```
vfloat16mf4_t vfadd_vv_f16mf4 (vfloat16mf4_t op1, vfloat16mf4_t
    op2, size_t vl);
vfloat16mf4_t vfadd_vf_f16mf4 (vfloat16mf4_t op1, float16_t op2,
    size_t vl);
vfloat16mf2_t vfadd_vv_f16mf2 (vfloat16mf2_t op1, vfloat16mf2_t
    op2, size_t vl);
vfloat16mf2_t vfadd_vf_f16mf2 (vfloat16mf2_t op1, float16_t op2,
    size_t vl);
```

```
vfloat16m1_t vfadd_vv_f16m1 (vfloat16m1_t op1, vfloat16m1_t op2,
    size_t vl);
vfloat16m1_t vfadd_vf_f16m1 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
vfloat16m2_t vfadd_vv_f16m2 (vfloat16m2_t op1, vfloat16m2_t op2,
    size_t vl);
vfloat16m2_t vfadd_vf_f16m2 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
vfloat16m4_t vfadd_vv_f16m4 (vfloat16m4_t op1, vfloat16m4_t op2,
    size_t vl);
vfloat16m4_t vfadd_vf_f16m4 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vfloat16m8_t vfadd_vv_f16m8 (vfloat16m8_t op1, vfloat16m8_t op2,
    size_t vl);
vfloat16m8_t vfadd_vf_f16m8 (vfloat16m8_t op1, float16_t op2,
    size_t vl);
vfloat32mf2_t vfadd_vv_f32mf2 (vfloat32mf2_t op1, vfloat32mf2_t
    op2, size_t vl);
vfloat32mf2_t vfadd_vf_f32mf2 (vfloat32mf2_t op1, float32_t op2,
    size_t vl);
vfloat32m1_t vfadd_vv_f32m1 (vfloat32m1_t op1, vfloat32m1_t op2,
    size_t vl);
vfloat32m1_t vfadd_vf_f32m1 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vfloat32m2_t vfadd_vv_f32m2 (vfloat32m2_t op1, vfloat32m2_t op2,
    size_t vl);
vfloat32m2_t vfadd_vf_f32m2 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
vfloat32m4_t vfadd_vv_f32m4 (vfloat32m4_t op1, vfloat32m4_t op2,
    size_t vl);
vfloat32m4_t vfadd_vf_f32m4 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
vfloat32m8_t vfadd_vv_f32m8 (vfloat32m8_t op1, vfloat32m8_t op2,
    size_t vl);
vfloat32m8_t vfadd_vf_f32m8 (vfloat32m8_t op1, float32_t op2,
    size_t vl);
vfloat64m1_t vfadd_vv_f64m1 (vfloat64m1_t op1, vfloat64m1_t op2,
    size_t vl);
vfloat64m1_t vfadd_vf_f64m1 (vfloat64m1_t op1, float64_t op2,
    size_t vl);
vfloat64m2_t vfadd_vv_f64m2 (vfloat64m2_t op1, vfloat64m2_t op2,
    size_t vl);
vfloat64m2_t vfadd_vf_f64m2 (vfloat64m2_t op1, float64_t op2,
    size_t vl);
vfloat64m4_t vfadd_vv_f64m4 (vfloat64m4_t op1, vfloat64m4_t op2,
    size_t vl);
```

```
vfloat64m4_t vfadd_vf_f64m4 (vfloat64m4_t op1, float64_t op2,
    size_t vl);
vfloat64m8_t vfadd_vv_f64m8 (vfloat64m8_t op1, vfloat64m8_t op2,
    size_t vl);
vfloat64m8_t vfadd_vf_f64m8 (vfloat64m8_t op1, float64_t op2,
    size_t vl);
vfloat16mf4_t vfsub_vv_f16mf4 (vfloat16mf4_t op1, vfloat16mf4_t
    op2, size_t vl);
vfloat16mf4_t vfsub_vf_f16mf4 (vfloat16mf4_t op1, float16_t op2,
    size_t vl);
vfloat16mf2_t vfsub_vv_f16mf2 (vfloat16mf2_t op1, vfloat16mf2_t
    op2, size_t vl);
vfloat16mf2_t vfsub_vf_f16mf2 (vfloat16mf2_t op1, float16_t op2,
    size_t vl);
vfloat16m1_t vfsub_vv_f16m1 (vfloat16m1_t op1, vfloat16m1_t op2,
    size_t vl);
vfloat16m1_t vfsub_vf_f16m1 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
vfloat16m2_t vfsub_vv_f16m2 (vfloat16m2_t op1, vfloat16m2_t op2,
    size_t vl);
vfloat16m2_t vfsub_vf_f16m2 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
vfloat16m4_t vfsub_vv_f16m4 (vfloat16m4_t op1, vfloat16m4_t op2,
    size_t vl);
vfloat16m4_t vfsub_vf_f16m4 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vfloat16m8_t vfsub_vv_f16m8 (vfloat16m8_t op1, vfloat16m8_t op2,
    size_t vl);
vfloat16m8_t vfsub_vf_f16m8 (vfloat16m8_t op1, float16_t op2,
    size_t vl);
vfloat32mf2_t vfsub_vv_f32mf2 (vfloat32mf2_t op1, vfloat32mf2_t
    op2, size_t vl);
vfloat32mf2_t vfsub_vf_f32mf2 (vfloat32mf2_t op1, float32_t op2,
    size_t vl);
vfloat32m1_t vfsub_vv_f32m1 (vfloat32m1_t op1, vfloat32m1_t op2,
    size_t vl);
vfloat32m1_t vfsub_vf_f32m1 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vfloat32m2_t vfsub_vv_f32m2 (vfloat32m2_t op1, vfloat32m2_t op2,
    size_t vl);
vfloat32m2_t vfsub_vf_f32m2 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
vfloat32m4_t vfsub_vv_f32m4 (vfloat32m4_t op1, vfloat32m4_t op2,
    size_t vl);
vfloat32m4_t vfsub_vf_f32m4 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
```

```
vfloat32m8_t vfsub_vv_f32m8 (vfloat32m8_t op1, vfloat32m8_t op2,
    size_t vl);
vfloat32m8_t vfsub_vf_f32m8 (vfloat32m8_t op1, float32_t op2,
    size_t vl);
vfloat64m1_t vfsub_vv_f64m1 (vfloat64m1_t op1, vfloat64m1_t op2,
    size_t vl);
vfloat64m1_t vfsub_vf_f64m1 (vfloat64m1_t op1, float64_t op2,
    size_t vl);
vfloat64m2_t vfsub_vv_f64m2 (vfloat64m2_t op1, vfloat64m2_t op2,
    size_t vl);
vfloat64m2_t vfsub_vf_f64m2 (vfloat64m2_t op1, float64_t op2,
    size_t vl);
vfloat64m4_t vfsub_vv_f64m4 (vfloat64m4_t op1, vfloat64m4_t op2,
    size_t vl);
vfloat64m4_t vfsub_vf_f64m4 (vfloat64m4_t op1, float64_t op2,
    size_t vl);
vfloat64m8_t vfsub_vv_f64m8 (vfloat64m8_t op1, vfloat64m8_t op2,
    size_t vl);
vfloat64m8_t vfsub_vf_f64m8 (vfloat64m8_t op1, float64_t op2,
    size_t vl);
vfloat16mf4_t vfrsub_vf_f16mf4 (vfloat16mf4_t op1, float16_t
    op2, size_t vl);
vfloat16mf2_t vfrsub_vf_f16mf2 (vfloat16mf2_t op1, float16_t
    op2, size_t vl);
vfloat16m1_t vfrsub_vf_f16m1 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
vfloat16m2_t vfrsub_vf_f16m2 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
vfloat16m4_t vfrsub_vf_f16m4 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vfloat16m8_t vfrsub_vf_f16m8 (vfloat16m8_t op1, float16_t op2,
    size_t vl);
vfloat32mf2_t vfrsub_vf_f32mf2 (vfloat32mf2_t op1, float32_t
    op2, size_t vl);
vfloat32m1_t vfrsub_vf_f32m1 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vfloat32m2_t vfrsub_vf_f32m2 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
vfloat32m4_t vfrsub_vf_f32m4 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
vfloat32m8_t vfrsub_vf_f32m8 (vfloat32m8_t op1, float32_t op2,
    size_t vl);
vfloat64m1_t vfrsub_vf_f64m1 (vfloat64m1_t op1, float64_t op2,
    size_t vl);
vfloat64m2_t vfrsub_vf_f64m2 (vfloat64m2_t op1, float64_t op2,
    size_t vl);
```

```
vfloat64m4_t vfrsub_vf_f64m4 (vfloat64m4_t op1, float64_t op2,
    size_t vl);
vfloat64m8_t vfrsub_vf_f64m8 (vfloat64m8_t op1, float64_t op2,
    size_t vl);
vfloat16mf4_t vfneg_v_f16mf4 (vfloat16mf4_t op1, size_t vl);
vfloat16mf2_t vfneg_v_f16mf2 (vfloat16mf2_t op1, size_t vl);
vfloat16m1_t vfneg_v_f16m1 (vfloat16m1_t op1, size_t vl);
vfloat16m2_t vfneg_v_f16m2 (vfloat16m2_t op1, size_t vl);
vfloat16m4_t vfneg_v_f16m4 (vfloat16m4_t op1, size_t vl);
vfloat16m8_t vfneg_v_f16m8 (vfloat16m8_t op1, size_t vl);
vfloat32mf2_t vfneg_v_f32mf2 (vfloat32mf2_t op1, size_t vl);
vfloat32m1_t vfneg_v_f32m1 (vfloat32m1_t op1, size_t vl);
vfloat32m2_t vfneg_v_f32m2 (vfloat32m2_t op1, size_t vl);
vfloat32m4_t vfneg_v_f32m4 (vfloat32m4_t op1, size_t vl);
vfloat32m8_t vfneg_v_f32m8 (vfloat32m8_t op1, size_t vl);
vfloat64m1_t vfneg_v_f64m1 (vfloat64m1_t op1, size_t vl);
vfloat64m2_t vfneg_v_f64m2 (vfloat64m2_t op1, size_t vl);
vfloat64m4_t vfneg_v_f64m4 (vfloat64m4_t op1, size_t vl);
vfloat64m8_t vfneg_v_f64m8 (vfloat64m8_t op1, size_t vl);
// masked functions
vfloat16mf4_t vfadd_vv_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, vfloat16mf4_t op2, size_t vl);
vfloat16mf4_t vfadd_vf_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
vfloat16mf2_t vfadd_vv_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, vfloat16mf2_t op2, size_t vl);
vfloat16mf2_t vfadd_vf_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
vfloat16m1_t vfadd_vv_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, vfloat16m1_t op2, size_t vl);
vfloat16m1_t vfadd_vf_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
vfloat16m2_t vfadd_vv_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, vfloat16m2_t op2, size_t vl);
vfloat16m2_t vfadd_vf_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, float16_t op2, size_t vl);
vfloat16m4_t vfadd_vv_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, vfloat16m4_t op2, size_t vl);
vfloat16m4_t vfadd_vf_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, float16_t op2, size_t vl);
vfloat16m8_t vfadd_vv_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, vfloat16m8_t op2, size_t vl);
vfloat16m8_t vfadd_vf_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, float16_t op2, size_t vl);
vfloat32mf2_t vfadd_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, vfloat32mf2_t op2, size_t vl);
```

743

```
vfloat32mf2_t vfadd_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vfloat32m1_t vfadd_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, vfloat32m1_t op2, size_t vl);
vfloat32m1_t vfadd_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vfloat32m2_t vfadd_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, vfloat32m2_t op2, size_t vl);
vfloat32m2_t vfadd_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
vfloat32m4_t vfadd_vv_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, vfloat32m4_t op2, size_t vl);
vfloat32m4_t vfadd_vf_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, float32_t op2, size_t vl);
vfloat32m8_t vfadd_vv_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, vfloat32m8_t op2, size_t vl);
vfloat32m8_t vfadd_vf_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, float32_t op2, size_t vl);
vfloat64m1_t vfadd_vv_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, vfloat64m1_t op2, size_t vl);
vfloat64m1_t vfadd_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, float64_t op2, size_t vl);
vfloat64m2_t vfadd_vv_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, vfloat64m2_t op2, size_t vl);
vfloat64m2_t vfadd_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, float64_t op2, size_t vl);
vfloat64m4_t vfadd_vv_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, vfloat64m4_t op2, size_t vl);
vfloat64m4_t vfadd_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, float64_t op2, size_t vl);
vfloat64m8_t vfadd_vv_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, vfloat64m8_t op2, size_t vl);
vfloat64m8_t vfadd_vf_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, float64_t op2, size_t vl);
vfloat16mf4_t vfsub_vv_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, vfloat16mf4_t op2, size_t vl);
vfloat16mf4_t vfsub_vf_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
vfloat16mf2_t vfsub_vv_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, vfloat16mf2_t op2, size_t vl);
vfloat16mf2_t vfsub_vf_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
vfloat16m1_t vfsub_vv_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, vfloat16m1_t op2, size_t vl);
vfloat16m1_t vfsub_vf_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
```

```
vfloat16m2_t vfsub_vv_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, vfloat16m2_t op2, size_t vl);
vfloat16m2_t vfsub_vf_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, float16_t op2, size_t vl);
vfloat16m4_t vfsub_vv_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, vfloat16m4_t op2, size_t vl);
vfloat16m4_t vfsub_vf_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, float16_t op2, size_t vl);
vfloat16m8_t vfsub_vv_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, vfloat16m8_t op2, size_t vl);
vfloat16m8_t vfsub_vf_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, float16_t op2, size_t vl);
vfloat32mf2_t vfsub_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, vfloat32mf2_t op2, size_t vl);
vfloat32mf2_t vfsub_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vfloat32m1_t vfsub_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, vfloat32m1_t op2, size_t vl);
vfloat32m1_t vfsub_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vfloat32m2_t vfsub_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, vfloat32m2_t op2, size_t vl);
vfloat32m2_t vfsub_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
vfloat32m4_t vfsub_vv_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, vfloat32m4_t op2, size_t vl);
vfloat32m4_t vfsub_vf_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, float32_t op2, size_t vl);
vfloat32m8_t vfsub_vv_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, vfloat32m8_t op2, size_t vl);
vfloat32m8_t vfsub_vf_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, float32_t op2, size_t vl);
vfloat64m1_t vfsub_vv_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, vfloat64m1_t op2, size_t vl);
vfloat64m1_t vfsub_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, float64_t op2, size_t vl);
vfloat64m2_t vfsub_vv_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, vfloat64m2_t op2, size_t vl);
vfloat64m2_t vfsub_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, float64_t op2, size_t vl);
vfloat64m4_t vfsub_vv_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, vfloat64m4_t op2, size_t vl);
vfloat64m4_t vfsub_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, float64_t op2, size_t vl);
vfloat64m8_t vfsub_vv_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, vfloat64m8_t op2, size_t vl);
```

```
vfloat64m8_t vfsub_vf_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, float64_t op2, size_t vl);
vfloat16mf4_t vfrsub_vf_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
vfloat16mf2_t vfrsub_vf_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
vfloat16m1_t vfrsub_vf_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
vfloat16m2_t vfrsub_vf_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, float16_t op2, size_t vl);
vfloat16m4_t vfrsub_vf_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, float16_t op2, size_t vl);
vfloat16m8_t vfrsub_vf_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, float16_t op2, size_t vl);
vfloat32mf2_t vfrsub_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vfloat32m1_t vfrsub_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vfloat32m2_t vfrsub_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
vfloat32m4_t vfrsub_vf_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, float32_t op2, size_t vl);
vfloat32m8_t vfrsub_vf_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, float32_t op2, size_t vl);
vfloat64m1_t vfrsub_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, float64_t op2, size_t vl);
vfloat64m2_t vfrsub_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, float64_t op2, size_t vl);
vfloat64m4_t vfrsub_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, float64_t op2, size_t vl);
vfloat64m8_t vfrsub_vf_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, float64_t op2, size_t vl);
vfloat16mf4_t vfneg_v_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, size_t vl);
vfloat16mf2_t vfneg_v_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, size_t vl);
vfloat16m1_t vfneg_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, size_t vl);
vfloat16m2_t vfneg_v_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, size_t vl);
vfloat16m4_t vfneg_v_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, size_t vl);
vfloat16m8_t vfneg_v_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, size_t vl);
vfloat32mf2_t vfneg_v_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, size_t vl);
```

```
vfloat32m1_t vfneg_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, size_t vl);
vfloat32m2_t vfneg_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, size_t vl);
vfloat32m4_t vfneg_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, size_t vl);
vfloat32m8_t vfneg_v_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, size_t vl);
vfloat64m1_t vfneg_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, size_t vl);
vfloat64m2_t vfneg_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, size_t vl);
vfloat64m4_t vfneg_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, size_t vl);
vfloat64m8_t vfneg_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, size_t vl);
```

Vector Widening Floating-Point Add/Subtract Functions:

Prototypes:

```
vfloat32mf2_t vfwadd_vv_f32mf2 (vfloat16mf4_t op1, vfloat16mf4_t
    op2, size_t vl);
vfloat32mf2_t vfwadd_vf_f32mf2 (vfloat16mf4_t op1, float16_t
    op2, size_t vl);
vfloat32mf2_t vfwadd_wv_f32mf2 (vfloat32mf2_t op1, vfloat16mf4_t
    op2, size_t vl);
vfloat32mf2_t vfwadd_wf_f32mf2 (vfloat32mf2_t op1, float16_t
    op2, size_t vl);
vfloat32m1_t vfwadd_vv_f32m1 (vfloat16mf2_t op1, vfloat16mf2_t
    op2, size_t vl);
vfloat32m1_t vfwadd_vf_f32m1 (vfloat16mf2_t op1, float16_t op2,
    size_t vl);
vfloat32m1_t vfwadd_wv_f32m1 (vfloat32m1_t op1, vfloat16mf2_t
    op2, size_t vl);
vfloat32m1_t vfwadd_wf_f32m1 (vfloat32m1_t op1, float16_t op2,
    size_t vl);
vfloat32m2_t vfwadd_vv_f32m2 (vfloat16m1_t op1, vfloat16m1_t
    op2, size_t vl);
vfloat32m2_t vfwadd_vf_f32m2 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
vfloat32m2_t vfwadd_wv_f32m2 (vfloat32m2_t op1, vfloat16m1_t
    op2, size_t vl);
vfloat32m2_t vfwadd_wf_f32m2 (vfloat32m2_t op1, float16_t op2,
    size_t vl);
```

```
vfloat32m4_t vfwadd_vv_f32m4 (vfloat16m2_t op1, vfloat16m2_t
    op2, size_t vl);
vfloat32m4_t vfwadd_vf_f32m4 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
vfloat32m4_t vfwadd_wv_f32m4 (vfloat32m4_t op1, vfloat16m2_t
    op2, size_t vl);
vfloat32m4_t vfwadd_wf_f32m4 (vfloat32m4_t op1, float16_t op2,
    size_t vl);
vfloat32m8_t vfwadd_vv_f32m8 (vfloat16m4_t op1, vfloat16m4_t
    op2, size_t vl);
vfloat32m8_t vfwadd_vf_f32m8 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vfloat32m8_t vfwadd_wv_f32m8 (vfloat32m8_t op1, vfloat16m4_t
    op2, size_t vl);
vfloat32m8_t vfwadd_wf_f32m8 (vfloat32m8_t op1, float16_t op2,
    size_t vl);
vfloat64m1_t vfwadd_vv_f64m1 (vfloat32mf2_t op1, vfloat32mf2_t
    op2, size_t vl);
vfloat64m1_t vfwadd_vf_f64m1 (vfloat32mf2_t op1, float32_t op2,
    size_t vl);
vfloat64m1_t vfwadd_wv_f64m1 (vfloat64m1_t op1, vfloat32mf2_t
    op2, size_t vl);
vfloat64m1_t vfwadd_wf_f64m1 (vfloat64m1_t op1, float32_t op2,
    size_t vl);
vfloat64m2_t vfwadd_vv_f64m2 (vfloat32m1_t op1, vfloat32m1_t
    op2, size_t vl);
vfloat64m2_t vfwadd_vf_f64m2 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vfloat64m2_t vfwadd_wv_f64m2 (vfloat64m2_t op1, vfloat32m1_t
    op2, size_t vl);
vfloat64m2_t vfwadd_wf_f64m2 (vfloat64m2_t op1, float32_t op2,
    size_t vl);
vfloat64m4_t vfwadd_vv_f64m4 (vfloat32m2_t op1, vfloat32m2_t
    op2, size_t vl);
vfloat64m4_t vfwadd_vf_f64m4 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
vfloat64m4_t vfwadd_wv_f64m4 (vfloat64m4_t op1, vfloat32m2_t
    op2, size_t vl);
vfloat64m4_t vfwadd_wf_f64m4 (vfloat64m4_t op1, float32_t op2,
    size_t vl);
vfloat64m8_t vfwadd_vv_f64m8 (vfloat32m4_t op1, vfloat32m4_t
    op2, size_t vl);
vfloat64m8_t vfwadd_vf_f64m8 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
vfloat64m8_t vfwadd_wv_f64m8 (vfloat64m8_t op1, vfloat32m4_t
    op2, size_t vl);
```

```
vfloat64m8_t vfwadd_wf_f64m8 (vfloat64m8_t op1, float32_t op2,
    size_t vl);
vfloat32mf2_t vfwsub_vv_f32mf2 (vfloat16mf4_t op1, vfloat16mf4_t
    op2, size_t vl);
vfloat32mf2_t vfwsub_vf_f32mf2 (vfloat16mf4_t op1, float16_t
    op2, size_t vl);
vfloat32mf2_t vfwsub_wv_f32mf2 (vfloat32mf2_t op1, vfloat16mf4_t
    op2, size_t vl);
vfloat32mf2_t vfwsub_wf_f32mf2 (vfloat32mf2_t op1, float16_t
    op2, size_t vl);
vfloat32m1_t vfwsub_vv_f32m1 (vfloat16mf2_t op1, vfloat16mf2_t
    op2, size_t vl);
vfloat32m1_t vfwsub_vf_f32m1 (vfloat16mf2_t op1, float16_t op2,
    size_t vl);
vfloat32m1_t vfwsub_wv_f32m1 (vfloat32m1_t op1, vfloat16mf2_t
    op2, size_t vl);
vfloat32m1_t vfwsub_wf_f32m1 (vfloat32m1_t op1, float16_t op2,
    size_t vl);
vfloat32m2_t vfwsub_vv_f32m2 (vfloat16m1_t op1, vfloat16m1_t
    op2, size_t vl);
vfloat32m2_t vfwsub_vf_f32m2 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
vfloat32m2_t vfwsub_wv_f32m2 (vfloat32m2_t op1, vfloat16m1_t
    op2, size_t vl);
vfloat32m2_t vfwsub_wf_f32m2 (vfloat32m2_t op1, float16_t op2,
    size_t vl);
vfloat32m4_t vfwsub_vv_f32m4 (vfloat16m2_t op1, vfloat16m2_t
    op2, size_t vl);
vfloat32m4_t vfwsub_vf_f32m4 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
vfloat32m4_t vfwsub_wv_f32m4 (vfloat32m4_t op1, vfloat16m2_t
    op2, size_t vl);
vfloat32m4_t vfwsub_wf_f32m4 (vfloat32m4_t op1, float16_t op2,
    size_t vl);
vfloat32m8_t vfwsub_vv_f32m8 (vfloat16m4_t op1, vfloat16m4_t
    op2, size_t vl);
vfloat32m8_t vfwsub_vf_f32m8 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vfloat32m8_t vfwsub_wv_f32m8 (vfloat32m8_t op1, vfloat16m4_t
    op2, size_t vl);
vfloat32m8_t vfwsub_wf_f32m8 (vfloat32m8_t op1, float16_t op2,
    size_t vl);
vfloat64m1_t vfwsub_vv_f64m1 (vfloat32mf2_t op1, vfloat32mf2_t
    op2, size_t vl);
vfloat64m1_t vfwsub_vf_f64m1 (vfloat32mf2_t op1, float32_t op2,
    size_t vl);
```

```
vfloat64m1_t vfwsub_wv_f64m1 (vfloat64m1_t op1, vfloat32mf2_t
    op2, size_t vl);
vfloat64m1_t vfwsub_wf_f64m1 (vfloat64m1_t op1, float32_t op2,
    size_t vl);
vfloat64m2_t vfwsub_vv_f64m2 (vfloat32m1_t op1, vfloat32m1_t
    op2, size_t vl);
vfloat64m2_t vfwsub_vf_f64m2 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vfloat64m2_t vfwsub_wv_f64m2 (vfloat64m2_t op1, vfloat32m1_t
    op2, size_t vl);
vfloat64m2_t vfwsub_wf_f64m2 (vfloat64m2_t op1, float32_t op2,
    size_t vl);
vfloat64m4_t vfwsub_vv_f64m4 (vfloat32m2_t op1, vfloat32m2_t
    op2, size_t vl);
vfloat64m4_t vfwsub_vf_f64m4 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
vfloat64m4_t vfwsub_wv_f64m4 (vfloat64m4_t op1, vfloat32m2_t
    op2, size_t vl);
vfloat64m4_t vfwsub_wf_f64m4 (vfloat64m4_t op1, float32_t op2,
    size_t vl);
vfloat64m8_t vfwsub_vv_f64m8 (vfloat32m4_t op1, vfloat32m4_t
    op2, size_t vl);
vfloat64m8_t vfwsub_vf_f64m8 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
vfloat64m8_t vfwsub_wv_f64m8 (vfloat64m8_t op1, vfloat32m4_t
    op2, size_t vl);
vfloat64m8_t vfwsub_wf_f64m8 (vfloat64m8_t op1, float32_t op2,
    size_t vl);
// masked functions
vfloat32mf2_t vfwadd_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat16mf4_t op1, vfloat16mf4_t op2, size_t vl);
vfloat32mf2_t vfwadd_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
vfloat32mf2_t vfwadd_wv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, vfloat16mf4_t op2, size_t vl);
vfloat32mf2_t vfwadd_wf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, float16_t op2, size_t vl);
vfloat32m1_t vfwadd_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat16mf2_t op1, vfloat16mf2_t op2, size_t vl);
vfloat32m1_t vfwadd_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
vfloat32m1_t vfwadd_wv_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, vfloat16mf2_t op2, size_t vl);
vfloat32m1_t vfwadd_wf_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, float16_t op2, size_t vl);
```

```
vfloat32m2_t vfwadd_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat16m1_t op1, vfloat16m1_t op2, size_t vl);
vfloat32m2_t vfwadd_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
vfloat32m2_t vfwadd_wv_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, vfloat16m1_t op2, size_t vl);
vfloat32m2_t vfwadd_wf_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, float16_t op2, size_t vl);
vfloat32m4_t vfwadd_vv_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat16m2_t op1, vfloat16m2_t op2, size_t vl);
vfloat32m4_t vfwadd_vf_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat16m2_t op1, float16_t op2, size_t vl);
vfloat32m4_t vfwadd_wv_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, vfloat16m2_t op2, size_t vl);
vfloat32m4_t vfwadd_wf_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, float16_t op2, size_t vl);
vfloat32m8_t vfwadd_vv_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat16m4_t op1, vfloat16m4_t op2, size_t vl);
vfloat32m8_t vfwadd_vf_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat16m4_t op1, float16_t op2, size_t vl);
vfloat32m8_t vfwadd_wv_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, vfloat16m4_t op2, size_t vl);
vfloat32m8_t vfwadd_wf_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, float16_t op2, size_t vl);
vfloat64m1_t vfwadd_vv_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat32mf2_t op1, vfloat32mf2_t op2, size_t vl);
vfloat64m1_t vfwadd_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vfloat64m1_t vfwadd_wv_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, vfloat32mf2_t op2, size_t vl);
vfloat64m1_t vfwadd_wf_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, float32_t op2, size_t vl);
vfloat64m2_t vfwadd_vv_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat32m1_t op1, vfloat32m1_t op2, size_t vl);
vfloat64m2_t vfwadd_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vfloat64m2_t vfwadd_wv_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, vfloat32m1_t op2, size_t vl);
vfloat64m2_t vfwadd_wf_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, float32_t op2, size_t vl);
vfloat64m4_t vfwadd_vv_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat32m2_t op1, vfloat32m2_t op2, size_t vl);
vfloat64m4_t vfwadd_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
vfloat64m4_t vfwadd_wv_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, vfloat32m2_t op2, size_t vl);
```

```
vfloat64m4_t vfwadd_wf_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, float32_t op2, size_t vl);
vfloat64m8_t vfwadd_vv_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat32m4_t op1, vfloat32m4_t op2, size_t vl);
vfloat64m8_t vfwadd_vf_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat32m4_t op1, float32_t op2, size_t vl);
vfloat64m8_t vfwadd_wv_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, vfloat32m4_t op2, size_t vl);
vfloat64m8_t vfwadd_wf_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, float32_t op2, size_t vl);
vfloat32mf2_t vfwsub_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat16mf4_t op1, vfloat16mf4_t op2, size_t vl);
vfloat32mf2_t vfwsub_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
vfloat32mf2_t vfwsub_wv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, vfloat16mf4_t op2, size_t vl);
vfloat32mf2_t vfwsub_wf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, float16_t op2, size_t vl);
vfloat32m1_t vfwsub_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat16mf2_t op1, vfloat16mf2_t op2, size_t vl);
vfloat32m1_t vfwsub_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
vfloat32m1_t vfwsub_wv_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, vfloat16mf2_t op2, size_t vl);
vfloat32m1_t vfwsub_wf_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, float16_t op2, size_t vl);
vfloat32m2_t vfwsub_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat16m1_t op1, vfloat16m1_t op2, size_t vl);
vfloat32m2_t vfwsub_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
vfloat32m2_t vfwsub_wv_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, vfloat16m1_t op2, size_t vl);
vfloat32m2_t vfwsub_wf_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, float16_t op2, size_t vl);
vfloat32m4_t vfwsub_vv_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat16m2_t op1, vfloat16m2_t op2, size_t vl);
vfloat32m4_t vfwsub_vf_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat16m2_t op1, float16_t op2, size_t vl);
vfloat32m4_t vfwsub_wv_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, vfloat16m2_t op2, size_t vl);
vfloat32m4_t vfwsub_wf_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, float16_t op2, size_t vl);
vfloat32m8_t vfwsub_vv_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat16m4_t op1, vfloat16m4_t op2, size_t vl);
vfloat32m8_t vfwsub_vf_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat16m4_t op1, float16_t op2, size_t vl);
```

```
vfloat32m8_t vfwsub_wv_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, vfloat16m4_t op2, size_t vl);
vfloat32m8_t vfwsub_wf_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, float16_t op2, size_t vl);
vfloat64m1_t vfwsub_vv_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat32mf2_t op1, vfloat32mf2_t op2, size_t vl);
vfloat64m1_t vfwsub_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vfloat64m1_t vfwsub_wv_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, vfloat32mf2_t op2, size_t vl);
vfloat64m1_t vfwsub_wf_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, float32_t op2, size_t vl);
vfloat64m2_t vfwsub_vv_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat32m1_t op1, vfloat32m1_t op2, size_t vl);
vfloat64m2_t vfwsub_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vfloat64m2_t vfwsub_wv_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, vfloat32m1_t op2, size_t vl);
vfloat64m2_t vfwsub_wf_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, float32_t op2, size_t vl);
vfloat64m4_t vfwsub_vv_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat32m2_t op1, vfloat32m2_t op2, size_t vl);
vfloat64m4_t vfwsub_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
vfloat64m4_t vfwsub_wv_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, vfloat32m2_t op2, size_t vl);
vfloat64m4_t vfwsub_wf_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, float32_t op2, size_t vl);
vfloat64m8_t vfwsub_vv_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat32m4_t op1, vfloat32m4_t op2, size_t vl);
vfloat64m8_t vfwsub_vf_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat32m4_t op1, float32_t op2, size_t vl);
vfloat64m8_t vfwsub_wv_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, vfloat32m4_t op2, size_t vl);
vfloat64m8_t vfwsub_wf_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, float32_t op2, size_t vl);
```

Vector Single-Width Floating-Point Multiply/Divide Functions:

Prototypes:

```
vfloat16mf4_t vfmul_vv_f16mf4 (vfloat16mf4_t op1, vfloat16mf4_t
    op2, size_t vl);
vfloat16mf4_t vfmul_vf_f16mf4 (vfloat16mf4_t op1, float16_t op2,
    size_t vl);
```

```
vfloat16mf2_t vfmul_vv_f16mf2 (vfloat16mf2_t op1, vfloat16mf2_t
    op2, size_t vl);
vfloat16mf2_t vfmul_vf_f16mf2 (vfloat16mf2_t op1, float16_t op2,
    size_t vl);
vfloat16m1_t vfmul_vv_f16m1 (vfloat16m1_t op1, vfloat16m1_t op2,
    size_t vl);
vfloat16m1_t vfmul_vf_f16m1 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
vfloat16m2_t vfmul_vv_f16m2 (vfloat16m2_t op1, vfloat16m2_t op2,
    size_t vl);
vfloat16m2_t vfmul_vf_f16m2 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
vfloat16m4_t vfmul_vv_f16m4 (vfloat16m4_t op1, vfloat16m4_t op2,
    size_t vl);
vfloat16m4_t vfmul_vf_f16m4 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vfloat16m8_t vfmul_vv_f16m8 (vfloat16m8_t op1, vfloat16m8_t op2,
    size_t vl);
vfloat16m8_t vfmul_vf_f16m8 (vfloat16m8_t op1, float16_t op2,
    size_t vl);
vfloat32mf2_t vfmul_vv_f32mf2 (vfloat32mf2_t op1, vfloat32mf2_t
    op2, size_t vl);
vfloat32mf2_t vfmul_vf_f32mf2 (vfloat32mf2_t op1, float32_t op2,
    size_t vl);
vfloat32m1_t vfmul_vv_f32m1 (vfloat32m1_t op1, vfloat32m1_t op2,
    size_t vl);
vfloat32m1_t vfmul_vf_f32m1 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vfloat32m2_t vfmul_vv_f32m2 (vfloat32m2_t op1, vfloat32m2_t op2,
    size_t vl);
vfloat32m2_t vfmul_vf_f32m2 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
vfloat32m4_t vfmul_vv_f32m4 (vfloat32m4_t op1, vfloat32m4_t op2,
    size_t vl);
vfloat32m4_t vfmul_vf_f32m4 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
vfloat32m8_t vfmul_vv_f32m8 (vfloat32m8_t op1, vfloat32m8_t op2,
    size_t vl);
vfloat32m8_t vfmul_vf_f32m8 (vfloat32m8_t op1, float32_t op2,
    size_t vl);
vfloat64m1_t vfmul_vv_f64m1 (vfloat64m1_t op1, vfloat64m1_t op2,
    size_t vl);
vfloat64m1_t vfmul_vf_f64m1 (vfloat64m1_t op1, float64_t op2,
    size_t vl);
vfloat64m2_t vfmul_vv_f64m2 (vfloat64m2_t op1, vfloat64m2_t op2,
    size_t vl);
```

```
vfloat64m2_t vfmul_vf_f64m2 (vfloat64m2_t op1, float64_t op2,
    size_t vl);
vfloat64m4_t vfmul_vv_f64m4 (vfloat64m4_t op1, vfloat64m4_t op2,
    size_t vl);
vfloat64m4_t vfmul_vf_f64m4 (vfloat64m4_t op1, float64_t op2,
    size_t vl);
vfloat64m8_t vfmul_vv_f64m8 (vfloat64m8_t op1, vfloat64m8_t op2,
    size_t vl);
vfloat64m8_t vfmul_vf_f64m8 (vfloat64m8_t op1, float64_t op2,
    size_t vl);
vfloat16mf4_t vfdiv_vv_f16mf4 (vfloat16mf4_t op1, vfloat16mf4_t
    op2, size_t vl);
vfloat16mf4_t vfdiv_vf_f16mf4 (vfloat16mf4_t op1, float16_t op2,
    size_t vl);
vfloat16mf2_t vfdiv_vv_f16mf2 (vfloat16mf2_t op1, vfloat16mf2_t
    op2, size_t vl);
vfloat16mf2_t vfdiv_vf_f16mf2 (vfloat16mf2_t op1, float16_t op2,
    size_t vl);
vfloat16m1_t vfdiv_vv_f16m1 (vfloat16m1_t op1, vfloat16m1_t op2,
    size_t vl);
vfloat16m1_t vfdiv_vf_f16m1 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
vfloat16m2_t vfdiv_vv_f16m2 (vfloat16m2_t op1, vfloat16m2_t op2,
    size_t vl);
vfloat16m2_t vfdiv_vf_f16m2 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
vfloat16m4_t vfdiv_vv_f16m4 (vfloat16m4_t op1, vfloat16m4_t op2,
    size_t vl);
vfloat16m4_t vfdiv_vf_f16m4 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vfloat16m8_t vfdiv_vv_f16m8 (vfloat16m8_t op1, vfloat16m8_t op2,
    size_t vl);
vfloat16m8_t vfdiv_vf_f16m8 (vfloat16m8_t op1, float16_t op2,
    size_t vl);
vfloat32mf2_t vfdiv_vv_f32mf2 (vfloat32mf2_t op1, vfloat32mf2_t
    op2, size_t vl);
vfloat32mf2_t vfdiv_vf_f32mf2 (vfloat32mf2_t op1, float32_t op2,
    size_t vl);
vfloat32m1_t vfdiv_vv_f32m1 (vfloat32m1_t op1, vfloat32m1_t op2,
    size_t vl);
vfloat32m1_t vfdiv_vf_f32m1 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vfloat32m2_t vfdiv_vv_f32m2 (vfloat32m2_t op1, vfloat32m2_t op2,
    size_t vl);
vfloat32m2_t vfdiv_vf_f32m2 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
```

```
vfloat32m4_t vfdiv_vv_f32m4 (vfloat32m4_t op1, vfloat32m4_t op2,
    size_t vl);
vfloat32m4_t vfdiv_vf_f32m4 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
vfloat32m8_t vfdiv_vv_f32m8 (vfloat32m8_t op1, vfloat32m8_t op2,
    size_t vl);
vfloat32m8_t vfdiv_vf_f32m8 (vfloat32m8_t op1, float32_t op2,
    size_t vl);
vfloat64m1_t vfdiv_vv_f64m1 (vfloat64m1_t op1, vfloat64m1_t op2,
    size_t vl);
vfloat64m1_t vfdiv_vf_f64m1 (vfloat64m1_t op1, float64_t op2,
    size_t vl);
vfloat64m2_t vfdiv_vv_f64m2 (vfloat64m2_t op1, vfloat64m2_t op2,
    size_t vl);
vfloat64m2_t vfdiv_vf_f64m2 (vfloat64m2_t op1, float64_t op2,
    size_t vl);
vfloat64m4_t vfdiv_vv_f64m4 (vfloat64m4_t op1, vfloat64m4_t op2,
    size_t vl);
vfloat64m4_t vfdiv_vf_f64m4 (vfloat64m4_t op1, float64_t op2,
    size_t vl);
vfloat64m8_t vfdiv_vv_f64m8 (vfloat64m8_t op1, vfloat64m8_t op2,
    size_t vl);
vfloat64m8_t vfdiv_vf_f64m8 (vfloat64m8_t op1, float64_t op2,
    size_t vl);
vfloat16mf4_t vfrdiv_vf_f16mf4 (vfloat16mf4_t op1, float16_t
    op2, size_t vl);
vfloat16mf2_t vfrdiv_vf_f16mf2 (vfloat16mf2_t op1, float16_t
    op2, size_t vl);
vfloat16m1_t vfrdiv_vf_f16m1 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
vfloat16m2_t vfrdiv_vf_f16m2 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
vfloat16m4_t vfrdiv_vf_f16m4 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vfloat16m8_t vfrdiv_vf_f16m8 (vfloat16m8_t op1, float16_t op2,
    size_t vl);
vfloat32mf2_t vfrdiv_vf_f32mf2 (vfloat32mf2_t op1, float32_t
    op2, size_t vl);
vfloat32m1_t vfrdiv_vf_f32m1 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vfloat32m2_t vfrdiv_vf_f32m2 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
vfloat32m4_t vfrdiv_vf_f32m4 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
vfloat32m8_t vfrdiv_vf_f32m8 (vfloat32m8_t op1, float32_t op2,
    size_t vl);
```

```
vfloat64m1_t vfrdiv_vf_f64m1 (vfloat64m1_t op1, float64_t op2,
    size_t vl);
vfloat64m2_t vfrdiv_vf_f64m2 (vfloat64m2_t op1, float64_t op2,
    size_t vl);
vfloat64m4_t vfrdiv_vf_f64m4 (vfloat64m4_t op1, float64_t op2,
    size_t vl);
vfloat64m8_t vfrdiv_vf_f64m8 (vfloat64m8_t op1, float64_t op2,
    size_t vl);
// masked functions
vfloat16mf4_t vfmul_vv_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, vfloat16mf4_t op2, size_t vl);
vfloat16mf4_t vfmul_vf_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
vfloat16mf2_t vfmul_vv_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, vfloat16mf2_t op2, size_t vl);
vfloat16mf2_t vfmul_vf_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
vfloat16m1_t vfmul_vv_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, vfloat16m1_t op2, size_t vl);
vfloat16m1_t vfmul_vf_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
vfloat16m2_t vfmul_vv_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, vfloat16m2_t op2, size_t vl);
vfloat16m2_t vfmul_vf_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, float16_t op2, size_t vl);
vfloat16m4_t vfmul_vv_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, vfloat16m4_t op2, size_t vl);
vfloat16m4_t vfmul_vf_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, float16_t op2, size_t vl);
vfloat16m8_t vfmul_vv_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, vfloat16m8_t op2, size_t vl);
vfloat16m8_t vfmul_vf_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, float16_t op2, size_t vl);
vfloat32mf2_t vfmul_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, vfloat32mf2_t op2, size_t vl);
vfloat32mf2_t vfmul_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vfloat32m1_t vfmul_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, vfloat32m1_t op2, size_t vl);
vfloat32m1_t vfmul_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vfloat32m2_t vfmul_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, vfloat32m2_t op2, size_t vl);
vfloat32m2_t vfmul_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
```

```
vfloat32m4_t vfmul_vv_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, vfloat32m4_t op2, size_t vl);
vfloat32m4_t vfmul_vf_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, float32_t op2, size_t vl);
vfloat32m8_t vfmul_vv_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, vfloat32m8_t op2, size_t vl);
vfloat32m8_t vfmul_vf_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, float32_t op2, size_t vl);
vfloat64m1_t vfmul_vv_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, vfloat64m1_t op2, size_t vl);
vfloat64m1_t vfmul_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, float64_t op2, size_t vl);
vfloat64m2_t vfmul_vv_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, vfloat64m2_t op2, size_t vl);
vfloat64m2_t vfmul_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, float64_t op2, size_t vl);
vfloat64m4_t vfmul_vv_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, vfloat64m4_t op2, size_t vl);
vfloat64m4_t vfmul_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, float64_t op2, size_t vl);
vfloat64m8_t vfmul_vv_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, vfloat64m8_t op2, size_t vl);
vfloat64m8_t vfmul_vf_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, float64_t op2, size_t vl);
vfloat16mf4_t vfdiv_vv_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, vfloat16mf4_t op2, size_t vl);
vfloat16mf4_t vfdiv_vf_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
vfloat16mf2_t vfdiv_vv_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, vfloat16mf2_t op2, size_t vl);
vfloat16mf2_t vfdiv_vf_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
vfloat16m1_t vfdiv_vv_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, vfloat16m1_t op2, size_t vl);
vfloat16m1_t vfdiv_vf_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
vfloat16m2_t vfdiv_vv_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, vfloat16m2_t op2, size_t vl);
vfloat16m2_t vfdiv_vf_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, float16_t op2, size_t vl);
vfloat16m4_t vfdiv_vv_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, vfloat16m4_t op2, size_t vl);
vfloat16m4_t vfdiv_vf_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, float16_t op2, size_t vl);
vfloat16m8_t vfdiv_vv_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, vfloat16m8_t op2, size_t vl);
```

```
vfloat16m8_t vfdiv_vf_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, float16_t op2, size_t vl);
vfloat32mf2_t vfdiv_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, vfloat32mf2_t op2, size_t vl);
vfloat32mf2_t vfdiv_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vfloat32m1_t vfdiv_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, vfloat32m1_t op2, size_t vl);
vfloat32m1_t vfdiv_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vfloat32m2_t vfdiv_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, vfloat32m2_t op2, size_t vl);
vfloat32m2_t vfdiv_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
vfloat32m4_t vfdiv_vv_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, vfloat32m4_t op2, size_t vl);
vfloat32m4_t vfdiv_vf_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, float32_t op2, size_t vl);
vfloat32m8_t vfdiv_vv_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, vfloat32m8_t op2, size_t vl);
vfloat32m8_t vfdiv_vf_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, float32_t op2, size_t vl);
vfloat64m1_t vfdiv_vv_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, vfloat64m1_t op2, size_t vl);
vfloat64m1_t vfdiv_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, float64_t op2, size_t vl);
vfloat64m2_t vfdiv_vv_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, vfloat64m2_t op2, size_t vl);
vfloat64m2_t vfdiv_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, float64_t op2, size_t vl);
vfloat64m4_t vfdiv_vv_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, vfloat64m4_t op2, size_t vl);
vfloat64m4_t vfdiv_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, float64_t op2, size_t vl);
vfloat64m8_t vfdiv_vv_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, vfloat64m8_t op2, size_t vl);
vfloat64m8_t vfdiv_vf_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, float64_t op2, size_t vl);
vfloat16mf4_t vfrdiv_vf_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
vfloat16mf2_t vfrdiv_vf_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
vfloat16m1_t vfrdiv_vf_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
vfloat16m2_t vfrdiv_vf_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, float16_t op2, size_t vl);
```

759

```
vfloat16m4_t vfrdiv_vf_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, float16_t op2, size_t vl);
vfloat16m8_t vfrdiv_vf_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, float16_t op2, size_t vl);
vfloat32mf2_t vfrdiv_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vfloat32m1_t vfrdiv_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vfloat32m2_t vfrdiv_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
vfloat32m4_t vfrdiv_vf_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, float32_t op2, size_t vl);
vfloat32m8_t vfrdiv_vf_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, float32_t op2, size_t vl);
vfloat64m1_t vfrdiv_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, float64_t op2, size_t vl);
vfloat64m2_t vfrdiv_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, float64_t op2, size_t vl);
vfloat64m4_t vfrdiv_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, float64_t op2, size_t vl);
vfloat64m8_t vfrdiv_vf_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, float64_t op2, size_t vl);
```

Vector Widening Floating-Point Multiply Functions:

Prototypes:

```
vfloat32mf2_t vfwmul_vv_f32mf2 (vfloat16mf4_t op1, vfloat16mf4_t
    op2, size_t vl);
vfloat32mf2_t vfwmul_vf_f32mf2 (vfloat16mf4_t op1, float16_t
    op2, size_t vl);
vfloat32m1_t vfwmul_vv_f32m1 (vfloat16mf2_t op1, vfloat16mf2_t
    op2, size_t vl);
vfloat32m1_t vfwmul_vf_f32m1 (vfloat16mf2_t op1, float16_t op2,
    size_t vl);
vfloat32m2_t vfwmul_vv_f32m2 (vfloat16m1_t op1, vfloat16m1_t
    op2, size_t vl);
vfloat32m2_t vfwmul_vf_f32m2 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
vfloat32m4_t vfwmul_vv_f32m4 (vfloat16m2_t op1, vfloat16m2_t
    op2, size_t vl);
vfloat32m4_t vfwmul_vf_f32m4 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
vfloat32m8_t vfwmul_vv_f32m8 (vfloat16m4_t op1, vfloat16m4_t
    op2, size_t vl);
```

```
vfloat32m8_t vfwmul_vf_f32m8 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vfloat64m1_t vfwmul_vv_f64m1 (vfloat32mf2_t op1, vfloat32mf2_t
    op2, size_t vl);
vfloat64m1_t vfwmul_vf_f64m1 (vfloat32mf2_t op1, float32_t op2,
    size_t vl);
vfloat64m2_t vfwmul_vv_f64m2 (vfloat32m1_t op1, vfloat32m1_t
    op2, size_t vl);
vfloat64m2_t vfwmul_vf_f64m2 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vfloat64m4_t vfwmul_vv_f64m4 (vfloat32m2_t op1, vfloat32m2_t
    op2, size_t vl);
vfloat64m4_t vfwmul_vf_f64m4 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
vfloat64m8_t vfwmul_vv_f64m8 (vfloat32m4_t op1, vfloat32m4_t
    op2, size_t vl);
vfloat64m8_t vfwmul_vf_f64m8 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
// masked functions
vfloat32mf2_t vfwmul_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat16mf4_t op1, vfloat16mf4_t op2, size_t vl);
vfloat32mf2_t vfwmul_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
vfloat32m1_t vfwmul_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat16mf2_t op1, vfloat16mf2_t op2, size_t vl);
vfloat32m1_t vfwmul_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
vfloat32m2_t vfwmul_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat16m1_t op1, vfloat16m1_t op2, size_t vl);
vfloat32m2_t vfwmul_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
vfloat32m4_t vfwmul_vv_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat16m2_t op1, vfloat16m2_t op2, size_t vl);
vfloat32m4_t vfwmul_vf_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat16m2_t op1, float16_t op2, size_t vl);
vfloat32m8_t vfwmul_vv_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat16m4_t op1, vfloat16m4_t op2, size_t vl);
vfloat32m8_t vfwmul_vf_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat16m4_t op1, float16_t op2, size_t vl);
vfloat64m1_t vfwmul_vv_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat32mf2_t op1, vfloat32mf2_t op2, size_t vl);
vfloat64m1_t vfwmul_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vfloat64m2_t vfwmul_vv_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat32m1_t op1, vfloat32m1_t op2, size_t vl);
```

```
vfloat64m2_t vfwmul_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vfloat64m4_t vfwmul_vv_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat32m2_t op1, vfloat32m2_t op2, size_t vl);
vfloat64m4_t vfwmul_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
vfloat64m8_t vfwmul_vv_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat32m4_t op1, vfloat32m4_t op2, size_t vl);
vfloat64m8_t vfwmul_vf_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat32m4_t op1, float32_t op2, size_t vl);
```

Vector Single-Width Floating-Point Fused Multiply-Add Functions:

Prototypes:

```
vfloat16mf4_t vfmacc_vv_f16mf4 (vfloat16mf4_t vd, vfloat16mf4_t
    vs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf4_t vfmacc_vf_f16mf4 (vfloat16mf4_t vd, float16_t rs1,
    vfloat16mf4_t vs2, size_t vl);
vfloat16mf2_t vfmacc_vv_f16mf2 (vfloat16mf2_t vd, vfloat16mf2_t
    vs1, vfloat16mf2_t vs2, size_t vl);
vfloat16mf2_t vfmacc_vf_f16mf2 (vfloat16mf2_t vd, float16_t rs1,
    vfloat16mf2_t vs2, size_t vl);
vfloat16m1_t vfmacc_vv_f16m1 (vfloat16m1_t vd, vfloat16m1_t vs1,
    vfloat16m1_t vs2, size_t vl);
vfloat16m1_t vfmacc_vf_f16m1 (vfloat16m1_t vd, float16_t rs1,
    vfloat16m1_t vs2, size_t vl);
vfloat16m2_t vfmacc_vv_f16m2 (vfloat16m2_t vd, vfloat16m2_t vs1,
    vfloat16m2_t vs2, size_t vl);
vfloat16m2_t vfmacc_vf_f16m2 (vfloat16m2_t vd, float16_t rs1,
    vfloat16m2_t vs2, size_t vl);
vfloat16m4_t vfmacc_vv_f16m4 (vfloat16m4_t vd, vfloat16m4_t vs1,
    vfloat16m4_t vs2, size_t vl);
vfloat16m4_t vfmacc_vf_f16m4 (vfloat16m4_t vd, float16_t rs1,
    vfloat16m4_t vs2, size_t vl);
vfloat16m8_t vfmacc_vv_f16m8 (vfloat16m8_t vd, vfloat16m8_t vs1,
    vfloat16m8_t vs2, size_t vl);
vfloat16m8_t vfmacc_vf_f16m8 (vfloat16m8_t vd, float16_t rs1,
    vfloat16m8_t vs2, size_t vl);
vfloat32mf2_t vfmacc_vv_f32mf2 (vfloat32mf2_t vd, vfloat32mf2_t
    vs1, vfloat32mf2_t vs2, size_t vl);
vfloat32mf2_t vfmacc_vf_f32mf2 (vfloat32mf2_t vd, float32_t rs1,
    vfloat32mf2_t vs2, size_t vl);
vfloat32m1_t vfmacc_vv_f32m1 (vfloat32m1_t vd, vfloat32m1_t vs1,
    vfloat32m1_t vs2, size_t vl);
```

```
vfloat32m1_t vfmacc_vf_f32m1 (vfloat32m1_t vd, float32_t rs1,
    vfloat32m1_t vs2, size_t vl);
vfloat32m2_t vfmacc_vv_f32m2 (vfloat32m2_t vd, vfloat32m2_t vs1,
    vfloat32m2_t vs2, size_t vl);
vfloat32m2_t vfmacc_vf_f32m2 (vfloat32m2_t vd, float32_t rs1,
    vfloat32m2_t vs2, size_t vl);
vfloat32m4_t vfmacc_vv_f32m4 (vfloat32m4_t vd, vfloat32m4_t vs1,
    vfloat32m4_t vs2, size_t vl);
vfloat32m4_t vfmacc_vf_f32m4 (vfloat32m4_t vd, float32_t rs1,
    vfloat32m4_t vs2, size_t vl);
vfloat32m8_t vfmacc_vv_f32m8 (vfloat32m8_t vd, vfloat32m8_t vs1,
    vfloat32m8_t vs2, size_t vl);
vfloat32m8_t vfmacc_vf_f32m8 (vfloat32m8_t vd, float32_t rs1,
    vfloat32m8_t vs2, size_t vl);
vfloat64m1_t vfmacc_vv_f64m1 (vfloat64m1_t vd, vfloat64m1_t vs1,
    vfloat64m1_t vs2, size_t vl);
vfloat64m1_t vfmacc_vf_f64m1 (vfloat64m1_t vd, float64_t rs1,
    vfloat64m1_t vs2, size_t vl);
vfloat64m2_t vfmacc_vv_f64m2 (vfloat64m2_t vd, vfloat64m2_t vs1,
    vfloat64m2_t vs2, size_t vl);
vfloat64m2_t vfmacc_vf_f64m2 (vfloat64m2_t vd, float64_t rs1,
    vfloat64m2_t vs2, size_t vl);
vfloat64m4_t vfmacc_vv_f64m4 (vfloat64m4_t vd, vfloat64m4_t vs1,
    vfloat64m4_t vs2, size_t vl);
vfloat64m4_t vfmacc_vf_f64m4 (vfloat64m4_t vd, float64_t rs1,
    vfloat64m4_t vs2, size_t vl);
vfloat64m8_t vfmacc_vv_f64m8 (vfloat64m8_t vd, vfloat64m8_t vs1,
    vfloat64m8_t vs2, size_t vl);
vfloat64m8_t vfmacc_vf_f64m8 (vfloat64m8_t vd, float64_t rs1,
    vfloat64m8_t vs2, size_t vl);
vfloat16mf4_t vfnmacc_vv_f16mf4 (vfloat16mf4_t vd, vfloat16mf4_t
    vs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf4_t vfnmacc_vf_f16mf4 (vfloat16mf4_t vd, float16_t
    rs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf2_t vfnmacc_vv_f16mf2 (vfloat16mf2_t vd, vfloat16mf2_t
    vs1, vfloat16mf2_t vs2, size_t vl);
vfloat16mf2_t vfnmacc_vf_f16mf2 (vfloat16mf2_t vd, float16_t
    rs1, vfloat16mf2_t vs2, size_t vl);
vfloat16m1_t vfnmacc_vv_f16m1 (vfloat16m1_t vd, vfloat16m1_t
    vs1, vfloat16m1_t vs2, size_t vl);
vfloat16m1_t vfnmacc_vf_f16m1 (vfloat16m1_t vd, float16_t rs1,
    vfloat16m1_t vs2, size_t vl);
vfloat16m2_t vfnmacc_vv_f16m2 (vfloat16m2_t vd, vfloat16m2_t
    vs1, vfloat16m2_t vs2, size_t vl);
vfloat16m2_t vfnmacc_vf_f16m2 (vfloat16m2_t vd, float16_t rs1,
    vfloat16m2_t vs2, size_t vl);
```

```
vfloat16m4_t vfnmacc_vv_f16m4 (vfloat16m4_t vd, vfloat16m4_t
    vs1, vfloat16m4_t vs2, size_t vl);
vfloat16m4_t vfnmacc_vf_f16m4 (vfloat16m4_t vd, float16_t rs1,
    vfloat16m4_t vs2, size_t vl);
vfloat16m8_t vfnmacc_vv_f16m8 (vfloat16m8_t vd, vfloat16m8_t
    vs1, vfloat16m8_t vs2, size_t vl);
vfloat16m8_t vfnmacc_vf_f16m8 (vfloat16m8_t vd, float16_t rs1,
    vfloat16m8_t vs2, size_t vl);
vfloat32mf2_t vfnmacc_vv_f32mf2 (vfloat32mf2_t vd, vfloat32mf2_t
    vs1, vfloat32mf2_t vs2, size_t vl);
vfloat32mf2_t vfnmacc_vf_f32mf2 (vfloat32mf2_t vd, float32_t
    rs1, vfloat32mf2_t vs2, size_t vl);
vfloat32m1_t vfnmacc_vv_f32m1 (vfloat32m1_t vd, vfloat32m1_t
    vs1, vfloat32m1_t vs2, size_t vl);
vfloat32m1_t vfnmacc_vf_f32m1 (vfloat32m1_t vd, float32_t rs1,
    vfloat32m1_t vs2, size_t vl);
vfloat32m2_t vfnmacc_vv_f32m2 (vfloat32m2_t vd, vfloat32m2_t
    vs1, vfloat32m2_t vs2, size_t vl);
vfloat32m2_t vfnmacc_vf_f32m2 (vfloat32m2_t vd, float32_t rs1,
    vfloat32m2_t vs2, size_t vl);
vfloat32m4_t vfnmacc_vv_f32m4 (vfloat32m4_t vd, vfloat32m4_t
    vs1, vfloat32m4_t vs2, size_t vl);
vfloat32m4_t vfnmacc_vf_f32m4 (vfloat32m4_t vd, float32_t rs1,
    vfloat32m4_t vs2, size_t vl);
vfloat32m8_t vfnmacc_vv_f32m8 (vfloat32m8_t vd, vfloat32m8_t
    vs1, vfloat32m8_t vs2, size_t vl);
vfloat32m8_t vfnmacc_vf_f32m8 (vfloat32m8_t vd, float32_t rs1,
    vfloat32m8_t vs2, size_t vl);
vfloat64m1_t vfnmacc_vv_f64m1 (vfloat64m1_t vd, vfloat64m1_t
    vs1, vfloat64m1_t vs2, size_t vl);
vfloat64m1_t vfnmacc_vf_f64m1 (vfloat64m1_t vd, float64_t rs1,
    vfloat64m1_t vs2, size_t vl);
vfloat64m2_t vfnmacc_vv_f64m2 (vfloat64m2_t vd, vfloat64m2_t
    vs1, vfloat64m2_t vs2, size_t vl);
vfloat64m2_t vfnmacc_vf_f64m2 (vfloat64m2_t vd, float64_t rs1,
    vfloat64m2_t vs2, size_t vl);
vfloat64m4_t vfnmacc_vv_f64m4 (vfloat64m4_t vd, vfloat64m4_t
    vs1, vfloat64m4_t vs2, size_t vl);
vfloat64m4_t vfnmacc_vf_f64m4 (vfloat64m4_t vd, float64_t rs1,
    vfloat64m4_t vs2, size_t vl);
vfloat64m8_t vfnmacc_vv_f64m8 (vfloat64m8_t vd, vfloat64m8_t
    vs1, vfloat64m8_t vs2, size_t vl);
vfloat64m8_t vfnmacc_vf_f64m8 (vfloat64m8_t vd, float64_t rs1,
    vfloat64m8_t vs2, size_t vl);
vfloat16mf4_t vfmsac_vv_f16mf4 (vfloat16mf4_t vd, vfloat16mf4_t
    vs1, vfloat16mf4_t vs2, size_t vl);
```

```
vfloat16mf4_t vfmsac_vf_f16mf4 (vfloat16mf4_t vd, float16_t rs1,
    vfloat16mf4_t vs2, size_t vl);
vfloat16mf2_t vfmsac_vv_f16mf2 (vfloat16mf2_t vd, vfloat16mf2_t
    vs1, vfloat16mf2_t vs2, size_t vl);
vfloat16mf2_t vfmsac_vf_f16mf2 (vfloat16mf2_t vd, float16_t rs1,
    vfloat16mf2_t vs2, size_t vl);
vfloat16m1_t vfmsac_vv_f16m1 (vfloat16m1_t vd, vfloat16m1_t vs1,
    vfloat16m1_t vs2, size_t vl);
vfloat16m1_t vfmsac_vf_f16m1 (vfloat16m1_t vd, float16_t rs1,
    vfloat16m1_t vs2, size_t vl);
vfloat16m2_t vfmsac_vv_f16m2 (vfloat16m2_t vd, vfloat16m2_t vs1,
    vfloat16m2_t vs2, size_t vl);
vfloat16m2_t vfmsac_vf_f16m2 (vfloat16m2_t vd, float16_t rs1,
    vfloat16m2_t vs2, size_t vl);
vfloat16m4_t vfmsac_vv_f16m4 (vfloat16m4_t vd, vfloat16m4_t vs1,
    vfloat16m4_t vs2, size_t vl);
vfloat16m4_t vfmsac_vf_f16m4 (vfloat16m4_t vd, float16_t rs1,
    vfloat16m4_t vs2, size_t vl);
vfloat16m8_t vfmsac_vv_f16m8 (vfloat16m8_t vd, vfloat16m8_t vs1,
    vfloat16m8_t vs2, size_t vl);
vfloat16m8_t vfmsac_vf_f16m8 (vfloat16m8_t vd, float16_t rs1,
    vfloat16m8_t vs2, size_t vl);
vfloat32mf2_t vfmsac_vv_f32mf2 (vfloat32mf2_t vd, vfloat32mf2_t
    vs1, vfloat32mf2_t vs2, size_t vl);
vfloat32mf2_t vfmsac_vf_f32mf2 (vfloat32mf2_t vd, float32_t rs1,
    vfloat32mf2_t vs2, size_t vl);
vfloat32m1_t vfmsac_vv_f32m1 (vfloat32m1_t vd, vfloat32m1_t vs1,
    vfloat32m1_t vs2, size_t vl);
vfloat32m1_t vfmsac_vf_f32m1 (vfloat32m1_t vd, float32_t rs1,
    vfloat32m1_t vs2, size_t vl);
vfloat32m2_t vfmsac_vv_f32m2 (vfloat32m2_t vd, vfloat32m2_t vs1,
    vfloat32m2_t vs2, size_t vl);
vfloat32m2_t vfmsac_vf_f32m2 (vfloat32m2_t vd, float32_t rs1,
    vfloat32m2_t vs2, size_t vl);
vfloat32m4_t vfmsac_vv_f32m4 (vfloat32m4_t vd, vfloat32m4_t vs1,
    vfloat32m4_t vs2, size_t vl);
vfloat32m4_t vfmsac_vf_f32m4 (vfloat32m4_t vd, float32_t rs1,
    vfloat32m4_t vs2, size_t vl);
vfloat32m8_t vfmsac_vv_f32m8 (vfloat32m8_t vd, vfloat32m8_t vs1,
    vfloat32m8_t vs2, size_t vl);
vfloat32m8_t vfmsac_vf_f32m8 (vfloat32m8_t vd, float32_t rs1,
    vfloat32m8_t vs2, size_t vl);
vfloat64m1_t vfmsac_vv_f64m1 (vfloat64m1_t vd, vfloat64m1_t vs1,
    vfloat64m1_t vs2, size_t vl);
vfloat64m1_t vfmsac_vf_f64m1 (vfloat64m1_t vd, float64_t rs1,
    vfloat64m1_t vs2, size_t vl);
```

```
vfloat64m2_t vfmsac_vv_f64m2 (vfloat64m2_t vd, vfloat64m2_t vs1,
    vfloat64m2_t vs2, size_t vl);
vfloat64m2_t vfmsac_vf_f64m2 (vfloat64m2_t vd, float64_t rs1,
    vfloat64m2_t vs2, size_t vl);
vfloat64m4_t vfmsac_vv_f64m4 (vfloat64m4_t vd, vfloat64m4_t vs1,
    vfloat64m4_t vs2, size_t vl);
vfloat64m4_t vfmsac_vf_f64m4 (vfloat64m4_t vd, float64_t rs1,
    vfloat64m4_t vs2, size_t vl);
vfloat64m8_t vfmsac_vv_f64m8 (vfloat64m8_t vd, vfloat64m8_t vs1,
    vfloat64m8_t vs2, size_t vl);
vfloat64m8_t vfmsac_vf_f64m8 (vfloat64m8_t vd, float64_t rs1,
    vfloat64m8_t vs2, size_t vl);
vfloat16mf4_t vfnmsac_vv_f16mf4 (vfloat16mf4_t vd, vfloat16mf4_t
    vs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf4_t vfnmsac_vf_f16mf4 (vfloat16mf4_t vd, float16_t
    rs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf2_t vfnmsac_vv_f16mf2 (vfloat16mf2_t vd, vfloat16mf2_t
    vs1, vfloat16mf2_t vs2, size_t vl);
vfloat16mf2_t vfnmsac_vf_f16mf2 (vfloat16mf2_t vd, float16_t
    rs1, vfloat16mf2_t vs2, size_t vl);
vfloat16m1_t vfnmsac_vv_f16m1 (vfloat16m1_t vd, vfloat16m1_t
    vs1, vfloat16m1_t vs2, size_t vl);
vfloat16m1_t vfnmsac_vf_f16m1 (vfloat16m1_t vd, float16_t rs1,
    vfloat16m1_t vs2, size_t vl);
vfloat16m2_t vfnmsac_vv_f16m2 (vfloat16m2_t vd, vfloat16m2_t
    vs1, vfloat16m2_t vs2, size_t vl);
vfloat16m2_t vfnmsac_vf_f16m2 (vfloat16m2_t vd, float16_t rs1,
    vfloat16m2_t vs2, size_t vl);
vfloat16m4_t vfnmsac_vv_f16m4 (vfloat16m4_t vd, vfloat16m4_t
    vs1, vfloat16m4_t vs2, size_t vl);
vfloat16m4_t vfnmsac_vf_f16m4 (vfloat16m4_t vd, float16_t rs1,
    vfloat16m4_t vs2, size_t vl);
vfloat16m8_t vfnmsac_vv_f16m8 (vfloat16m8_t vd, vfloat16m8_t
    vs1, vfloat16m8_t vs2, size_t vl);
vfloat16m8_t vfnmsac_vf_f16m8 (vfloat16m8_t vd, float16_t rs1,
    vfloat16m8_t vs2, size_t vl);
vfloat32mf2_t vfnmsac_vv_f32mf2 (vfloat32mf2_t vd, vfloat32mf2_t
    vs1, vfloat32mf2_t vs2, size_t vl);
vfloat32mf2_t vfnmsac_vf_f32mf2 (vfloat32mf2_t vd, float32_t
    rs1, vfloat32mf2_t vs2, size_t vl);
vfloat32m1_t vfnmsac_vv_f32m1 (vfloat32m1_t vd, vfloat32m1_t
    vs1, vfloat32m1_t vs2, size_t vl);
vfloat32m1_t vfnmsac_vf_f32m1 (vfloat32m1_t vd, float32_t rs1,
    vfloat32m1_t vs2, size_t vl);
vfloat32m2_t vfnmsac_vv_f32m2 (vfloat32m2_t vd, vfloat32m2_t
    vs1, vfloat32m2_t vs2, size_t vl);
```

```
vfloat32m2_t vfnmsac_vf_f32m2 (vfloat32m2_t vd, float32_t rs1,
    vfloat32m2_t vs2, size_t vl);
vfloat32m4_t vfnmsac_vv_f32m4 (vfloat32m4_t vd, vfloat32m4_t
    vs1, vfloat32m4_t vs2, size_t vl);
vfloat32m4_t vfnmsac_vf_f32m4 (vfloat32m4_t vd, float32_t rs1,
    vfloat32m4_t vs2, size_t vl);
vfloat32m8_t vfnmsac_vv_f32m8 (vfloat32m8_t vd, vfloat32m8_t
    vs1, vfloat32m8_t vs2, size_t vl);
vfloat32m8_t vfnmsac_vf_f32m8 (vfloat32m8_t vd, float32_t rs1,
    vfloat32m8_t vs2, size_t vl);
vfloat64m1_t vfnmsac_vv_f64m1 (vfloat64m1_t vd, vfloat64m1_t
    vs1, vfloat64m1_t vs2, size_t vl);
vfloat64m1_t vfnmsac_vf_f64m1 (vfloat64m1_t vd, float64_t rs1,
    vfloat64m1_t vs2, size_t vl);
vfloat64m2_t vfnmsac_vv_f64m2 (vfloat64m2_t vd, vfloat64m2_t
    vs1, vfloat64m2_t vs2, size_t vl);
vfloat64m2_t vfnmsac_vf_f64m2 (vfloat64m2_t vd, float64_t rs1,
    vfloat64m2_t vs2, size_t vl);
vfloat64m4_t vfnmsac_vv_f64m4 (vfloat64m4_t vd, vfloat64m4_t
    vs1, vfloat64m4_t vs2, size_t vl);
vfloat64m4_t vfnmsac_vf_f64m4 (vfloat64m4_t vd, float64_t rs1,
    vfloat64m4_t vs2, size_t vl);
vfloat64m8_t vfnmsac_vv_f64m8 (vfloat64m8_t vd, vfloat64m8_t
    vs1, vfloat64m8_t vs2, size_t vl);
vfloat64m8_t vfnmsac_vf_f64m8 (vfloat64m8_t vd, float64_t rs1,
    vfloat64m8_t vs2, size_t vl);
vfloat16mf4_t vfmadd_vv_f16mf4 (vfloat16mf4_t vd, vfloat16mf4_t
    vs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf4_t vfmadd_vf_f16mf4 (vfloat16mf4_t vd, float16_t rs1,
    vfloat16mf4_t vs2, size_t vl);
vfloat16mf2_t vfmadd_vv_f16mf2 (vfloat16mf2_t vd, vfloat16mf2_t
    vs1, vfloat16mf2_t vs2, size_t vl);
vfloat16mf2_t vfmadd_vf_f16mf2 (vfloat16mf2_t vd, float16_t rs1,
    vfloat16mf2_t vs2, size_t vl);
vfloat16m1_t vfmadd_vv_f16m1 (vfloat16m1_t vd, vfloat16m1_t vs1,
    vfloat16m1_t vs2, size_t vl);
vfloat16m1_t vfmadd_vf_f16m1 (vfloat16m1_t vd, float16_t rs1,
    vfloat16m1_t vs2, size_t vl);
vfloat16m2_t vfmadd_vv_f16m2 (vfloat16m2_t vd, vfloat16m2_t vs1,
    vfloat16m2_t vs2, size_t vl);
vfloat16m2_t vfmadd_vf_f16m2 (vfloat16m2_t vd, float16_t rs1,
    vfloat16m2_t vs2, size_t vl);
vfloat16m4_t vfmadd_vv_f16m4 (vfloat16m4_t vd, vfloat16m4_t vs1,
    vfloat16m4_t vs2, size_t vl);
vfloat16m4_t vfmadd_vf_f16m4 (vfloat16m4_t vd, float16_t rs1,
    vfloat16m4_t vs2, size_t vl);
```

```
vfloat16m8_t vfmadd_vv_f16m8 (vfloat16m8_t vd, vfloat16m8_t vs1,
    vfloat16m8_t vs2, size_t vl);
vfloat16m8_t vfmadd_vf_f16m8 (vfloat16m8_t vd, float16_t rs1,
    vfloat16m8_t vs2, size_t vl);
vfloat32mf2_t vfmadd_vv_f32mf2 (vfloat32mf2_t vd, vfloat32mf2_t
    vs1, vfloat32mf2_t vs2, size_t vl);
vfloat32mf2_t vfmadd_vf_f32mf2 (vfloat32mf2_t vd, float32_t rs1,
    vfloat32mf2_t vs2, size_t vl);
vfloat32m1_t vfmadd_vv_f32m1 (vfloat32m1_t vd, vfloat32m1_t vs1,
    vfloat32m1_t vs2, size_t vl);
vfloat32m1_t vfmadd_vf_f32m1 (vfloat32m1_t vd, float32_t rs1,
    vfloat32m1_t vs2, size_t vl);
vfloat32m2_t vfmadd_vv_f32m2 (vfloat32m2_t vd, vfloat32m2_t vs1,
    vfloat32m2_t vs2, size_t vl);
vfloat32m2_t vfmadd_vf_f32m2 (vfloat32m2_t vd, float32_t rs1,
    vfloat32m2_t vs2, size_t vl);
vfloat32m4_t vfmadd_vv_f32m4 (vfloat32m4_t vd, vfloat32m4_t vs1,
    vfloat32m4_t vs2, size_t vl);
vfloat32m4_t vfmadd_vf_f32m4 (vfloat32m4_t vd, float32_t rs1,
    vfloat32m4_t vs2, size_t vl);
vfloat32m8_t vfmadd_vv_f32m8 (vfloat32m8_t vd, vfloat32m8_t vs1,
    vfloat32m8_t vs2, size_t vl);
vfloat32m8_t vfmadd_vf_f32m8 (vfloat32m8_t vd, float32_t rs1,
    vfloat32m8_t vs2, size_t vl);
vfloat64m1_t vfmadd_vv_f64m1 (vfloat64m1_t vd, vfloat64m1_t vs1,
    vfloat64m1_t vs2, size_t vl);
vfloat64m1_t vfmadd_vf_f64m1 (vfloat64m1_t vd, float64_t rs1,
    vfloat64m1_t vs2, size_t vl);
vfloat64m2_t vfmadd_vv_f64m2 (vfloat64m2_t vd, vfloat64m2_t vs1,
    vfloat64m2_t vs2, size_t vl);
vfloat64m2_t vfmadd_vf_f64m2 (vfloat64m2_t vd, float64_t rs1,
    vfloat64m2_t vs2, size_t vl);
vfloat64m4_t vfmadd_vv_f64m4 (vfloat64m4_t vd, vfloat64m4_t vs1,
    vfloat64m4_t vs2, size_t vl);
vfloat64m4_t vfmadd_vf_f64m4 (vfloat64m4_t vd, float64_t rs1,
    vfloat64m4_t vs2, size_t vl);
vfloat64m8_t vfmadd_vv_f64m8 (vfloat64m8_t vd, vfloat64m8_t vs1,
    vfloat64m8_t vs2, size_t vl);
vfloat64m8_t vfmadd_vf_f64m8 (vfloat64m8_t vd, float64_t rs1,
    vfloat64m8_t vs2, size_t vl);
vfloat16mf4_t vfnmadd_vv_f16mf4 (vfloat16mf4_t vd, vfloat16mf4_t
    vs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf4_t vfnmadd_vf_f16mf4 (vfloat16mf4_t vd, float16_t
    rs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf2_t vfnmadd_vv_f16mf2 (vfloat16mf2_t vd, vfloat16mf2_t
    vs1, vfloat16mf2_t vs2, size_t vl);
```

```
vfloat16mf2_t vfnmadd_vf_f16mf2 (vfloat16mf2_t vd, float16_t
    rs1, vfloat16mf2_t vs2, size_t vl);
vfloat16m1_t vfnmadd_vv_f16m1 (vfloat16m1_t vd, vfloat16m1_t
    vs1, vfloat16m1_t vs2, size_t vl);
vfloat16m1_t vfnmadd_vf_f16m1 (vfloat16m1_t vd, float16_t rs1,
    vfloat16m1_t vs2, size_t vl);
vfloat16m2_t vfnmadd_vv_f16m2 (vfloat16m2_t vd, vfloat16m2_t
    vs1, vfloat16m2_t vs2, size_t vl);
vfloat16m2_t vfnmadd_vf_f16m2 (vfloat16m2_t vd, float16_t rs1,
    vfloat16m2_t vs2, size_t vl);
vfloat16m4_t vfnmadd_vv_f16m4 (vfloat16m4_t vd, vfloat16m4_t
    vs1, vfloat16m4_t vs2, size_t vl);
vfloat16m4_t vfnmadd_vf_f16m4 (vfloat16m4_t vd, float16_t rs1,
    vfloat16m4_t vs2, size_t vl);
vfloat16m8_t vfnmadd_vv_f16m8 (vfloat16m8_t vd, vfloat16m8_t
    vs1, vfloat16m8_t vs2, size_t vl);
vfloat16m8_t vfnmadd_vf_f16m8 (vfloat16m8_t vd, float16_t rs1,
    vfloat16m8_t vs2, size_t vl);
vfloat32mf2_t vfnmadd_vv_f32mf2 (vfloat32mf2_t vd, vfloat32mf2_t
    vs1, vfloat32mf2_t vs2, size_t vl);
vfloat32mf2_t vfnmadd_vf_f32mf2 (vfloat32mf2_t vd, float32_t
    rs1, vfloat32mf2_t vs2, size_t vl);
vfloat32m1_t vfnmadd_vv_f32m1 (vfloat32m1_t vd, vfloat32m1_t
    vs1, vfloat32m1_t vs2, size_t vl);
vfloat32m1_t vfnmadd_vf_f32m1 (vfloat32m1_t vd, float32_t rs1,
    vfloat32m1_t vs2, size_t vl);
vfloat32m2_t vfnmadd_vv_f32m2 (vfloat32m2_t vd, vfloat32m2_t
    vs1, vfloat32m2_t vs2, size_t vl);
vfloat32m2_t vfnmadd_vf_f32m2 (vfloat32m2_t vd, float32_t rs1,
    vfloat32m2_t vs2, size_t vl);
vfloat32m4_t vfnmadd_vv_f32m4 (vfloat32m4_t vd, vfloat32m4_t
    vs1, vfloat32m4_t vs2, size_t vl);
vfloat32m4_t vfnmadd_vf_f32m4 (vfloat32m4_t vd, float32_t rs1,
    vfloat32m4_t vs2, size_t vl);
vfloat32m8_t vfnmadd_vv_f32m8 (vfloat32m8_t vd, vfloat32m8_t
    vs1, vfloat32m8_t vs2, size_t vl);
vfloat32m8_t vfnmadd_vf_f32m8 (vfloat32m8_t vd, float32_t rs1,
    vfloat32m8_t vs2, size_t vl);
vfloat64m1_t vfnmadd_vv_f64m1 (vfloat64m1_t vd, vfloat64m1_t
    vs1, vfloat64m1_t vs2, size_t vl);
vfloat64m1_t vfnmadd_vf_f64m1 (vfloat64m1_t vd, float64_t rs1,
    vfloat64m1_t vs2, size_t vl);
vfloat64m2_t vfnmadd_vv_f64m2 (vfloat64m2_t vd, vfloat64m2_t
    vs1, vfloat64m2_t vs2, size_t vl);
vfloat64m2_t vfnmadd_vf_f64m2 (vfloat64m2_t vd, float64_t rs1,
    vfloat64m2_t vs2, size_t vl);
```

```
vfloat64m4_t vfnmadd_vv_f64m4 (vfloat64m4_t vd, vfloat64m4_t
    vs1, vfloat64m4_t vs2, size_t vl);
vfloat64m4_t vfnmadd_vf_f64m4 (vfloat64m4_t vd, float64_t rs1,
    vfloat64m4_t vs2, size_t vl);
vfloat64m8_t vfnmadd_vv_f64m8 (vfloat64m8_t vd, vfloat64m8_t
    vs1, vfloat64m8_t vs2, size_t vl);
vfloat64m8_t vfnmadd_vf_f64m8 (vfloat64m8_t vd, float64_t rs1,
    vfloat64m8_t vs2, size_t vl);
vfloat16mf4_t vfmsub_vv_f16mf4 (vfloat16mf4_t vd, vfloat16mf4_t
    vs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf4_t vfmsub_vf_f16mf4 (vfloat16mf4_t vd, float16_t rs1,
    vfloat16mf4_t vs2, size_t vl);
vfloat16mf2_t vfmsub_vv_f16mf2 (vfloat16mf2_t vd, vfloat16mf2_t
    vs1, vfloat16mf2_t vs2, size_t vl);
vfloat16mf2_t vfmsub_vf_f16mf2 (vfloat16mf2_t vd, float16_t rs1,
    vfloat16mf2_t vs2, size_t vl);
vfloat16m1_t vfmsub_vv_f16m1 (vfloat16m1_t vd, vfloat16m1_t vs1,
    vfloat16m1_t vs2, size_t vl);
vfloat16m1_t vfmsub_vf_f16m1 (vfloat16m1_t vd, float16_t rs1,
    vfloat16m1_t vs2, size_t vl);
vfloat16m2_t vfmsub_vv_f16m2 (vfloat16m2_t vd, vfloat16m2_t vs1,
    vfloat16m2_t vs2, size_t vl);
vfloat16m2_t vfmsub_vf_f16m2 (vfloat16m2_t vd, float16_t rs1,
    vfloat16m2_t vs2, size_t vl);
vfloat16m4_t vfmsub_vv_f16m4 (vfloat16m4_t vd, vfloat16m4_t vs1,
    vfloat16m4_t vs2, size_t vl);
vfloat16m4_t vfmsub_vf_f16m4 (vfloat16m4_t vd, float16_t rs1,
    vfloat16m4_t vs2, size_t vl);
vfloat16m8_t vfmsub_vv_f16m8 (vfloat16m8_t vd, vfloat16m8_t vs1,
    vfloat16m8_t vs2, size_t vl);
vfloat16m8_t vfmsub_vf_f16m8 (vfloat16m8_t vd, float16_t rs1,
    vfloat16m8_t vs2, size_t vl);
vfloat32mf2_t vfmsub_vv_f32mf2 (vfloat32mf2_t vd, vfloat32mf2_t
    vs1, vfloat32mf2_t vs2, size_t vl);
vfloat32mf2_t vfmsub_vf_f32mf2 (vfloat32mf2_t vd, float32_t rs1,
    vfloat32mf2_t vs2, size_t vl);
vfloat32m1_t vfmsub_vv_f32m1 (vfloat32m1_t vd, vfloat32m1_t vs1,
    vfloat32m1_t vs2, size_t vl);
vfloat32m1_t vfmsub_vf_f32m1 (vfloat32m1_t vd, float32_t rs1,
    vfloat32m1_t vs2, size_t vl);
vfloat32m2_t vfmsub_vv_f32m2 (vfloat32m2_t vd, vfloat32m2_t vs1,
    vfloat32m2_t vs2, size_t vl);
vfloat32m2_t vfmsub_vf_f32m2 (vfloat32m2_t vd, float32_t rs1,
    vfloat32m2_t vs2, size_t vl);
vfloat32m4_t vfmsub_vv_f32m4 (vfloat32m4_t vd, vfloat32m4_t vs1,
    vfloat32m4_t vs2, size_t vl);
```

```
vfloat32m4_t vfmsub_vf_f32m4 (vfloat32m4_t vd, float32_t rs1,
    vfloat32m4_t vs2, size_t vl);
vfloat32m8_t vfmsub_vv_f32m8 (vfloat32m8_t vd, vfloat32m8_t vs1,
    vfloat32m8_t vs2, size_t vl);
vfloat32m8_t vfmsub_vf_f32m8 (vfloat32m8_t vd, float32_t rs1,
    vfloat32m8_t vs2, size_t vl);
vfloat64m1_t vfmsub_vv_f64m1 (vfloat64m1_t vd, vfloat64m1_t vs1,
    vfloat64m1_t vs2, size_t vl);
vfloat64m1_t vfmsub_vf_f64m1 (vfloat64m1_t vd, float64_t rs1,
    vfloat64m1_t vs2, size_t vl);
vfloat64m2_t vfmsub_vv_f64m2 (vfloat64m2_t vd, vfloat64m2_t vs1,
    vfloat64m2_t vs2, size_t vl);
vfloat64m2_t vfmsub_vf_f64m2 (vfloat64m2_t vd, float64_t rs1,
    vfloat64m2_t vs2, size_t vl);
vfloat64m4_t vfmsub_vv_f64m4 (vfloat64m4_t vd, vfloat64m4_t vs1,
    vfloat64m4_t vs2, size_t vl);
vfloat64m4_t vfmsub_vf_f64m4 (vfloat64m4_t vd, float64_t rs1,
    vfloat64m4_t vs2, size_t vl);
vfloat64m8_t vfmsub_vv_f64m8 (vfloat64m8_t vd, vfloat64m8_t vs1,
    vfloat64m8_t vs2, size_t vl);
vfloat64m8_t vfmsub_vf_f64m8 (vfloat64m8_t vd, float64_t rs1,
    vfloat64m8_t vs2, size_t vl);
vfloat16mf4_t vfnmsub_vv_f16mf4 (vfloat16mf4_t vd, vfloat16mf4_t
    vs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf4_t vfnmsub_vf_f16mf4 (vfloat16mf4_t vd, float16_t
    rs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf2_t vfnmsub_vv_f16mf2 (vfloat16mf2_t vd, vfloat16mf2_t
    vs1, vfloat16mf2_t vs2, size_t vl);
vfloat16mf2_t vfnmsub_vf_f16mf2 (vfloat16mf2_t vd, float16_t
    rs1, vfloat16mf2_t vs2, size_t vl);
vfloat16m1_t vfnmsub_vv_f16m1 (vfloat16m1_t vd, vfloat16m1_t
    vs1, vfloat16m1_t vs2, size_t vl);
vfloat16m1_t vfnmsub_vf_f16m1 (vfloat16m1_t vd, float16_t rs1,
    vfloat16m1_t vs2, size_t vl);
vfloat16m2_t vfnmsub_vv_f16m2 (vfloat16m2_t vd, vfloat16m2_t
    vs1, vfloat16m2_t vs2, size_t vl);
vfloat16m2_t vfnmsub_vf_f16m2 (vfloat16m2_t vd, float16_t rs1,
    vfloat16m2_t vs2, size_t vl);
vfloat16m4_t vfnmsub_vv_f16m4 (vfloat16m4_t vd, vfloat16m4_t
    vs1, vfloat16m4_t vs2, size_t vl);
vfloat16m4_t vfnmsub_vf_f16m4 (vfloat16m4_t vd, float16_t rs1,
    vfloat16m4_t vs2, size_t vl);
vfloat16m8_t vfnmsub_vv_f16m8 (vfloat16m8_t vd, vfloat16m8_t
    vs1, vfloat16m8_t vs2, size_t vl);
vfloat16m8_t vfnmsub_vf_f16m8 (vfloat16m8_t vd, float16_t rs1,
    vfloat16m8_t vs2, size_t vl);
```

```
vfloat32mf2_t vfnmsub_vv_f32mf2 (vfloat32mf2_t vd, vfloat32mf2_t
    vs1, vfloat32mf2_t vs2, size_t vl);
vfloat32mf2_t vfnmsub_vf_f32mf2 (vfloat32mf2_t vd, float32_t
    rs1, vfloat32mf2_t vs2, size_t vl);
vfloat32m1_t vfnmsub_vv_f32m1 (vfloat32m1_t vd, vfloat32m1_t
    vs1, vfloat32m1_t vs2, size_t vl);
vfloat32m1_t vfnmsub_vf_f32m1 (vfloat32m1_t vd, float32_t rs1,
    vfloat32m1_t vs2, size_t vl);
vfloat32m2_t vfnmsub_vv_f32m2 (vfloat32m2_t vd, vfloat32m2_t
    vs1, vfloat32m2_t vs2, size_t vl);
vfloat32m2_t vfnmsub_vf_f32m2 (vfloat32m2_t vd, float32_t rs1,
    vfloat32m2_t vs2, size_t vl);
vfloat32m4_t vfnmsub_vv_f32m4 (vfloat32m4_t vd, vfloat32m4_t
    vs1, vfloat32m4_t vs2, size_t vl);
vfloat32m4_t vfnmsub_vf_f32m4 (vfloat32m4_t vd, float32_t rs1,
    vfloat32m4_t vs2, size_t vl);
vfloat32m8_t vfnmsub_vv_f32m8 (vfloat32m8_t vd, vfloat32m8_t
    vs1, vfloat32m8_t vs2, size_t vl);
vfloat32m8_t vfnmsub_vf_f32m8 (vfloat32m8_t vd, float32_t rs1,
    vfloat32m8_t vs2, size_t vl);
vfloat64m1_t vfnmsub_vv_f64m1 (vfloat64m1_t vd, vfloat64m1_t
    vs1, vfloat64m1_t vs2, size_t vl);
vfloat64m1_t vfnmsub_vf_f64m1 (vfloat64m1_t vd, float64_t rs1,
    vfloat64m1_t vs2, size_t vl);
vfloat64m2_t vfnmsub_vv_f64m2 (vfloat64m2_t vd, vfloat64m2_t
    vs1, vfloat64m2_t vs2, size_t vl);
vfloat64m2_t vfnmsub_vf_f64m2 (vfloat64m2_t vd, float64_t rs1,
    vfloat64m2_t vs2, size_t vl);
vfloat64m4_t vfnmsub_vv_f64m4 (vfloat64m4_t vd, vfloat64m4_t
    vs1, vfloat64m4_t vs2, size_t vl);
vfloat64m4_t vfnmsub_vf_f64m4 (vfloat64m4_t vd, float64_t rs1,
    vfloat64m4_t vs2, size_t vl);
vfloat64m8_t vfnmsub_vv_f64m8 (vfloat64m8_t vd, vfloat64m8_t
    vs1, vfloat64m8_t vs2, size_t vl);
vfloat64m8_t vfnmsub_vf_f64m8 (vfloat64m8_t vd, float64_t rs1,
    vfloat64m8_t vs2, size_t vl);
// masked functions
vfloat16mf4_t vfmacc_vv_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    vd, vfloat16mf4_t vs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf4_t vfmacc_vf_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    vd, float16_t rs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf2_t vfmacc_vv_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    vd, vfloat16mf2_t vs1, vfloat16mf2_t vs2, size_t vl);
vfloat16mf2_t vfmacc_vf_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    vd, float16_t rs1, vfloat16mf2_t vs2, size_t vl);
```

```
vfloat16m1_t vfmacc_vv_f16m1_m (vbool16_t mask, vfloat16m1_t vd,
    vfloat16m1_t vs1, vfloat16m1_t vs2, size_t vl);
vfloat16m1_t vfmacc_vf_f16m1_m (vbool16_t mask, vfloat16m1_t vd,
    float16_t rs1, vfloat16m1_t vs2, size_t vl);
vfloat16m2_t vfmacc_vv_f16m2_m (vbool8_t mask, vfloat16m2_t vd,
    vfloat16m2_t vs1, vfloat16m2_t vs2, size_t vl);
vfloat16m2_t vfmacc_vf_f16m2_m (vbool8_t mask, vfloat16m2_t vd,
    float16_t rs1, vfloat16m2_t vs2, size_t vl);
vfloat16m4_t vfmacc_vv_f16m4_m (vbool4_t mask, vfloat16m4_t vd,
    vfloat16m4_t vs1, vfloat16m4_t vs2, size_t vl);
vfloat16m4_t vfmacc_vf_f16m4_m (vbool4_t mask, vfloat16m4_t vd,
    float16_t rs1, vfloat16m4_t vs2, size_t vl);
vfloat16m8_t vfmacc_vv_f16m8_m (vbool2_t mask, vfloat16m8_t vd,
    vfloat16m8_t vs1, vfloat16m8_t vs2, size_t vl);
vfloat16m8_t vfmacc_vf_f16m8_m (vbool2_t mask, vfloat16m8_t vd,
    float16_t rs1, vfloat16m8_t vs2, size_t vl);
vfloat32mf2_t vfmacc_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    vd, vfloat32mf2_t vs1, vfloat32mf2_t vs2, size_t vl);
vfloat32mf2_t vfmacc_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    vd, float32_t rs1, vfloat32mf2_t vs2, size_t vl);
vfloat32m1_t vfmacc_vv_f32m1_m (vbool32_t mask, vfloat32m1_t vd,
    vfloat32m1_t vs1, vfloat32m1_t vs2, size_t vl);
vfloat32m1_t vfmacc_vf_f32m1_m (vbool32_t mask, vfloat32m1_t vd,
    float32_t rs1, vfloat32m1_t vs2, size_t vl);
vfloat32m2_t vfmacc_vv_f32m2_m (vbool16_t mask, vfloat32m2_t vd,
    vfloat32m2_t vs1, vfloat32m2_t vs2, size_t vl);
vfloat32m2_t vfmacc_vf_f32m2_m (vbool16_t mask, vfloat32m2_t vd,
    float32_t rs1, vfloat32m2_t vs2, size_t vl);
vfloat32m4_t vfmacc_vv_f32m4_m (vbool8_t mask, vfloat32m4_t vd,
    vfloat32m4_t vs1, vfloat32m4_t vs2, size_t vl);
vfloat32m4_t vfmacc_vf_f32m4_m (vbool8_t mask, vfloat32m4_t vd,
    float32_t rs1, vfloat32m4_t vs2, size_t vl);
vfloat32m8_t vfmacc_vv_f32m8_m (vbool4_t mask, vfloat32m8_t vd,
    vfloat32m8_t vs1, vfloat32m8_t vs2, size_t vl);
vfloat32m8_t vfmacc_vf_f32m8_m (vbool4_t mask, vfloat32m8_t vd,
    float32_t rs1, vfloat32m8_t vs2, size_t vl);
vfloat64m1_t vfmacc_vv_f64m1_m (vbool64_t mask, vfloat64m1_t vd,
    vfloat64m1_t vs1, vfloat64m1_t vs2, size_t vl);
vfloat64m1_t vfmacc_vf_f64m1_m (vbool64_t mask, vfloat64m1_t vd,
    float64_t rs1, vfloat64m1_t vs2, size_t vl);
vfloat64m2_t vfmacc_vv_f64m2_m (vbool32_t mask, vfloat64m2_t vd,
    vfloat64m2_t vs1, vfloat64m2_t vs2, size_t vl);
vfloat64m2_t vfmacc_vf_f64m2_m (vbool32_t mask, vfloat64m2_t vd,
    float64_t rs1, vfloat64m2_t vs2, size_t vl);
vfloat64m4_t vfmacc_vv_f64m4_m (vbool16_t mask, vfloat64m4_t vd,
    vfloat64m4_t vs1, vfloat64m4_t vs2, size_t vl);
```

```
vfloat64m4_t vfmacc_vf_f64m4_m (vbool16_t mask, vfloat64m4_t vd,
    float64_t rs1, vfloat64m4_t vs2, size_t vl);
vfloat64m8_t vfmacc_vv_f64m8_m (vbool8_t mask, vfloat64m8_t vd,
    vfloat64m8_t vs1, vfloat64m8_t vs2, size_t vl);
vfloat64m8_t vfmacc_vf_f64m8_m (vbool8_t mask, vfloat64m8_t vd,
    float64_t rs1, vfloat64m8_t vs2, size_t vl);
vfloat16mf4_t vfnmacc_vv_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    vd, vfloat16mf4_t vs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf4_t vfnmacc_vf_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    vd, float16_t rs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf2_t vfnmacc_vv_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    vd, vfloat16mf2_t vs1, vfloat16mf2_t vs2, size_t vl);
vfloat16mf2_t vfnmacc_vf_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    vd, float16_t rs1, vfloat16mf2_t vs2, size_t vl);
vfloat16m1_t vfnmacc_vv_f16m1_m (vbool16_t mask, vfloat16m1_t
    vd, vfloat16m1_t vs1, vfloat16m1_t vs2, size_t vl);
vfloat16m1_t vfnmacc_vf_f16m1_m (vbool16_t mask, vfloat16m1_t
    vd, float16_t rs1, vfloat16m1_t vs2, size_t vl);
vfloat16m2_t vfnmacc_vv_f16m2_m (vbool8_t mask, vfloat16m2_t vd,
    vfloat16m2_t vs1, vfloat16m2_t vs2, size_t vl);
vfloat16m2_t vfnmacc_vf_f16m2_m (vbool8_t mask, vfloat16m2_t vd,
    float16_t rs1, vfloat16m2_t vs2, size_t vl);
vfloat16m4_t vfnmacc_vv_f16m4_m (vbool4_t mask, vfloat16m4_t vd,
    vfloat16m4_t vs1, vfloat16m4_t vs2, size_t vl);
vfloat16m4_t vfnmacc_vf_f16m4_m (vbool4_t mask, vfloat16m4_t vd,
    float16_t rs1, vfloat16m4_t vs2, size_t vl);
vfloat16m8_t vfnmacc_vv_f16m8_m (vbool2_t mask, vfloat16m8_t vd,
    vfloat16m8_t vs1, vfloat16m8_t vs2, size_t vl);
vfloat16m8_t vfnmacc_vf_f16m8_m (vbool2_t mask, vfloat16m8_t vd,
    float16_t rs1, vfloat16m8_t vs2, size_t vl);
vfloat32mf2_t vfnmacc_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    vd, vfloat32mf2_t vs1, vfloat32mf2_t vs2, size_t vl);
vfloat32mf2_t vfnmacc_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    vd, float32_t rs1, vfloat32mf2_t vs2, size_t vl);
vfloat32m1_t vfnmacc_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    vd, vfloat32m1_t vs1, vfloat32m1_t vs2, size_t vl);
vfloat32m1_t vfnmacc_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    vd, float32_t rs1, vfloat32m1_t vs2, size_t vl);
vfloat32m2_t vfnmacc_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    vd, vfloat32m2_t vs1, vfloat32m2_t vs2, size_t vl);
vfloat32m2_t vfnmacc_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    vd, float32_t rs1, vfloat32m2_t vs2, size_t vl);
vfloat32m4_t vfnmacc_vv_f32m4_m (vbool8_t mask, vfloat32m4_t vd,
    vfloat32m4_t vs1, vfloat32m4_t vs2, size_t vl);
vfloat32m4_t vfnmacc_vf_f32m4_m (vbool8_t mask, vfloat32m4_t vd,
    float32_t rs1, vfloat32m4_t vs2, size_t vl);
```

```
vfloat32m8_t vfnmacc_vv_f32m8_m (vbool4_t mask, vfloat32m8_t vd,
    vfloat32m8_t vs1, vfloat32m8_t vs2, size_t vl);
vfloat32m8_t vfnmacc_vf_f32m8_m (vbool4_t mask, vfloat32m8_t vd,
    float32_t rs1, vfloat32m8_t vs2, size_t vl);
vfloat64m1_t vfnmacc_vv_f64m1_m (vbool64_t mask, vfloat64m1_t
    vd, vfloat64m1_t vs1, vfloat64m1_t vs2, size_t vl);
vfloat64m1_t vfnmacc_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    vd, float64_t rs1, vfloat64m1_t vs2, size_t vl);
vfloat64m2_t vfnmacc_vv_f64m2_m (vbool32_t mask, vfloat64m2_t
    vd, vfloat64m2_t vs1, vfloat64m2_t vs2, size_t vl);
vfloat64m2_t vfnmacc_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    vd, float64_t rs1, vfloat64m2_t vs2, size_t vl);
vfloat64m4_t vfnmacc_vv_f64m4_m (vbool16_t mask, vfloat64m4_t
    vd, vfloat64m4_t vs1, vfloat64m4_t vs2, size_t vl);
vfloat64m4_t vfnmacc_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    vd, float64_t rs1, vfloat64m4_t vs2, size_t vl);
vfloat64m8_t vfnmacc_vv_f64m8_m (vbool8_t mask, vfloat64m8_t vd,
    vfloat64m8_t vs1, vfloat64m8_t vs2, size_t vl);
vfloat64m8_t vfnmacc_vf_f64m8_m (vbool8_t mask, vfloat64m8_t vd,
    float64_t rs1, vfloat64m8_t vs2, size_t vl);
vfloat16mf4_t vfmsac_vv_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    vd, vfloat16mf4_t vs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf4_t vfmsac_vf_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    vd, float16_t rs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf2_t vfmsac_vv_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    vd, vfloat16mf2_t vs1, vfloat16mf2_t vs2, size_t vl);
vfloat16mf2_t vfmsac_vf_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    vd, float16_t rs1, vfloat16mf2_t vs2, size_t vl);
vfloat16m1_t vfmsac_vv_f16m1_m (vbool16_t mask, vfloat16m1_t vd,
    vfloat16m1_t vs1, vfloat16m1_t vs2, size_t vl);
vfloat16m1_t vfmsac_vf_f16m1_m (vbool16_t mask, vfloat16m1_t vd,
    float16_t rs1, vfloat16m1_t vs2, size_t vl);
vfloat16m2_t vfmsac_vv_f16m2_m (vbool8_t mask, vfloat16m2_t vd,
    vfloat16m2_t vs1, vfloat16m2_t vs2, size_t vl);
vfloat16m2_t vfmsac_vf_f16m2_m (vbool8_t mask, vfloat16m2_t vd,
    float16_t rs1, vfloat16m2_t vs2, size_t vl);
vfloat16m4_t vfmsac_vv_f16m4_m (vbool4_t mask, vfloat16m4_t vd,
    vfloat16m4_t vs1, vfloat16m4_t vs2, size_t vl);
vfloat16m4_t vfmsac_vf_f16m4_m (vbool4_t mask, vfloat16m4_t vd,
    float16_t rs1, vfloat16m4_t vs2, size_t vl);
vfloat16m8_t vfmsac_vv_f16m8_m (vbool2_t mask, vfloat16m8_t vd,
    vfloat16m8_t vs1, vfloat16m8_t vs2, size_t vl);
vfloat16m8_t vfmsac_vf_f16m8_m (vbool2_t mask, vfloat16m8_t vd,
    float16_t rs1, vfloat16m8_t vs2, size_t vl);
vfloat32mf2_t vfmsac_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    vd, vfloat32mf2_t vs1, vfloat32mf2_t vs2, size_t vl);
```

```
vfloat32mf2_t vfmsac_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    vd, float32_t rs1, vfloat32mf2_t vs2, size_t vl);
vfloat32m1_t vfmsac_vv_f32m1_m (vbool32_t mask, vfloat32m1_t vd,
    vfloat32m1_t vs1, vfloat32m1_t vs2, size_t vl);
vfloat32m1_t vfmsac_vf_f32m1_m (vbool32_t mask, vfloat32m1_t vd,
    float32_t rs1, vfloat32m1_t vs2, size_t vl);
vfloat32m2_t vfmsac_vv_f32m2_m (vbool16_t mask, vfloat32m2_t vd,
    vfloat32m2_t vs1, vfloat32m2_t vs2, size_t vl);
vfloat32m2_t vfmsac_vf_f32m2_m (vbool16_t mask, vfloat32m2_t vd,
    float32_t rs1, vfloat32m2_t vs2, size_t vl);
vfloat32m4_t vfmsac_vv_f32m4_m (vbool8_t mask, vfloat32m4_t vd,
    vfloat32m4_t vs1, vfloat32m4_t vs2, size_t vl);
vfloat32m4_t vfmsac_vf_f32m4_m (vbool8_t mask, vfloat32m4_t vd,
    float32_t rs1, vfloat32m4_t vs2, size_t vl);
vfloat32m8_t vfmsac_vv_f32m8_m (vbool4_t mask, vfloat32m8_t vd,
    vfloat32m8_t vs1, vfloat32m8_t vs2, size_t vl);
vfloat32m8_t vfmsac_vf_f32m8_m (vbool4_t mask, vfloat32m8_t vd,
    float32_t rs1, vfloat32m8_t vs2, size_t vl);
vfloat64m1_t vfmsac_vv_f64m1_m (vbool64_t mask, vfloat64m1_t vd,
    vfloat64m1_t vs1, vfloat64m1_t vs2, size_t vl);
vfloat64m1_t vfmsac_vf_f64m1_m (vbool64_t mask, vfloat64m1_t vd,
    float64_t rs1, vfloat64m1_t vs2, size_t vl);
vfloat64m2_t vfmsac_vv_f64m2_m (vbool32_t mask, vfloat64m2_t vd,
    vfloat64m2_t vs1, vfloat64m2_t vs2, size_t vl);
vfloat64m2_t vfmsac_vf_f64m2_m (vbool32_t mask, vfloat64m2_t vd,
    float64_t rs1, vfloat64m2_t vs2, size_t vl);
vfloat64m4_t vfmsac_vv_f64m4_m (vbool16_t mask, vfloat64m4_t vd,
    vfloat64m4_t vs1, vfloat64m4_t vs2, size_t vl);
vfloat64m4_t vfmsac_vf_f64m4_m (vbool16_t mask, vfloat64m4_t vd,
    float64_t rs1, vfloat64m4_t vs2, size_t vl);
vfloat64m8_t vfmsac_vv_f64m8_m (vbool8_t mask, vfloat64m8_t vd,
    vfloat64m8_t vs1, vfloat64m8_t vs2, size_t vl);
vfloat64m8_t vfmsac_vf_f64m8_m (vbool8_t mask, vfloat64m8_t vd,
    float64_t rs1, vfloat64m8_t vs2, size_t vl);
vfloat16mf4_t vfnmsac_vv_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    vd, vfloat16mf4_t vs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf4_t vfnmsac_vf_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    vd, float16_t rs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf2_t vfnmsac_vv_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    vd, vfloat16mf2_t vs1, vfloat16mf2_t vs2, size_t vl);
vfloat16mf2_t vfnmsac_vf_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    vd, float16_t rs1, vfloat16mf2_t vs2, size_t vl);
vfloat16m1_t vfnmsac_vv_f16m1_m (vbool16_t mask, vfloat16m1_t
    vd, vfloat16m1_t vs1, vfloat16m1_t vs2, size_t vl);
vfloat16m1_t vfnmsac_vf_f16m1_m (vbool16_t mask, vfloat16m1_t
    vd, float16_t rs1, vfloat16m1_t vs2, size_t vl);
```

```
vfloat16m2_t vfnmsac_vv_f16m2_m (vbool8_t mask, vfloat16m2_t vd,
    vfloat16m2_t vs1, vfloat16m2_t vs2, size_t vl);
vfloat16m2_t vfnmsac_vf_f16m2_m (vbool8_t mask, vfloat16m2_t vd,
    float16_t rs1, vfloat16m2_t vs2, size_t vl);
vfloat16m4_t vfnmsac_vv_f16m4_m (vbool4_t mask, vfloat16m4_t vd,
    vfloat16m4_t vs1, vfloat16m4_t vs2, size_t vl);
vfloat16m4_t vfnmsac_vf_f16m4_m (vbool4_t mask, vfloat16m4_t vd,
    float16_t rs1, vfloat16m4_t vs2, size_t vl);
vfloat16m8_t vfnmsac_vv_f16m8_m (vbool2_t mask, vfloat16m8_t vd,
    vfloat16m8_t vs1, vfloat16m8_t vs2, size_t vl);
vfloat16m8_t vfnmsac_vf_f16m8_m (vbool2_t mask, vfloat16m8_t vd,
    float16_t rs1, vfloat16m8_t vs2, size_t vl);
vfloat32mf2_t vfnmsac_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    vd, vfloat32mf2_t vs1, vfloat32mf2_t vs2, size_t vl);
vfloat32mf2_t vfnmsac_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    vd, float32_t rs1, vfloat32mf2_t vs2, size_t vl);
vfloat32m1_t vfnmsac_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    vd, vfloat32m1_t vs1, vfloat32m1_t vs2, size_t vl);
vfloat32m1_t vfnmsac_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    vd, float32_t rs1, vfloat32m1_t vs2, size_t vl);
vfloat32m2_t vfnmsac_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
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    vd, float32_t rs1, vfloat32m2_t vs2, size_t vl);
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    vfloat32m4_t vs1, vfloat32m4_t vs2, size_t vl);
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    float32_t rs1, vfloat32m4_t vs2, size_t vl);
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    vfloat32m8_t vs1, vfloat32m8_t vs2, size_t vl);
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    vd, vfloat64m1_t vs1, vfloat64m1_t vs2, size_t vl);
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    vd, float64_t rs1, vfloat64m1_t vs2, size_t vl);
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    vd, vfloat64m2_t vs1, vfloat64m2_t vs2, size_t vl);
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    vd, float64_t rs1, vfloat64m2_t vs2, size_t vl);
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    vd, vfloat64m4_t vs1, vfloat64m4_t vs2, size_t vl);
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    vd, float64_t rs1, vfloat64m4_t vs2, size_t vl);
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```

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vfloat64m8_t vfnmsac_vf_f64m8_m (vbool8_t mask, vfloat64m8_t vd,
    float64_t rs1, vfloat64m8_t vs2, size_t vl);
vfloat16mf4_t vfmadd_vv_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    vd, vfloat16mf4_t vs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf4_t vfmadd_vf_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    vd, float16_t rs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf2_t vfmadd_vv_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    vd, vfloat16mf2_t vs1, vfloat16mf2_t vs2, size_t vl);
vfloat16mf2_t vfmadd_vf_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    vd, float16_t rs1, vfloat16mf2_t vs2, size_t vl);
vfloat16m1_t vfmadd_vv_f16m1_m (vbool16_t mask, vfloat16m1_t vd,
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vfloat16mf2_t vfnmadd_vv_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    vd, vfloat16mf2_t vs1, vfloat16mf2_t vs2, size_t vl);
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    vd, vfloat32m1_t vs1, vfloat32m1_t vs2, size_t vl);
```

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vfloat32m1_t vfnmadd_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
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vfloat32m2_t vfnmadd_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    vd, vfloat32m2_t vs1, vfloat32m2_t vs2, size_t vl);
vfloat32m2_t vfnmadd_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    vd, float32_t rs1, vfloat32m2_t vs2, size_t vl);
vfloat32m4_t vfnmadd_vv_f32m4_m (vbool8_t mask, vfloat32m4_t vd,
    vfloat32m4_t vs1, vfloat32m4_t vs2, size_t vl);
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    float32_t rs1, vfloat32m4_t vs2, size_t vl);
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    vd, vfloat64m4_t vs1, vfloat64m4_t vs2, size_t vl);
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    vd, float64_t rs1, vfloat64m4_t vs2, size_t vl);
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    vfloat64m8_t vs1, vfloat64m8_t vs2, size_t vl);
vfloat64m8_t vfnmadd_vf_f64m8_m (vbool8_t mask, vfloat64m8_t vd,
    float64_t rs1, vfloat64m8_t vs2, size_t vl);
vfloat16mf4_t vfmsub_vv_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    vd, vfloat16mf4_t vs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf4_t vfmsub_vf_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    vd, float16_t rs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf2_t vfmsub_vv_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    vd, vfloat16mf2_t vs1, vfloat16mf2_t vs2, size_t vl);
vfloat16mf2_t vfmsub_vf_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    vd, float16_t rs1, vfloat16mf2_t vs2, size_t vl);
vfloat16m1_t vfmsub_vv_f16m1_m (vbool16_t mask, vfloat16m1_t vd,
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    float16_t rs1, vfloat16m2_t vs2, size_t vl);
```

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vfloat16m4_t vfmsub_vv_f16m4_m (vbool4_t mask, vfloat16m4_t vd,
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vfloat16m4_t vfmsub_vf_f16m4_m (vbool4_t mask, vfloat16m4_t vd,
    float16_t rs1, vfloat16m4_t vs2, size_t vl);
vfloat16m8_t vfmsub_vv_f16m8_m (vbool2_t mask, vfloat16m8_t vd,
    vfloat16m8_t vs1, vfloat16m8_t vs2, size_t vl);
vfloat16m8_t vfmsub_vf_f16m8_m (vbool2_t mask, vfloat16m8_t vd,
    float16_t rs1, vfloat16m8_t vs2, size_t vl);
vfloat32mf2_t vfmsub_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    vd, vfloat32mf2_t vs1, vfloat32mf2_t vs2, size_t vl);
vfloat32mf2_t vfmsub_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    vd, float32_t rs1, vfloat32mf2_t vs2, size_t vl);
vfloat32m1_t vfmsub_vv_f32m1_m (vbool32_t mask, vfloat32m1_t vd,
    vfloat32m1_t vs1, vfloat32m1_t vs2, size_t vl);
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vfloat32m4_t vfmsub_vf_f32m4_m (vbool8_t mask, vfloat32m4_t vd,
    float32_t rs1, vfloat32m4_t vs2, size_t vl);
vfloat32m8_t vfmsub_vv_f32m8_m (vbool4_t mask, vfloat32m8_t vd,
    vfloat32m8_t vs1, vfloat32m8_t vs2, size_t vl);
vfloat32m8_t vfmsub_vf_f32m8_m (vbool4_t mask, vfloat32m8_t vd,
    float32_t rs1, vfloat32m8_t vs2, size_t vl);
vfloat64m1_t vfmsub_vv_f64m1_m (vbool64_t mask, vfloat64m1_t vd,
    vfloat64m1_t vs1, vfloat64m1_t vs2, size_t vl);
vfloat64m1_t vfmsub_vf_f64m1_m (vbool64_t mask, vfloat64m1_t vd,
    float64_t rs1, vfloat64m1_t vs2, size_t vl);
vfloat64m2_t vfmsub_vv_f64m2_m (vbool32_t mask, vfloat64m2_t vd,
    vfloat64m2_t vs1, vfloat64m2_t vs2, size_t vl);
vfloat64m2_t vfmsub_vf_f64m2_m (vbool32_t mask, vfloat64m2_t vd,
    float64_t rs1, vfloat64m2_t vs2, size_t vl);
vfloat64m4_t vfmsub_vv_f64m4_m (vbool16_t mask, vfloat64m4_t vd,
    vfloat64m4_t vs1, vfloat64m4_t vs2, size_t vl);
vfloat64m4_t vfmsub_vf_f64m4_m (vbool16_t mask, vfloat64m4_t vd,
    float64_t rs1, vfloat64m4_t vs2, size_t vl);
vfloat64m8_t vfmsub_vv_f64m8_m (vbool8_t mask, vfloat64m8_t vd,
    vfloat64m8_t vs1, vfloat64m8_t vs2, size_t vl);
vfloat64m8_t vfmsub_vf_f64m8_m (vbool8_t mask, vfloat64m8_t vd,
    float64_t rs1, vfloat64m8_t vs2, size_t vl);
vfloat16mf4_t vfnmsub_vv_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    vd, vfloat16mf4_t vs1, vfloat16mf4_t vs2, size_t vl);
```

```c
vfloat16mf4_t vfnmsub_vf_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    vd, float16_t rs1, vfloat16mf4_t vs2, size_t vl);
vfloat16mf2_t vfnmsub_vv_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    vd, vfloat16mf2_t vs1, vfloat16mf2_t vs2, size_t vl);
vfloat16mf2_t vfnmsub_vf_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    vd, float16_t rs1, vfloat16mf2_t vs2, size_t vl);
vfloat16m1_t vfnmsub_vv_f16m1_m (vbool16_t mask, vfloat16m1_t
    vd, vfloat16m1_t vs1, vfloat16m1_t vs2, size_t vl);
vfloat16m1_t vfnmsub_vf_f16m1_m (vbool16_t mask, vfloat16m1_t
    vd, float16_t rs1, vfloat16m1_t vs2, size_t vl);
vfloat16m2_t vfnmsub_vv_f16m2_m (vbool8_t mask, vfloat16m2_t vd,
    vfloat16m2_t vs1, vfloat16m2_t vs2, size_t vl);
vfloat16m2_t vfnmsub_vf_f16m2_m (vbool8_t mask, vfloat16m2_t vd,
    float16_t rs1, vfloat16m2_t vs2, size_t vl);
vfloat16m4_t vfnmsub_vv_f16m4_m (vbool4_t mask, vfloat16m4_t vd,
    vfloat16m4_t vs1, vfloat16m4_t vs2, size_t vl);
vfloat16m4_t vfnmsub_vf_f16m4_m (vbool4_t mask, vfloat16m4_t vd,
    float16_t rs1, vfloat16m4_t vs2, size_t vl);
vfloat16m8_t vfnmsub_vv_f16m8_m (vbool2_t mask, vfloat16m8_t vd,
    vfloat16m8_t vs1, vfloat16m8_t vs2, size_t vl);
vfloat16m8_t vfnmsub_vf_f16m8_m (vbool2_t mask, vfloat16m8_t vd,
    float16_t rs1, vfloat16m8_t vs2, size_t vl);
vfloat32mf2_t vfnmsub_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    vd, vfloat32mf2_t vs1, vfloat32mf2_t vs2, size_t vl);
vfloat32mf2_t vfnmsub_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    vd, float32_t rs1, vfloat32mf2_t vs2, size_t vl);
vfloat32m1_t vfnmsub_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    vd, vfloat32m1_t vs1, vfloat32m1_t vs2, size_t vl);
vfloat32m1_t vfnmsub_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    vd, float32_t rs1, vfloat32m1_t vs2, size_t vl);
vfloat32m2_t vfnmsub_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    vd, vfloat32m2_t vs1, vfloat32m2_t vs2, size_t vl);
vfloat32m2_t vfnmsub_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    vd, float32_t rs1, vfloat32m2_t vs2, size_t vl);
vfloat32m4_t vfnmsub_vv_f32m4_m (vbool8_t mask, vfloat32m4_t vd,
    vfloat32m4_t vs1, vfloat32m4_t vs2, size_t vl);
vfloat32m4_t vfnmsub_vf_f32m4_m (vbool8_t mask, vfloat32m4_t vd,
    float32_t rs1, vfloat32m4_t vs2, size_t vl);
vfloat32m8_t vfnmsub_vv_f32m8_m (vbool4_t mask, vfloat32m8_t vd,
    vfloat32m8_t vs1, vfloat32m8_t vs2, size_t vl);
vfloat32m8_t vfnmsub_vf_f32m8_m (vbool4_t mask, vfloat32m8_t vd,
    float32_t rs1, vfloat32m8_t vs2, size_t vl);
vfloat64m1_t vfnmsub_vv_f64m1_m (vbool64_t mask, vfloat64m1_t
    vd, vfloat64m1_t vs1, vfloat64m1_t vs2, size_t vl);
vfloat64m1_t vfnmsub_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    vd, float64_t rs1, vfloat64m1_t vs2, size_t vl);
```

```
vfloat64m2_t vfnmsub_vv_f64m2_m (vbool32_t mask, vfloat64m2_t
    vd, vfloat64m2_t vs1, vfloat64m2_t vs2, size_t vl);
vfloat64m2_t vfnmsub_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    vd, float64_t rs1, vfloat64m2_t vs2, size_t vl);
vfloat64m4_t vfnmsub_vv_f64m4_m (vbool16_t mask, vfloat64m4_t
    vd, vfloat64m4_t vs1, vfloat64m4_t vs2, size_t vl);
vfloat64m4_t vfnmsub_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    vd, float64_t rs1, vfloat64m4_t vs2, size_t vl);
vfloat64m8_t vfnmsub_vv_f64m8_m (vbool8_t mask, vfloat64m8_t vd,
    vfloat64m8_t vs1, vfloat64m8_t vs2, size_t vl);
vfloat64m8_t vfnmsub_vf_f64m8_m (vbool8_t mask, vfloat64m8_t vd,
    float64_t rs1, vfloat64m8_t vs2, size_t vl);
```

Vector Widening Floating-Point Fused Multiply-Add Functions:

Prototypes:

```
vfloat32mf2_t vfwmacc_vv_f32mf2 (vfloat32mf2_t vd, vfloat16mf4_t
    vs1, vfloat16mf4_t vs2, size_t vl);
vfloat32mf2_t vfwmacc_vf_f32mf2 (vfloat32mf2_t vd, float16_t
    vs1, vfloat16mf4_t vs2, size_t vl);
vfloat32m1_t vfwmacc_vv_f32m1 (vfloat32m1_t vd, vfloat16mf2_t
    vs1, vfloat16mf2_t vs2, size_t vl);
vfloat32m1_t vfwmacc_vf_f32m1 (vfloat32m1_t vd, float16_t vs1,
    vfloat16mf2_t vs2, size_t vl);
vfloat32m2_t vfwmacc_vv_f32m2 (vfloat32m2_t vd, vfloat16m1_t
    vs1, vfloat16m1_t vs2, size_t vl);
vfloat32m2_t vfwmacc_vf_f32m2 (vfloat32m2_t vd, float16_t vs1,
    vfloat16m1_t vs2, size_t vl);
vfloat32m4_t vfwmacc_vv_f32m4 (vfloat32m4_t vd, vfloat16m2_t
    vs1, vfloat16m2_t vs2, size_t vl);
vfloat32m4_t vfwmacc_vf_f32m4 (vfloat32m4_t vd, float16_t vs1,
    vfloat16m2_t vs2, size_t vl);
vfloat32m8_t vfwmacc_vv_f32m8 (vfloat32m8_t vd, vfloat16m4_t
    vs1, vfloat16m4_t vs2, size_t vl);
vfloat32m8_t vfwmacc_vf_f32m8 (vfloat32m8_t vd, float16_t vs1,
    vfloat16m4_t vs2, size_t vl);
vfloat64m1_t vfwmacc_vv_f64m1 (vfloat64m1_t vd, vfloat32mf2_t
    vs1, vfloat32mf2_t vs2, size_t vl);
vfloat64m1_t vfwmacc_vf_f64m1 (vfloat64m1_t vd, float32_t vs1,
    vfloat32mf2_t vs2, size_t vl);
vfloat64m2_t vfwmacc_vv_f64m2 (vfloat64m2_t vd, vfloat32m1_t
    vs1, vfloat32m1_t vs2, size_t vl);
vfloat64m2_t vfwmacc_vf_f64m2 (vfloat64m2_t vd, float32_t vs1,
    vfloat32m1_t vs2, size_t vl);
```

```
vfloat64m4_t vfwmacc_vv_f64m4 (vfloat64m4_t vd, vfloat32m2_t
    vs1, vfloat32m2_t vs2, size_t vl);
vfloat64m4_t vfwmacc_vf_f64m4 (vfloat64m4_t vd, float32_t vs1,
    vfloat32m2_t vs2, size_t vl);
vfloat64m8_t vfwmacc_vv_f64m8 (vfloat64m8_t vd, vfloat32m4_t
    vs1, vfloat32m4_t vs2, size_t vl);
vfloat64m8_t vfwmacc_vf_f64m8 (vfloat64m8_t vd, float32_t vs1,
    vfloat32m4_t vs2, size_t vl);
vfloat32mf2_t vfwnmacc_vv_f32mf2 (vfloat32mf2_t vd,
    vfloat16mf4_t vs1, vfloat16mf4_t vs2, size_t vl);
vfloat32mf2_t vfwnmacc_vf_f32mf2 (vfloat32mf2_t vd, float16_t
    vs1, vfloat16mf4_t vs2, size_t vl);
vfloat32m1_t vfwnmacc_vv_f32m1 (vfloat32m1_t vd, vfloat16mf2_t
    vs1, vfloat16mf2_t vs2, size_t vl);
vfloat32m1_t vfwnmacc_vf_f32m1 (vfloat32m1_t vd, float16_t vs1,
    vfloat16mf2_t vs2, size_t vl);
vfloat32m2_t vfwnmacc_vv_f32m2 (vfloat32m2_t vd, vfloat16m1_t
    vs1, vfloat16m1_t vs2, size_t vl);
vfloat32m2_t vfwnmacc_vf_f32m2 (vfloat32m2_t vd, float16_t vs1,
    vfloat16m1_t vs2, size_t vl);
vfloat32m4_t vfwnmacc_vv_f32m4 (vfloat32m4_t vd, vfloat16m2_t
    vs1, vfloat16m2_t vs2, size_t vl);
vfloat32m4_t vfwnmacc_vf_f32m4 (vfloat32m4_t vd, float16_t vs1,
    vfloat16m2_t vs2, size_t vl);
vfloat32m8_t vfwnmacc_vv_f32m8 (vfloat32m8_t vd, vfloat16m4_t
    vs1, vfloat16m4_t vs2, size_t vl);
vfloat32m8_t vfwnmacc_vf_f32m8 (vfloat32m8_t vd, float16_t vs1,
    vfloat16m4_t vs2, size_t vl);
vfloat64m1_t vfwnmacc_vv_f64m1 (vfloat64m1_t vd, vfloat32mf2_t
    vs1, vfloat32mf2_t vs2, size_t vl);
vfloat64m1_t vfwnmacc_vf_f64m1 (vfloat64m1_t vd, float32_t vs1,
    vfloat32mf2_t vs2, size_t vl);
vfloat64m2_t vfwnmacc_vv_f64m2 (vfloat64m2_t vd, vfloat32m1_t
    vs1, vfloat32m1_t vs2, size_t vl);
vfloat64m2_t vfwnmacc_vf_f64m2 (vfloat64m2_t vd, float32_t vs1,
    vfloat32m1_t vs2, size_t vl);
vfloat64m4_t vfwnmacc_vv_f64m4 (vfloat64m4_t vd, vfloat32m2_t
    vs1, vfloat32m2_t vs2, size_t vl);
vfloat64m4_t vfwnmacc_vf_f64m4 (vfloat64m4_t vd, float32_t vs1,
    vfloat32m2_t vs2, size_t vl);
vfloat64m8_t vfwnmacc_vv_f64m8 (vfloat64m8_t vd, vfloat32m4_t
    vs1, vfloat32m4_t vs2, size_t vl);
vfloat64m8_t vfwnmacc_vf_f64m8 (vfloat64m8_t vd, float32_t vs1,
    vfloat32m4_t vs2, size_t vl);
vfloat32mf2_t vfwmsac_vv_f32mf2 (vfloat32mf2_t vd, vfloat16mf4_t
    vs1, vfloat16mf4_t vs2, size_t vl);
```

```
vfloat32mf2_t vfwmsac_vf_f32mf2 (vfloat32mf2_t vd, float16_t
    vs1, vfloat16mf4_t vs2, size_t vl);
vfloat32m1_t vfwmsac_vv_f32m1 (vfloat32m1_t vd, vfloat16mf2_t
    vs1, vfloat16mf2_t vs2, size_t vl);
vfloat32m1_t vfwmsac_vf_f32m1 (vfloat32m1_t vd, float16_t vs1,
    vfloat16mf2_t vs2, size_t vl);
vfloat32m2_t vfwmsac_vv_f32m2 (vfloat32m2_t vd, vfloat16m1_t
    vs1, vfloat16m1_t vs2, size_t vl);
vfloat32m2_t vfwmsac_vf_f32m2 (vfloat32m2_t vd, float16_t vs1,
    vfloat16m1_t vs2, size_t vl);
vfloat32m4_t vfwmsac_vv_f32m4 (vfloat32m4_t vd, vfloat16m2_t
    vs1, vfloat16m2_t vs2, size_t vl);
vfloat32m4_t vfwmsac_vf_f32m4 (vfloat32m4_t vd, float16_t vs1,
    vfloat16m2_t vs2, size_t vl);
vfloat32m8_t vfwmsac_vv_f32m8 (vfloat32m8_t vd, vfloat16m4_t
    vs1, vfloat16m4_t vs2, size_t vl);
vfloat32m8_t vfwmsac_vf_f32m8 (vfloat32m8_t vd, float16_t vs1,
    vfloat16m4_t vs2, size_t vl);
vfloat64m1_t vfwmsac_vv_f64m1 (vfloat64m1_t vd, vfloat32mf2_t
    vs1, vfloat32mf2_t vs2, size_t vl);
vfloat64m1_t vfwmsac_vf_f64m1 (vfloat64m1_t vd, float32_t vs1,
    vfloat32mf2_t vs2, size_t vl);
vfloat64m2_t vfwmsac_vv_f64m2 (vfloat64m2_t vd, vfloat32m1_t
    vs1, vfloat32m1_t vs2, size_t vl);
vfloat64m2_t vfwmsac_vf_f64m2 (vfloat64m2_t vd, float32_t vs1,
    vfloat32m1_t vs2, size_t vl);
vfloat64m4_t vfwmsac_vv_f64m4 (vfloat64m4_t vd, vfloat32m2_t
    vs1, vfloat32m2_t vs2, size_t vl);
vfloat64m4_t vfwmsac_vf_f64m4 (vfloat64m4_t vd, float32_t vs1,
    vfloat32m2_t vs2, size_t vl);
vfloat64m8_t vfwmsac_vv_f64m8 (vfloat64m8_t vd, vfloat32m4_t
    vs1, vfloat32m4_t vs2, size_t vl);
vfloat64m8_t vfwmsac_vf_f64m8 (vfloat64m8_t vd, float32_t vs1,
    vfloat32m4_t vs2, size_t vl);
vfloat32mf2_t vfwnmsac_vv_f32mf2 (vfloat32mf2_t vd,
    vfloat16mf4_t vs1, vfloat16mf4_t vs2, size_t vl);
vfloat32mf2_t vfwnmsac_vf_f32mf2 (vfloat32mf2_t vd, float16_t
    vs1, vfloat16mf4_t vs2, size_t vl);
vfloat32m1_t vfwnmsac_vv_f32m1 (vfloat32m1_t vd, vfloat16mf2_t
    vs1, vfloat16mf2_t vs2, size_t vl);
vfloat32m1_t vfwnmsac_vf_f32m1 (vfloat32m1_t vd, float16_t vs1,
    vfloat16mf2_t vs2, size_t vl);
vfloat32m2_t vfwnmsac_vv_f32m2 (vfloat32m2_t vd, vfloat16m1_t
    vs1, vfloat16m1_t vs2, size_t vl);
vfloat32m2_t vfwnmsac_vf_f32m2 (vfloat32m2_t vd, float16_t vs1,
    vfloat16m1_t vs2, size_t vl);
```

```
vfloat32m4_t vfwnmsac_vv_f32m4 (vfloat32m4_t vd, vfloat16m2_t
    vs1, vfloat16m2_t vs2, size_t vl);
vfloat32m4_t vfwnmsac_vf_f32m4 (vfloat32m4_t vd, float16_t vs1,
    vfloat16m2_t vs2, size_t vl);
vfloat32m8_t vfwnmsac_vv_f32m8 (vfloat32m8_t vd, vfloat16m4_t
    vs1, vfloat16m4_t vs2, size_t vl);
vfloat32m8_t vfwnmsac_vf_f32m8 (vfloat32m8_t vd, float16_t vs1,
    vfloat16m4_t vs2, size_t vl);
vfloat64m1_t vfwnmsac_vv_f64m1 (vfloat64m1_t vd, vfloat32mf2_t
    vs1, vfloat32mf2_t vs2, size_t vl);
vfloat64m1_t vfwnmsac_vf_f64m1 (vfloat64m1_t vd, float32_t vs1,
    vfloat32mf2_t vs2, size_t vl);
vfloat64m2_t vfwnmsac_vv_f64m2 (vfloat64m2_t vd, vfloat32m1_t
    vs1, vfloat32m1_t vs2, size_t vl);
vfloat64m2_t vfwnmsac_vf_f64m2 (vfloat64m2_t vd, float32_t vs1,
    vfloat32m1_t vs2, size_t vl);
vfloat64m4_t vfwnmsac_vv_f64m4 (vfloat64m4_t vd, vfloat32m2_t
    vs1, vfloat32m2_t vs2, size_t vl);
vfloat64m4_t vfwnmsac_vf_f64m4 (vfloat64m4_t vd, float32_t vs1,
    vfloat32m2_t vs2, size_t vl);
vfloat64m8_t vfwnmsac_vv_f64m8 (vfloat64m8_t vd, vfloat32m4_t
    vs1, vfloat32m4_t vs2, size_t vl);
vfloat64m8_t vfwnmsac_vf_f64m8 (vfloat64m8_t vd, float32_t vs1,
    vfloat32m4_t vs2, size_t vl);
// masked functions
vfloat32mf2_t vfwmacc_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    vd, vfloat16mf4_t vs1, vfloat16mf4_t vs2, size_t vl);
vfloat32mf2_t vfwmacc_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    vd, float16_t vs1, vfloat16mf4_t vs2, size_t vl);
vfloat32m1_t vfwmacc_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    vd, vfloat16mf2_t vs1, vfloat16mf2_t vs2, size_t vl);
vfloat32m1_t vfwmacc_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    vd, float16_t vs1, vfloat16mf2_t vs2, size_t vl);
vfloat32m2_t vfwmacc_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    vd, vfloat16m1_t vs1, vfloat16m1_t vs2, size_t vl);
vfloat32m2_t vfwmacc_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    vd, float16_t vs1, vfloat16m1_t vs2, size_t vl);
vfloat32m4_t vfwmacc_vv_f32m4_m (vbool8_t mask, vfloat32m4_t vd,
    vfloat16m2_t vs1, vfloat16m2_t vs2, size_t vl);
vfloat32m4_t vfwmacc_vf_f32m4_m (vbool8_t mask, vfloat32m4_t vd,
    float16_t vs1, vfloat16m2_t vs2, size_t vl);
vfloat32m8_t vfwmacc_vv_f32m8_m (vbool4_t mask, vfloat32m8_t vd,
    vfloat16m4_t vs1, vfloat16m4_t vs2, size_t vl);
vfloat32m8_t vfwmacc_vf_f32m8_m (vbool4_t mask, vfloat32m8_t vd,
    float16_t vs1, vfloat16m4_t vs2, size_t vl);
```

```
vfloat64m1_t vfwmacc_vv_f64m1_m (vbool64_t mask, vfloat64m1_t
    vd, vfloat32mf2_t vs1, vfloat32mf2_t vs2, size_t vl);
vfloat64m1_t vfwmacc_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    vd, float32_t vs1, vfloat32mf2_t vs2, size_t vl);
vfloat64m2_t vfwmacc_vv_f64m2_m (vbool32_t mask, vfloat64m2_t
    vd, vfloat32m1_t vs1, vfloat32m1_t vs2, size_t vl);
vfloat64m2_t vfwmacc_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    vd, float32_t vs1, vfloat32m1_t vs2, size_t vl);
vfloat64m4_t vfwmacc_vv_f64m4_m (vbool16_t mask, vfloat64m4_t
    vd, vfloat32m2_t vs1, vfloat32m2_t vs2, size_t vl);
vfloat64m4_t vfwmacc_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    vd, float32_t vs1, vfloat32m2_t vs2, size_t vl);
vfloat64m8_t vfwmacc_vv_f64m8_m (vbool8_t mask, vfloat64m8_t vd,
    vfloat32m4_t vs1, vfloat32m4_t vs2, size_t vl);
vfloat64m8_t vfwmacc_vf_f64m8_m (vbool8_t mask, vfloat64m8_t vd,
    float32_t vs1, vfloat32m4_t vs2, size_t vl);
vfloat32mf2_t vfwnmacc_vv_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t vd, vfloat16mf4_t vs1, vfloat16mf4_t vs2,
    size_t vl);
vfloat32mf2_t vfwnmacc_vf_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t vd, float16_t vs1, vfloat16mf4_t vs2, size_t
    vl);
vfloat32m1_t vfwnmacc_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    vd, vfloat16mf2_t vs1, vfloat16mf2_t vs2, size_t vl);
vfloat32m1_t vfwnmacc_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    vd, float16_t vs1, vfloat16mf2_t vs2, size_t vl);
vfloat32m2_t vfwnmacc_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    vd, vfloat16m1_t vs1, vfloat16m1_t vs2, size_t vl);
vfloat32m2_t vfwnmacc_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    vd, float16_t vs1, vfloat16m1_t vs2, size_t vl);
vfloat32m4_t vfwnmacc_vv_f32m4_m (vbool8_t mask, vfloat32m4_t
    vd, vfloat16m2_t vs1, vfloat16m2_t vs2, size_t vl);
vfloat32m4_t vfwnmacc_vf_f32m4_m (vbool8_t mask, vfloat32m4_t
    vd, float16_t vs1, vfloat16m2_t vs2, size_t vl);
vfloat32m8_t vfwnmacc_vv_f32m8_m (vbool4_t mask, vfloat32m8_t
    vd, vfloat16m4_t vs1, vfloat16m4_t vs2, size_t vl);
vfloat32m8_t vfwnmacc_vf_f32m8_m (vbool4_t mask, vfloat32m8_t
    vd, float16_t vs1, vfloat16m4_t vs2, size_t vl);
vfloat64m1_t vfwnmacc_vv_f64m1_m (vbool64_t mask, vfloat64m1_t
    vd, vfloat32mf2_t vs1, vfloat32mf2_t vs2, size_t vl);
vfloat64m1_t vfwnmacc_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    vd, float32_t vs1, vfloat32mf2_t vs2, size_t vl);
vfloat64m2_t vfwnmacc_vv_f64m2_m (vbool32_t mask, vfloat64m2_t
    vd, vfloat32m1_t vs1, vfloat32m1_t vs2, size_t vl);
vfloat64m2_t vfwnmacc_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    vd, float32_t vs1, vfloat32m1_t vs2, size_t vl);
```

```
vfloat64m4_t vfwnmacc_vv_f64m4_m (vbool16_t mask, vfloat64m4_t
    vd, vfloat32m2_t vs1, vfloat32m2_t vs2, size_t vl);
vfloat64m4_t vfwnmacc_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    vd, float32_t vs1, vfloat32m2_t vs2, size_t vl);
vfloat64m8_t vfwnmacc_vv_f64m8_m (vbool8_t mask, vfloat64m8_t
    vd, vfloat32m4_t vs1, vfloat32m4_t vs2, size_t vl);
vfloat64m8_t vfwnmacc_vf_f64m8_m (vbool8_t mask, vfloat64m8_t
    vd, float32_t vs1, vfloat32m4_t vs2, size_t vl);
vfloat32mf2_t vfwmsac_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    vd, vfloat16mf4_t vs1, vfloat16mf4_t vs2, size_t vl);
vfloat32mf2_t vfwmsac_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    vd, float16_t vs1, vfloat16mf4_t vs2, size_t vl);
vfloat32m1_t vfwmsac_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    vd, vfloat16mf2_t vs1, vfloat16mf2_t vs2, size_t vl);
vfloat32m1_t vfwmsac_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    vd, float16_t vs1, vfloat16mf2_t vs2, size_t vl);
vfloat32m2_t vfwmsac_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    vd, vfloat16m1_t vs1, vfloat16m1_t vs2, size_t vl);
vfloat32m2_t vfwmsac_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    vd, float16_t vs1, vfloat16m1_t vs2, size_t vl);
vfloat32m4_t vfwmsac_vv_f32m4_m (vbool8_t mask, vfloat32m4_t vd,
    vfloat16m2_t vs1, vfloat16m2_t vs2, size_t vl);
vfloat32m4_t vfwmsac_vf_f32m4_m (vbool8_t mask, vfloat32m4_t vd,
    float16_t vs1, vfloat16m2_t vs2, size_t vl);
vfloat32m8_t vfwmsac_vv_f32m8_m (vbool4_t mask, vfloat32m8_t vd,
    vfloat16m4_t vs1, vfloat16m4_t vs2, size_t vl);
vfloat32m8_t vfwmsac_vf_f32m8_m (vbool4_t mask, vfloat32m8_t vd,
    float16_t vs1, vfloat16m4_t vs2, size_t vl);
vfloat64m1_t vfwmsac_vv_f64m1_m (vbool64_t mask, vfloat64m1_t
    vd, vfloat32mf2_t vs1, vfloat32mf2_t vs2, size_t vl);
vfloat64m1_t vfwmsac_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    vd, float32_t vs1, vfloat32mf2_t vs2, size_t vl);
vfloat64m2_t vfwmsac_vv_f64m2_m (vbool32_t mask, vfloat64m2_t
    vd, vfloat32m1_t vs1, vfloat32m1_t vs2, size_t vl);
vfloat64m2_t vfwmsac_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    vd, float32_t vs1, vfloat32m1_t vs2, size_t vl);
vfloat64m4_t vfwmsac_vv_f64m4_m (vbool16_t mask, vfloat64m4_t
    vd, vfloat32m2_t vs1, vfloat32m2_t vs2, size_t vl);
vfloat64m4_t vfwmsac_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    vd, float32_t vs1, vfloat32m2_t vs2, size_t vl);
vfloat64m8_t vfwmsac_vv_f64m8_m (vbool8_t mask, vfloat64m8_t vd,
    vfloat32m4_t vs1, vfloat32m4_t vs2, size_t vl);
vfloat64m8_t vfwmsac_vf_f64m8_m (vbool8_t mask, vfloat64m8_t vd,
    float32_t vs1, vfloat32m4_t vs2, size_t vl);
vfloat32mf2_t vfwnmsac_vv_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t vd, vfloat16mf4_t vs1, vfloat16mf4_t vs2,
```

```
    size_t vl);
vfloat32mf2_t vfwnmsac_vf_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t vd, float16_t vs1, vfloat16mf4_t vs2, size_t
    vl);
vfloat32m1_t vfwnmsac_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    vd, vfloat16mf2_t vs1, vfloat16mf2_t vs2, size_t vl);
vfloat32m1_t vfwnmsac_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    vd, float16_t vs1, vfloat16mf2_t vs2, size_t vl);
vfloat32m2_t vfwnmsac_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    vd, vfloat16m1_t vs1, vfloat16m1_t vs2, size_t vl);
vfloat32m2_t vfwnmsac_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    vd, float16_t vs1, vfloat16m1_t vs2, size_t vl);
vfloat32m4_t vfwnmsac_vv_f32m4_m (vbool8_t mask, vfloat32m4_t
    vd, vfloat16m2_t vs1, vfloat16m2_t vs2, size_t vl);
vfloat32m4_t vfwnmsac_vf_f32m4_m (vbool8_t mask, vfloat32m4_t
    vd, float16_t vs1, vfloat16m2_t vs2, size_t vl);
vfloat32m8_t vfwnmsac_vv_f32m8_m (vbool4_t mask, vfloat32m8_t
    vd, vfloat16m4_t vs1, vfloat16m4_t vs2, size_t vl);
vfloat32m8_t vfwnmsac_vf_f32m8_m (vbool4_t mask, vfloat32m8_t
    vd, float16_t vs1, vfloat16m4_t vs2, size_t vl);
vfloat64m1_t vfwnmsac_vv_f64m1_m (vbool64_t mask, vfloat64m1_t
    vd, vfloat32mf2_t vs1, vfloat32mf2_t vs2, size_t vl);
vfloat64m1_t vfwnmsac_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    vd, float32_t vs1, vfloat32mf2_t vs2, size_t vl);
vfloat64m2_t vfwnmsac_vv_f64m2_m (vbool32_t mask, vfloat64m2_t
    vd, vfloat32m1_t vs1, vfloat32m1_t vs2, size_t vl);
vfloat64m2_t vfwnmsac_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    vd, float32_t vs1, vfloat32m1_t vs2, size_t vl);
vfloat64m4_t vfwnmsac_vv_f64m4_m (vbool16_t mask, vfloat64m4_t
    vd, vfloat32m2_t vs1, vfloat32m2_t vs2, size_t vl);
vfloat64m4_t vfwnmsac_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    vd, float32_t vs1, vfloat32m2_t vs2, size_t vl);
vfloat64m8_t vfwnmsac_vv_f64m8_m (vbool8_t mask, vfloat64m8_t
    vd, vfloat32m4_t vs1, vfloat32m4_t vs2, size_t vl);
vfloat64m8_t vfwnmsac_vf_f64m8_m (vbool8_t mask, vfloat64m8_t
    vd, float32_t vs1, vfloat32m4_t vs2, size_t vl);
```

Vector Floating-Point Square-Root Functions:

Prototypes:

```
vfloat16mf4_t vfsqrt_v_f16mf4 (vfloat16mf4_t op1, size_t vl);
vfloat16mf2_t vfsqrt_v_f16mf2 (vfloat16mf2_t op1, size_t vl);
vfloat16m1_t vfsqrt_v_f16m1 (vfloat16m1_t op1, size_t vl);
vfloat16m2_t vfsqrt_v_f16m2 (vfloat16m2_t op1, size_t vl);
vfloat16m4_t vfsqrt_v_f16m4 (vfloat16m4_t op1, size_t vl);
```

```
vfloat16m8_t vfsqrt_v_f16m8 (vfloat16m8_t op1, size_t vl);
vfloat32mf2_t vfsqrt_v_f32mf2 (vfloat32mf2_t op1, size_t vl);
vfloat32m1_t vfsqrt_v_f32m1 (vfloat32m1_t op1, size_t vl);
vfloat32m2_t vfsqrt_v_f32m2 (vfloat32m2_t op1, size_t vl);
vfloat32m4_t vfsqrt_v_f32m4 (vfloat32m4_t op1, size_t vl);
vfloat32m8_t vfsqrt_v_f32m8 (vfloat32m8_t op1, size_t vl);
vfloat64m1_t vfsqrt_v_f64m1 (vfloat64m1_t op1, size_t vl);
vfloat64m2_t vfsqrt_v_f64m2 (vfloat64m2_t op1, size_t vl);
vfloat64m4_t vfsqrt_v_f64m4 (vfloat64m4_t op1, size_t vl);
vfloat64m8_t vfsqrt_v_f64m8 (vfloat64m8_t op1, size_t vl);
// masked functions
vfloat16mf4_t vfsqrt_v_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, size_t vl);
vfloat16mf2_t vfsqrt_v_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, size_t vl);
vfloat16m1_t vfsqrt_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, size_t vl);
vfloat16m2_t vfsqrt_v_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, size_t vl);
vfloat16m4_t vfsqrt_v_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, size_t vl);
vfloat16m8_t vfsqrt_v_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, size_t vl);
vfloat32mf2_t vfsqrt_v_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, size_t vl);
vfloat32m1_t vfsqrt_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, size_t vl);
vfloat32m2_t vfsqrt_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, size_t vl);
vfloat32m4_t vfsqrt_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, size_t vl);
vfloat32m8_t vfsqrt_v_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, size_t vl);
vfloat64m1_t vfsqrt_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, size_t vl);
vfloat64m2_t vfsqrt_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, size_t vl);
vfloat64m4_t vfsqrt_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, size_t vl);
vfloat64m8_t vfsqrt_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, size_t vl);
```

Vector Floating-Point Reciprocal Square-Root Estimate Functions:

Prototypes:

```
vfloat16mf4_t vfrsqrt7_v_f16mf4 (vfloat16mf4_t op1, size_t vl);
vfloat16mf2_t vfrsqrt7_v_f16mf2 (vfloat16mf2_t op1, size_t vl);
vfloat16m1_t vfrsqrt7_v_f16m1 (vfloat16m1_t op1, size_t vl);
vfloat16m2_t vfrsqrt7_v_f16m2 (vfloat16m2_t op1, size_t vl);
vfloat16m4_t vfrsqrt7_v_f16m4 (vfloat16m4_t op1, size_t vl);
vfloat16m8_t vfrsqrt7_v_f16m8 (vfloat16m8_t op1, size_t vl);
vfloat32mf2_t vfrsqrt7_v_f32mf2 (vfloat32mf2_t op1, size_t vl);
vfloat32m1_t vfrsqrt7_v_f32m1 (vfloat32m1_t op1, size_t vl);
vfloat32m2_t vfrsqrt7_v_f32m2 (vfloat32m2_t op1, size_t vl);
vfloat32m4_t vfrsqrt7_v_f32m4 (vfloat32m4_t op1, size_t vl);
vfloat32m8_t vfrsqrt7_v_f32m8 (vfloat32m8_t op1, size_t vl);
vfloat64m1_t vfrsqrt7_v_f64m1 (vfloat64m1_t op1, size_t vl);
vfloat64m2_t vfrsqrt7_v_f64m2 (vfloat64m2_t op1, size_t vl);
vfloat64m4_t vfrsqrt7_v_f64m4 (vfloat64m4_t op1, size_t vl);
vfloat64m8_t vfrsqrt7_v_f64m8 (vfloat64m8_t op1, size_t vl);
// masked functions
vfloat16mf4_t vfrsqrt7_v_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, size_t vl);
vfloat16mf2_t vfrsqrt7_v_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, size_t vl);
vfloat16m1_t vfrsqrt7_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, size_t vl);
vfloat16m2_t vfrsqrt7_v_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, size_t vl);
vfloat16m4_t vfrsqrt7_v_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, size_t vl);
vfloat16m8_t vfrsqrt7_v_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, size_t vl);
vfloat32mf2_t vfrsqrt7_v_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, size_t vl);
vfloat32m1_t vfrsqrt7_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, size_t vl);
vfloat32m2_t vfrsqrt7_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, size_t vl);
vfloat32m4_t vfrsqrt7_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, size_t vl);
vfloat32m8_t vfrsqrt7_v_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, size_t vl);
vfloat64m1_t vfrsqrt7_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, size_t vl);
vfloat64m2_t vfrsqrt7_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, size_t vl);
vfloat64m4_t vfrsqrt7_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, size_t vl);
vfloat64m8_t vfrsqrt7_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, size_t vl);
```

Vector Floating-Point Reciprocal Estimate Functions:

Prototypes:

```
vfloat16mf4_t vfrec7_v_f16mf4 (vfloat16mf4_t op1, size_t vl);
vfloat16mf2_t vfrec7_v_f16mf2 (vfloat16mf2_t op1, size_t vl);
vfloat16m1_t vfrec7_v_f16m1 (vfloat16m1_t op1, size_t vl);
vfloat16m2_t vfrec7_v_f16m2 (vfloat16m2_t op1, size_t vl);
vfloat16m4_t vfrec7_v_f16m4 (vfloat16m4_t op1, size_t vl);
vfloat16m8_t vfrec7_v_f16m8 (vfloat16m8_t op1, size_t vl);
vfloat32mf2_t vfrec7_v_f32mf2 (vfloat32mf2_t op1, size_t vl);
vfloat32m1_t vfrec7_v_f32m1 (vfloat32m1_t op1, size_t vl);
vfloat32m2_t vfrec7_v_f32m2 (vfloat32m2_t op1, size_t vl);
vfloat32m4_t vfrec7_v_f32m4 (vfloat32m4_t op1, size_t vl);
vfloat32m8_t vfrec7_v_f32m8 (vfloat32m8_t op1, size_t vl);
vfloat64m1_t vfrec7_v_f64m1 (vfloat64m1_t op1, size_t vl);
vfloat64m2_t vfrec7_v_f64m2 (vfloat64m2_t op1, size_t vl);
vfloat64m4_t vfrec7_v_f64m4 (vfloat64m4_t op1, size_t vl);
vfloat64m8_t vfrec7_v_f64m8 (vfloat64m8_t op1, size_t vl);
// masked functions
vfloat16mf4_t vfrec7_v_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, size_t vl);
vfloat16mf2_t vfrec7_v_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, size_t vl);
vfloat16m1_t vfrec7_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, size_t vl);
vfloat16m2_t vfrec7_v_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, size_t vl);
vfloat16m4_t vfrec7_v_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, size_t vl);
vfloat16m8_t vfrec7_v_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, size_t vl);
vfloat32mf2_t vfrec7_v_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, size_t vl);
vfloat32m1_t vfrec7_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, size_t vl);
vfloat32m2_t vfrec7_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, size_t vl);
vfloat32m4_t vfrec7_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, size_t vl);
vfloat32m8_t vfrec7_v_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, size_t vl);
vfloat64m1_t vfrec7_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, size_t vl);
vfloat64m2_t vfrec7_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, size_t vl);
```

```
vfloat64m4_t vfrec7_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, size_t vl);
vfloat64m8_t vfrec7_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, size_t vl);
```

Vector Floating-Point MIN/MAX Functions:

Prototypes:

```
vfloat16mf4_t vfmin_vv_f16mf4 (vfloat16mf4_t op1, vfloat16mf4_t
    op2, size_t vl);
vfloat16mf4_t vfmin_vf_f16mf4 (vfloat16mf4_t op1, float16_t op2,
    size_t vl);
vfloat16mf2_t vfmin_vv_f16mf2 (vfloat16mf2_t op1, vfloat16mf2_t
    op2, size_t vl);
vfloat16mf2_t vfmin_vf_f16mf2 (vfloat16mf2_t op1, float16_t op2,
    size_t vl);
vfloat16m1_t vfmin_vv_f16m1 (vfloat16m1_t op1, vfloat16m1_t op2,
    size_t vl);
vfloat16m1_t vfmin_vf_f16m1 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
vfloat16m2_t vfmin_vv_f16m2 (vfloat16m2_t op1, vfloat16m2_t op2,
    size_t vl);
vfloat16m2_t vfmin_vf_f16m2 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
vfloat16m4_t vfmin_vv_f16m4 (vfloat16m4_t op1, vfloat16m4_t op2,
    size_t vl);
vfloat16m4_t vfmin_vf_f16m4 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vfloat16m8_t vfmin_vv_f16m8 (vfloat16m8_t op1, vfloat16m8_t op2,
    size_t vl);
vfloat16m8_t vfmin_vf_f16m8 (vfloat16m8_t op1, float16_t op2,
    size_t vl);
vfloat32mf2_t vfmin_vv_f32mf2 (vfloat32mf2_t op1, vfloat32mf2_t
    op2, size_t vl);
vfloat32mf2_t vfmin_vf_f32mf2 (vfloat32mf2_t op1, float32_t op2,
    size_t vl);
vfloat32m1_t vfmin_vv_f32m1 (vfloat32m1_t op1, vfloat32m1_t op2,
    size_t vl);
vfloat32m1_t vfmin_vf_f32m1 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vfloat32m2_t vfmin_vv_f32m2 (vfloat32m2_t op1, vfloat32m2_t op2,
    size_t vl);
vfloat32m2_t vfmin_vf_f32m2 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
```

```
vfloat32m4_t vfmin_vv_f32m4 (vfloat32m4_t op1, vfloat32m4_t op2,
    size_t vl);
vfloat32m4_t vfmin_vf_f32m4 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
vfloat32m8_t vfmin_vv_f32m8 (vfloat32m8_t op1, vfloat32m8_t op2,
    size_t vl);
vfloat32m8_t vfmin_vf_f32m8 (vfloat32m8_t op1, float32_t op2,
    size_t vl);
vfloat64m1_t vfmin_vv_f64m1 (vfloat64m1_t op1, vfloat64m1_t op2,
    size_t vl);
vfloat64m1_t vfmin_vf_f64m1 (vfloat64m1_t op1, float64_t op2,
    size_t vl);
vfloat64m2_t vfmin_vv_f64m2 (vfloat64m2_t op1, vfloat64m2_t op2,
    size_t vl);
vfloat64m2_t vfmin_vf_f64m2 (vfloat64m2_t op1, float64_t op2,
    size_t vl);
vfloat64m4_t vfmin_vv_f64m4 (vfloat64m4_t op1, vfloat64m4_t op2,
    size_t vl);
vfloat64m4_t vfmin_vf_f64m4 (vfloat64m4_t op1, float64_t op2,
    size_t vl);
vfloat64m8_t vfmin_vv_f64m8 (vfloat64m8_t op1, vfloat64m8_t op2,
    size_t vl);
vfloat64m8_t vfmin_vf_f64m8 (vfloat64m8_t op1, float64_t op2,
    size_t vl);
vfloat16mf4_t vfmax_vv_f16mf4 (vfloat16mf4_t op1, vfloat16mf4_t
    op2, size_t vl);
vfloat16mf4_t vfmax_vf_f16mf4 (vfloat16mf4_t op1, float16_t op2,
    size_t vl);
vfloat16mf2_t vfmax_vv_f16mf2 (vfloat16mf2_t op1, vfloat16mf2_t
    op2, size_t vl);
vfloat16mf2_t vfmax_vf_f16mf2 (vfloat16mf2_t op1, float16_t op2,
    size_t vl);
vfloat16m1_t vfmax_vv_f16m1 (vfloat16m1_t op1, vfloat16m1_t op2,
    size_t vl);
vfloat16m1_t vfmax_vf_f16m1 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
vfloat16m2_t vfmax_vv_f16m2 (vfloat16m2_t op1, vfloat16m2_t op2,
    size_t vl);
vfloat16m2_t vfmax_vf_f16m2 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
vfloat16m4_t vfmax_vv_f16m4 (vfloat16m4_t op1, vfloat16m4_t op2,
    size_t vl);
vfloat16m4_t vfmax_vf_f16m4 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vfloat16m8_t vfmax_vv_f16m8 (vfloat16m8_t op1, vfloat16m8_t op2,
    size_t vl);
```

```
vfloat16m8_t vfmax_vf_f16m8 (vfloat16m8_t op1, float16_t op2,
    size_t vl);
vfloat32mf2_t vfmax_vv_f32mf2 (vfloat32mf2_t op1, vfloat32mf2_t
    op2, size_t vl);
vfloat32mf2_t vfmax_vf_f32mf2 (vfloat32mf2_t op1, float32_t op2,
    size_t vl);
vfloat32m1_t vfmax_vv_f32m1 (vfloat32m1_t op1, vfloat32m1_t op2,
    size_t vl);
vfloat32m1_t vfmax_vf_f32m1 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vfloat32m2_t vfmax_vv_f32m2 (vfloat32m2_t op1, vfloat32m2_t op2,
    size_t vl);
vfloat32m2_t vfmax_vf_f32m2 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
vfloat32m4_t vfmax_vv_f32m4 (vfloat32m4_t op1, vfloat32m4_t op2,
    size_t vl);
vfloat32m4_t vfmax_vf_f32m4 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
vfloat32m8_t vfmax_vv_f32m8 (vfloat32m8_t op1, vfloat32m8_t op2,
    size_t vl);
vfloat32m8_t vfmax_vf_f32m8 (vfloat32m8_t op1, float32_t op2,
    size_t vl);
vfloat64m1_t vfmax_vv_f64m1 (vfloat64m1_t op1, vfloat64m1_t op2,
    size_t vl);
vfloat64m1_t vfmax_vf_f64m1 (vfloat64m1_t op1, float64_t op2,
    size_t vl);
vfloat64m2_t vfmax_vv_f64m2 (vfloat64m2_t op1, vfloat64m2_t op2,
    size_t vl);
vfloat64m2_t vfmax_vf_f64m2 (vfloat64m2_t op1, float64_t op2,
    size_t vl);
vfloat64m4_t vfmax_vv_f64m4 (vfloat64m4_t op1, vfloat64m4_t op2,
    size_t vl);
vfloat64m4_t vfmax_vf_f64m4 (vfloat64m4_t op1, float64_t op2,
    size_t vl);
vfloat64m8_t vfmax_vv_f64m8 (vfloat64m8_t op1, vfloat64m8_t op2,
    size_t vl);
vfloat64m8_t vfmax_vf_f64m8 (vfloat64m8_t op1, float64_t op2,
    size_t vl);
// masked functions
vfloat16mf4_t vfmin_vv_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, vfloat16mf4_t op2, size_t vl);
vfloat16mf4_t vfmin_vf_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
vfloat16mf2_t vfmin_vv_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, vfloat16mf2_t op2, size_t vl);
```

```
vfloat16mf2_t vfmin_vf_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
vfloat16m1_t vfmin_vv_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, vfloat16m1_t op2, size_t vl);
vfloat16m1_t vfmin_vf_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
vfloat16m2_t vfmin_vv_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, vfloat16m2_t op2, size_t vl);
vfloat16m2_t vfmin_vf_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, float16_t op2, size_t vl);
vfloat16m4_t vfmin_vv_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, vfloat16m4_t op2, size_t vl);
vfloat16m4_t vfmin_vf_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, float16_t op2, size_t vl);
vfloat16m8_t vfmin_vv_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, vfloat16m8_t op2, size_t vl);
vfloat16m8_t vfmin_vf_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, float16_t op2, size_t vl);
vfloat32mf2_t vfmin_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, vfloat32mf2_t op2, size_t vl);
vfloat32mf2_t vfmin_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vfloat32m1_t vfmin_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, vfloat32m1_t op2, size_t vl);
vfloat32m1_t vfmin_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vfloat32m2_t vfmin_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, vfloat32m2_t op2, size_t vl);
vfloat32m2_t vfmin_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
vfloat32m4_t vfmin_vv_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, vfloat32m4_t op2, size_t vl);
vfloat32m4_t vfmin_vf_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, float32_t op2, size_t vl);
vfloat32m8_t vfmin_vv_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, vfloat32m8_t op2, size_t vl);
vfloat32m8_t vfmin_vf_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, float32_t op2, size_t vl);
vfloat64m1_t vfmin_vv_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, vfloat64m1_t op2, size_t vl);
vfloat64m1_t vfmin_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, float64_t op2, size_t vl);
vfloat64m2_t vfmin_vv_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, vfloat64m2_t op2, size_t vl);
vfloat64m2_t vfmin_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, float64_t op2, size_t vl);
```

```
vfloat64m4_t vfmin_vv_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, vfloat64m4_t op2, size_t vl);
vfloat64m4_t vfmin_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, float64_t op2, size_t vl);
vfloat64m8_t vfmin_vv_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, vfloat64m8_t op2, size_t vl);
vfloat64m8_t vfmin_vf_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, float64_t op2, size_t vl);
vfloat16mf4_t vfmax_vv_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, vfloat16mf4_t op2, size_t vl);
vfloat16mf4_t vfmax_vf_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
vfloat16mf2_t vfmax_vv_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, vfloat16mf2_t op2, size_t vl);
vfloat16mf2_t vfmax_vf_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
vfloat16m1_t vfmax_vv_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, vfloat16m1_t op2, size_t vl);
vfloat16m1_t vfmax_vf_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
vfloat16m2_t vfmax_vv_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, vfloat16m2_t op2, size_t vl);
vfloat16m2_t vfmax_vf_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, float16_t op2, size_t vl);
vfloat16m4_t vfmax_vv_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, vfloat16m4_t op2, size_t vl);
vfloat16m4_t vfmax_vf_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, float16_t op2, size_t vl);
vfloat16m8_t vfmax_vv_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, vfloat16m8_t op2, size_t vl);
vfloat16m8_t vfmax_vf_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, float16_t op2, size_t vl);
vfloat32mf2_t vfmax_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, vfloat32mf2_t op2, size_t vl);
vfloat32mf2_t vfmax_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vfloat32m1_t vfmax_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, vfloat32m1_t op2, size_t vl);
vfloat32m1_t vfmax_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vfloat32m2_t vfmax_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, vfloat32m2_t op2, size_t vl);
vfloat32m2_t vfmax_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
vfloat32m4_t vfmax_vv_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, vfloat32m4_t op2, size_t vl);
```

```
vfloat32m4_t vfmax_vf_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, float32_t op2, size_t vl);
vfloat32m8_t vfmax_vv_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, vfloat32m8_t op2, size_t vl);
vfloat32m8_t vfmax_vf_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, float32_t op2, size_t vl);
vfloat64m1_t vfmax_vv_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, vfloat64m1_t op2, size_t vl);
vfloat64m1_t vfmax_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, float64_t op2, size_t vl);
vfloat64m2_t vfmax_vv_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, vfloat64m2_t op2, size_t vl);
vfloat64m2_t vfmax_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, float64_t op2, size_t vl);
vfloat64m4_t vfmax_vv_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, vfloat64m4_t op2, size_t vl);
vfloat64m4_t vfmax_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, float64_t op2, size_t vl);
vfloat64m8_t vfmax_vv_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, vfloat64m8_t op2, size_t vl);
vfloat64m8_t vfmax_vf_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, float64_t op2, size_t vl);
```

Vector Floating-Point Sign-Injection Functions:

Prototypes:

```
vfloat16mf4_t vfsgnj_vv_f16mf4 (vfloat16mf4_t op1, vfloat16mf4_t
    op2, size_t vl);
vfloat16mf4_t vfsgnj_vf_f16mf4 (vfloat16mf4_t op1, float16_t
    op2, size_t vl);
vfloat16mf2_t vfsgnj_vv_f16mf2 (vfloat16mf2_t op1, vfloat16mf2_t
    op2, size_t vl);
vfloat16mf2_t vfsgnj_vf_f16mf2 (vfloat16mf2_t op1, float16_t
    op2, size_t vl);
vfloat16m1_t vfsgnj_vv_f16m1 (vfloat16m1_t op1, vfloat16m1_t
    op2, size_t vl);
vfloat16m1_t vfsgnj_vf_f16m1 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
vfloat16m2_t vfsgnj_vv_f16m2 (vfloat16m2_t op1, vfloat16m2_t
    op2, size_t vl);
vfloat16m2_t vfsgnj_vf_f16m2 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
vfloat16m4_t vfsgnj_vv_f16m4 (vfloat16m4_t op1, vfloat16m4_t
    op2, size_t vl);
```

```
vfloat16m4_t vfsgnj_vf_f16m4 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vfloat16m8_t vfsgnj_vv_f16m8 (vfloat16m8_t op1, vfloat16m8_t
    op2, size_t vl);
vfloat16m8_t vfsgnj_vf_f16m8 (vfloat16m8_t op1, float16_t op2,
    size_t vl);
vfloat32mf2_t vfsgnj_vv_f32mf2 (vfloat32mf2_t op1, vfloat32mf2_t
    op2, size_t vl);
vfloat32mf2_t vfsgnj_vf_f32mf2 (vfloat32mf2_t op1, float32_t
    op2, size_t vl);
vfloat32m1_t vfsgnj_vv_f32m1 (vfloat32m1_t op1, vfloat32m1_t
    op2, size_t vl);
vfloat32m1_t vfsgnj_vf_f32m1 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vfloat32m2_t vfsgnj_vv_f32m2 (vfloat32m2_t op1, vfloat32m2_t
    op2, size_t vl);
vfloat32m2_t vfsgnj_vf_f32m2 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
vfloat32m4_t vfsgnj_vv_f32m4 (vfloat32m4_t op1, vfloat32m4_t
    op2, size_t vl);
vfloat32m4_t vfsgnj_vf_f32m4 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
vfloat32m8_t vfsgnj_vv_f32m8 (vfloat32m8_t op1, vfloat32m8_t
    op2, size_t vl);
vfloat32m8_t vfsgnj_vf_f32m8 (vfloat32m8_t op1, float32_t op2,
    size_t vl);
vfloat64m1_t vfsgnj_vv_f64m1 (vfloat64m1_t op1, vfloat64m1_t
    op2, size_t vl);
vfloat64m1_t vfsgnj_vf_f64m1 (vfloat64m1_t op1, float64_t op2,
    size_t vl);
vfloat64m2_t vfsgnj_vv_f64m2 (vfloat64m2_t op1, vfloat64m2_t
    op2, size_t vl);
vfloat64m2_t vfsgnj_vf_f64m2 (vfloat64m2_t op1, float64_t op2,
    size_t vl);
vfloat64m4_t vfsgnj_vv_f64m4 (vfloat64m4_t op1, vfloat64m4_t
    op2, size_t vl);
vfloat64m4_t vfsgnj_vf_f64m4 (vfloat64m4_t op1, float64_t op2,
    size_t vl);
vfloat64m8_t vfsgnj_vv_f64m8 (vfloat64m8_t op1, vfloat64m8_t
    op2, size_t vl);
vfloat64m8_t vfsgnj_vf_f64m8 (vfloat64m8_t op1, float64_t op2,
    size_t vl);
vfloat16mf4_t vfsgnjn_vv_f16mf4 (vfloat16mf4_t op1,
    vfloat16mf4_t op2, size_t vl);
vfloat16mf4_t vfsgnjn_vf_f16mf4 (vfloat16mf4_t op1, float16_t
    op2, size_t vl);
```

```
vfloat16mf2_t vfsgnjn_vv_f16mf2 (vfloat16mf2_t op1,
    vfloat16mf2_t op2, size_t vl);
vfloat16mf2_t vfsgnjn_vf_f16mf2 (vfloat16mf2_t op1, float16_t
    op2, size_t vl);
vfloat16m1_t vfsgnjn_vv_f16m1 (vfloat16m1_t op1, vfloat16m1_t
    op2, size_t vl);
vfloat16m1_t vfsgnjn_vf_f16m1 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
vfloat16m2_t vfsgnjn_vv_f16m2 (vfloat16m2_t op1, vfloat16m2_t
    op2, size_t vl);
vfloat16m2_t vfsgnjn_vf_f16m2 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
vfloat16m4_t vfsgnjn_vv_f16m4 (vfloat16m4_t op1, vfloat16m4_t
    op2, size_t vl);
vfloat16m4_t vfsgnjn_vf_f16m4 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vfloat16m8_t vfsgnjn_vv_f16m8 (vfloat16m8_t op1, vfloat16m8_t
    op2, size_t vl);
vfloat16m8_t vfsgnjn_vf_f16m8 (vfloat16m8_t op1, float16_t op2,
    size_t vl);
vfloat32mf2_t vfsgnjn_vv_f32mf2 (vfloat32mf2_t op1,
    vfloat32mf2_t op2, size_t vl);
vfloat32mf2_t vfsgnjn_vf_f32mf2 (vfloat32mf2_t op1, float32_t
    op2, size_t vl);
vfloat32m1_t vfsgnjn_vv_f32m1 (vfloat32m1_t op1, vfloat32m1_t
    op2, size_t vl);
vfloat32m1_t vfsgnjn_vf_f32m1 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vfloat32m2_t vfsgnjn_vv_f32m2 (vfloat32m2_t op1, vfloat32m2_t
    op2, size_t vl);
vfloat32m2_t vfsgnjn_vf_f32m2 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
vfloat32m4_t vfsgnjn_vv_f32m4 (vfloat32m4_t op1, vfloat32m4_t
    op2, size_t vl);
vfloat32m4_t vfsgnjn_vf_f32m4 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
vfloat32m8_t vfsgnjn_vv_f32m8 (vfloat32m8_t op1, vfloat32m8_t
    op2, size_t vl);
vfloat32m8_t vfsgnjn_vf_f32m8 (vfloat32m8_t op1, float32_t op2,
    size_t vl);
vfloat64m1_t vfsgnjn_vv_f64m1 (vfloat64m1_t op1, vfloat64m1_t
    op2, size_t vl);
vfloat64m1_t vfsgnjn_vf_f64m1 (vfloat64m1_t op1, float64_t op2,
    size_t vl);
vfloat64m2_t vfsgnjn_vv_f64m2 (vfloat64m2_t op1, vfloat64m2_t
    op2, size_t vl);
```

```
vfloat64m2_t vfsgnjn_vf_f64m2 (vfloat64m2_t op1, float64_t op2,
    size_t vl);
vfloat64m4_t vfsgnjn_vv_f64m4 (vfloat64m4_t op1, vfloat64m4_t
    op2, size_t vl);
vfloat64m4_t vfsgnjn_vf_f64m4 (vfloat64m4_t op1, float64_t op2,
    size_t vl);
vfloat64m8_t vfsgnjn_vv_f64m8 (vfloat64m8_t op1, vfloat64m8_t
    op2, size_t vl);
vfloat64m8_t vfsgnjn_vf_f64m8 (vfloat64m8_t op1, float64_t op2,
    size_t vl);
vfloat16mf4_t vfsgnjx_vv_f16mf4 (vfloat16mf4_t op1,
    vfloat16mf4_t op2, size_t vl);
vfloat16mf4_t vfsgnjx_vf_f16mf4 (vfloat16mf4_t op1, float16_t
    op2, size_t vl);
vfloat16mf2_t vfsgnjx_vv_f16mf2 (vfloat16mf2_t op1,
    vfloat16mf2_t op2, size_t vl);
vfloat16mf2_t vfsgnjx_vf_f16mf2 (vfloat16mf2_t op1, float16_t
    op2, size_t vl);
vfloat16m1_t vfsgnjx_vv_f16m1 (vfloat16m1_t op1, vfloat16m1_t
    op2, size_t vl);
vfloat16m1_t vfsgnjx_vf_f16m1 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
vfloat16m2_t vfsgnjx_vv_f16m2 (vfloat16m2_t op1, vfloat16m2_t
    op2, size_t vl);
vfloat16m2_t vfsgnjx_vf_f16m2 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
vfloat16m4_t vfsgnjx_vv_f16m4 (vfloat16m4_t op1, vfloat16m4_t
    op2, size_t vl);
vfloat16m4_t vfsgnjx_vf_f16m4 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vfloat16m8_t vfsgnjx_vv_f16m8 (vfloat16m8_t op1, vfloat16m8_t
    op2, size_t vl);
vfloat16m8_t vfsgnjx_vf_f16m8 (vfloat16m8_t op1, float16_t op2,
    size_t vl);
vfloat32mf2_t vfsgnjx_vv_f32mf2 (vfloat32mf2_t op1,
    vfloat32mf2_t op2, size_t vl);
vfloat32mf2_t vfsgnjx_vf_f32mf2 (vfloat32mf2_t op1, float32_t
    op2, size_t vl);
vfloat32m1_t vfsgnjx_vv_f32m1 (vfloat32m1_t op1, vfloat32m1_t
    op2, size_t vl);
vfloat32m1_t vfsgnjx_vf_f32m1 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vfloat32m2_t vfsgnjx_vv_f32m2 (vfloat32m2_t op1, vfloat32m2_t
    op2, size_t vl);
vfloat32m2_t vfsgnjx_vf_f32m2 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
```

```
vfloat32m4_t vfsgnjx_vv_f32m4 (vfloat32m4_t op1, vfloat32m4_t
    op2, size_t vl);
vfloat32m4_t vfsgnjx_vf_f32m4 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
vfloat32m8_t vfsgnjx_vv_f32m8 (vfloat32m8_t op1, vfloat32m8_t
    op2, size_t vl);
vfloat32m8_t vfsgnjx_vf_f32m8 (vfloat32m8_t op1, float32_t op2,
    size_t vl);
vfloat64m1_t vfsgnjx_vv_f64m1 (vfloat64m1_t op1, vfloat64m1_t
    op2, size_t vl);
vfloat64m1_t vfsgnjx_vf_f64m1 (vfloat64m1_t op1, float64_t op2,
    size_t vl);
vfloat64m2_t vfsgnjx_vv_f64m2 (vfloat64m2_t op1, vfloat64m2_t
    op2, size_t vl);
vfloat64m2_t vfsgnjx_vf_f64m2 (vfloat64m2_t op1, float64_t op2,
    size_t vl);
vfloat64m4_t vfsgnjx_vv_f64m4 (vfloat64m4_t op1, vfloat64m4_t
    op2, size_t vl);
vfloat64m4_t vfsgnjx_vf_f64m4 (vfloat64m4_t op1, float64_t op2,
    size_t vl);
vfloat64m8_t vfsgnjx_vv_f64m8 (vfloat64m8_t op1, vfloat64m8_t
    op2, size_t vl);
vfloat64m8_t vfsgnjx_vf_f64m8 (vfloat64m8_t op1, float64_t op2,
    size_t vl);
// masked functions
vfloat16mf4_t vfsgnj_vv_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, vfloat16mf4_t op2, size_t vl);
vfloat16mf4_t vfsgnj_vf_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
vfloat16mf2_t vfsgnj_vv_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, vfloat16mf2_t op2, size_t vl);
vfloat16mf2_t vfsgnj_vf_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
vfloat16m1_t vfsgnj_vv_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, vfloat16m1_t op2, size_t vl);
vfloat16m1_t vfsgnj_vf_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
vfloat16m2_t vfsgnj_vv_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, vfloat16m2_t op2, size_t vl);
vfloat16m2_t vfsgnj_vf_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, float16_t op2, size_t vl);
vfloat16m4_t vfsgnj_vv_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, vfloat16m4_t op2, size_t vl);
vfloat16m4_t vfsgnj_vf_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, float16_t op2, size_t vl);
```

```
vfloat16m8_t vfsgnj_vv_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, vfloat16m8_t op2, size_t vl);
vfloat16m8_t vfsgnj_vf_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, float16_t op2, size_t vl);
vfloat32mf2_t vfsgnj_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, vfloat32mf2_t op2, size_t vl);
vfloat32mf2_t vfsgnj_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vfloat32m1_t vfsgnj_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, vfloat32m1_t op2, size_t vl);
vfloat32m1_t vfsgnj_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vfloat32m2_t vfsgnj_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, vfloat32m2_t op2, size_t vl);
vfloat32m2_t vfsgnj_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
vfloat32m4_t vfsgnj_vv_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, vfloat32m4_t op2, size_t vl);
vfloat32m4_t vfsgnj_vf_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, float32_t op2, size_t vl);
vfloat32m8_t vfsgnj_vv_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, vfloat32m8_t op2, size_t vl);
vfloat32m8_t vfsgnj_vf_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, float32_t op2, size_t vl);
vfloat64m1_t vfsgnj_vv_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, vfloat64m1_t op2, size_t vl);
vfloat64m1_t vfsgnj_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, float64_t op2, size_t vl);
vfloat64m2_t vfsgnj_vv_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, vfloat64m2_t op2, size_t vl);
vfloat64m2_t vfsgnj_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, float64_t op2, size_t vl);
vfloat64m4_t vfsgnj_vv_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, vfloat64m4_t op2, size_t vl);
vfloat64m4_t vfsgnj_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, float64_t op2, size_t vl);
vfloat64m8_t vfsgnj_vv_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, vfloat64m8_t op2, size_t vl);
vfloat64m8_t vfsgnj_vf_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, float64_t op2, size_t vl);
vfloat16mf4_t vfsgnjn_vv_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, vfloat16mf4_t op2, size_t vl);
vfloat16mf4_t vfsgnjn_vf_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
vfloat16mf2_t vfsgnjn_vv_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, vfloat16mf2_t op2, size_t vl);
```

```
vfloat16mf2_t vfsgnjn_vf_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
vfloat16m1_t vfsgnjn_vv_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, vfloat16m1_t op2, size_t vl);
vfloat16m1_t vfsgnjn_vf_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
vfloat16m2_t vfsgnjn_vv_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, vfloat16m2_t op2, size_t vl);
vfloat16m2_t vfsgnjn_vf_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, float16_t op2, size_t vl);
vfloat16m4_t vfsgnjn_vv_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, vfloat16m4_t op2, size_t vl);
vfloat16m4_t vfsgnjn_vf_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, float16_t op2, size_t vl);
vfloat16m8_t vfsgnjn_vv_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, vfloat16m8_t op2, size_t vl);
vfloat16m8_t vfsgnjn_vf_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, float16_t op2, size_t vl);
vfloat32mf2_t vfsgnjn_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, vfloat32mf2_t op2, size_t vl);
vfloat32mf2_t vfsgnjn_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vfloat32m1_t vfsgnjn_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, vfloat32m1_t op2, size_t vl);
vfloat32m1_t vfsgnjn_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vfloat32m2_t vfsgnjn_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, vfloat32m2_t op2, size_t vl);
vfloat32m2_t vfsgnjn_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
vfloat32m4_t vfsgnjn_vv_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, vfloat32m4_t op2, size_t vl);
vfloat32m4_t vfsgnjn_vf_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, float32_t op2, size_t vl);
vfloat32m8_t vfsgnjn_vv_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, vfloat32m8_t op2, size_t vl);
vfloat32m8_t vfsgnjn_vf_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, float32_t op2, size_t vl);
vfloat64m1_t vfsgnjn_vv_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, vfloat64m1_t op2, size_t vl);
vfloat64m1_t vfsgnjn_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, float64_t op2, size_t vl);
vfloat64m2_t vfsgnjn_vv_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, vfloat64m2_t op2, size_t vl);
vfloat64m2_t vfsgnjn_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, float64_t op2, size_t vl);
```

```
vfloat64m4_t vfsgnjn_vv_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, vfloat64m4_t op2, size_t vl);
vfloat64m4_t vfsgnjn_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, float64_t op2, size_t vl);
vfloat64m8_t vfsgnjn_vv_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, vfloat64m8_t op2, size_t vl);
vfloat64m8_t vfsgnjn_vf_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, float64_t op2, size_t vl);
vfloat16mf4_t vfsgnjx_vv_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, vfloat16mf4_t op2, size_t vl);
vfloat16mf4_t vfsgnjx_vf_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
vfloat16mf2_t vfsgnjx_vv_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, vfloat16mf2_t op2, size_t vl);
vfloat16mf2_t vfsgnjx_vf_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
vfloat16m1_t vfsgnjx_vv_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, vfloat16m1_t op2, size_t vl);
vfloat16m1_t vfsgnjx_vf_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
vfloat16m2_t vfsgnjx_vv_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, vfloat16m2_t op2, size_t vl);
vfloat16m2_t vfsgnjx_vf_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, float16_t op2, size_t vl);
vfloat16m4_t vfsgnjx_vv_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, vfloat16m4_t op2, size_t vl);
vfloat16m4_t vfsgnjx_vf_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, float16_t op2, size_t vl);
vfloat16m8_t vfsgnjx_vv_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, vfloat16m8_t op2, size_t vl);
vfloat16m8_t vfsgnjx_vf_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, float16_t op2, size_t vl);
vfloat32mf2_t vfsgnjx_vv_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, vfloat32mf2_t op2, size_t vl);
vfloat32mf2_t vfsgnjx_vf_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vfloat32m1_t vfsgnjx_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, vfloat32m1_t op2, size_t vl);
vfloat32m1_t vfsgnjx_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vfloat32m2_t vfsgnjx_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, vfloat32m2_t op2, size_t vl);
vfloat32m2_t vfsgnjx_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
vfloat32m4_t vfsgnjx_vv_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, vfloat32m4_t op2, size_t vl);
```

```
vfloat32m4_t vfsgnjx_vf_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, float32_t op2, size_t vl);
vfloat32m8_t vfsgnjx_vv_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, vfloat32m8_t op2, size_t vl);
vfloat32m8_t vfsgnjx_vf_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, float32_t op2, size_t vl);
vfloat64m1_t vfsgnjx_vv_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, vfloat64m1_t op2, size_t vl);
vfloat64m1_t vfsgnjx_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, float64_t op2, size_t vl);
vfloat64m2_t vfsgnjx_vv_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, vfloat64m2_t op2, size_t vl);
vfloat64m2_t vfsgnjx_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, float64_t op2, size_t vl);
vfloat64m4_t vfsgnjx_vv_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, vfloat64m4_t op2, size_t vl);
vfloat64m4_t vfsgnjx_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, float64_t op2, size_t vl);
vfloat64m8_t vfsgnjx_vv_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, vfloat64m8_t op2, size_t vl);
vfloat64m8_t vfsgnjx_vf_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, float64_t op2, size_t vl);
```

Vector Floating-Point Absolute Value Functions:

Prototypes:

```
vfloat16mf4_t vfabs_v_f16mf4 (vfloat16mf4_t op1, size_t vl);
vfloat16mf2_t vfabs_v_f16mf2 (vfloat16mf2_t op1, size_t vl);
vfloat16m1_t vfabs_v_f16m1 (vfloat16m1_t op1, size_t vl);
vfloat16m2_t vfabs_v_f16m2 (vfloat16m2_t op1, size_t vl);
vfloat16m4_t vfabs_v_f16m4 (vfloat16m4_t op1, size_t vl);
vfloat16m8_t vfabs_v_f16m8 (vfloat16m8_t op1, size_t vl);
vfloat32mf2_t vfabs_v_f32mf2 (vfloat32mf2_t op1, size_t vl);
vfloat32m1_t vfabs_v_f32m1 (vfloat32m1_t op1, size_t vl);
vfloat32m2_t vfabs_v_f32m2 (vfloat32m2_t op1, size_t vl);
vfloat32m4_t vfabs_v_f32m4 (vfloat32m4_t op1, size_t vl);
vfloat32m8_t vfabs_v_f32m8 (vfloat32m8_t op1, size_t vl);
vfloat64m1_t vfabs_v_f64m1 (vfloat64m1_t op1, size_t vl);
vfloat64m2_t vfabs_v_f64m2 (vfloat64m2_t op1, size_t vl);
vfloat64m4_t vfabs_v_f64m4 (vfloat64m4_t op1, size_t vl);
vfloat64m8_t vfabs_v_f64m8 (vfloat64m8_t op1, size_t vl);
// masked functions
vfloat16mf4_t vfabs_v_f16mf4_m (vbool64_t mask, vfloat16mf4_t
    maskedoff, vfloat16mf4_t op1, size_t vl);
```

```
vfloat16mf2_t vfabs_v_f16mf2_m (vbool32_t mask, vfloat16mf2_t
    maskedoff, vfloat16mf2_t op1, size_t vl);
vfloat16m1_t vfabs_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, size_t vl);
vfloat16m2_t vfabs_v_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, size_t vl);
vfloat16m4_t vfabs_v_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, size_t vl);
vfloat16m8_t vfabs_v_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, size_t vl);
vfloat32mf2_t vfabs_v_f32mf2_m (vbool64_t mask, vfloat32mf2_t
    maskedoff, vfloat32mf2_t op1, size_t vl);
vfloat32m1_t vfabs_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, size_t vl);
vfloat32m2_t vfabs_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, size_t vl);
vfloat32m4_t vfabs_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, size_t vl);
vfloat32m8_t vfabs_v_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, size_t vl);
vfloat64m1_t vfabs_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, size_t vl);
vfloat64m2_t vfabs_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, size_t vl);
vfloat64m4_t vfabs_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, size_t vl);
vfloat64m8_t vfabs_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, size_t vl);
```

Vector Floating-Point Compare Functions:

Prototypes:

```
vbool64_t vmfeq_vv_f16mf4_b64 (vfloat16mf4_t op1, vfloat16mf4_t
    op2, size_t vl);
vbool64_t vmfeq_vf_f16mf4_b64 (vfloat16mf4_t op1, float16_t op2,
    size_t vl);
vbool32_t vmfeq_vv_f16mf2_b32 (vfloat16mf2_t op1, vfloat16mf2_t
    op2, size_t vl);
vbool32_t vmfeq_vf_f16mf2_b32 (vfloat16mf2_t op1, float16_t op2,
    size_t vl);
vbool16_t vmfeq_vv_f16m1_b16 (vfloat16m1_t op1, vfloat16m1_t
    op2, size_t vl);
vbool16_t vmfeq_vf_f16m1_b16 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
```

```
vbool8_t vmfeq_vv_f16m2_b8 (vfloat16m2_t op1, vfloat16m2_t op2,
    size_t vl);
vbool8_t vmfeq_vf_f16m2_b8 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
vbool4_t vmfeq_vv_f16m4_b4 (vfloat16m4_t op1, vfloat16m4_t op2,
    size_t vl);
vbool4_t vmfeq_vf_f16m4_b4 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vbool2_t vmfeq_vv_f16m8_b2 (vfloat16m8_t op1, vfloat16m8_t op2,
    size_t vl);
vbool2_t vmfeq_vf_f16m8_b2 (vfloat16m8_t op1, float16_t op2,
    size_t vl);
vbool64_t vmfeq_vv_f32mf2_b64 (vfloat32mf2_t op1, vfloat32mf2_t
    op2, size_t vl);
vbool64_t vmfeq_vf_f32mf2_b64 (vfloat32mf2_t op1, float32_t op2,
    size_t vl);
vbool32_t vmfeq_vv_f32m1_b32 (vfloat32m1_t op1, vfloat32m1_t
    op2, size_t vl);
vbool32_t vmfeq_vf_f32m1_b32 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vbool16_t vmfeq_vv_f32m2_b16 (vfloat32m2_t op1, vfloat32m2_t
    op2, size_t vl);
vbool16_t vmfeq_vf_f32m2_b16 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
vbool8_t vmfeq_vv_f32m4_b8 (vfloat32m4_t op1, vfloat32m4_t op2,
    size_t vl);
vbool8_t vmfeq_vf_f32m4_b8 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
vbool4_t vmfeq_vv_f32m8_b4 (vfloat32m8_t op1, vfloat32m8_t op2,
    size_t vl);
vbool4_t vmfeq_vf_f32m8_b4 (vfloat32m8_t op1, float32_t op2,
    size_t vl);
vbool64_t vmfeq_vv_f64m1_b64 (vfloat64m1_t op1, vfloat64m1_t
    op2, size_t vl);
vbool64_t vmfeq_vf_f64m1_b64 (vfloat64m1_t op1, float64_t op2,
    size_t vl);
vbool32_t vmfeq_vv_f64m2_b32 (vfloat64m2_t op1, vfloat64m2_t
    op2, size_t vl);
vbool32_t vmfeq_vf_f64m2_b32 (vfloat64m2_t op1, float64_t op2,
    size_t vl);
vbool16_t vmfeq_vv_f64m4_b16 (vfloat64m4_t op1, vfloat64m4_t
    op2, size_t vl);
vbool16_t vmfeq_vf_f64m4_b16 (vfloat64m4_t op1, float64_t op2,
    size_t vl);
vbool8_t vmfeq_vv_f64m8_b8 (vfloat64m8_t op1, vfloat64m8_t op2,
    size_t vl);
```

```
vbool8_t vmfeq_vf_f64m8_b8 (vfloat64m8_t op1, float64_t op2,
    size_t vl);
vbool64_t vmfne_vv_f16mf4_b64 (vfloat16mf4_t op1, vfloat16mf4_t
    op2, size_t vl);
vbool64_t vmfne_vf_f16mf4_b64 (vfloat16mf4_t op1, float16_t op2,
    size_t vl);
vbool32_t vmfne_vv_f16mf2_b32 (vfloat16mf2_t op1, vfloat16mf2_t
    op2, size_t vl);
vbool32_t vmfne_vf_f16mf2_b32 (vfloat16mf2_t op1, float16_t op2,
    size_t vl);
vbool16_t vmfne_vv_f16m1_b16 (vfloat16m1_t op1, vfloat16m1_t
    op2, size_t vl);
vbool16_t vmfne_vf_f16m1_b16 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
vbool8_t vmfne_vv_f16m2_b8 (vfloat16m2_t op1, vfloat16m2_t op2,
    size_t vl);
vbool8_t vmfne_vf_f16m2_b8 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
vbool4_t vmfne_vv_f16m4_b4 (vfloat16m4_t op1, vfloat16m4_t op2,
    size_t vl);
vbool4_t vmfne_vf_f16m4_b4 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vbool2_t vmfne_vv_f16m8_b2 (vfloat16m8_t op1, vfloat16m8_t op2,
    size_t vl);
vbool2_t vmfne_vf_f16m8_b2 (vfloat16m8_t op1, float16_t op2,
    size_t vl);
vbool64_t vmfne_vv_f32mf2_b64 (vfloat32mf2_t op1, vfloat32mf2_t
    op2, size_t vl);
vbool64_t vmfne_vf_f32mf2_b64 (vfloat32mf2_t op1, float32_t op2,
    size_t vl);
vbool32_t vmfne_vv_f32m1_b32 (vfloat32m1_t op1, vfloat32m1_t
    op2, size_t vl);
vbool32_t vmfne_vf_f32m1_b32 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vbool16_t vmfne_vv_f32m2_b16 (vfloat32m2_t op1, vfloat32m2_t
    op2, size_t vl);
vbool16_t vmfne_vf_f32m2_b16 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
vbool8_t vmfne_vv_f32m4_b8 (vfloat32m4_t op1, vfloat32m4_t op2,
    size_t vl);
vbool8_t vmfne_vf_f32m4_b8 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
vbool4_t vmfne_vv_f32m8_b4 (vfloat32m8_t op1, vfloat32m8_t op2,
    size_t vl);
vbool4_t vmfne_vf_f32m8_b4 (vfloat32m8_t op1, float32_t op2,
    size_t vl);
```

```
vbool64_t vmfne_vv_f64m1_b64 (vfloat64m1_t op1, vfloat64m1_t
    op2, size_t vl);
vbool64_t vmfne_vf_f64m1_b64 (vfloat64m1_t op1, float64_t op2,
    size_t vl);
vbool32_t vmfne_vv_f64m2_b32 (vfloat64m2_t op1, vfloat64m2_t
    op2, size_t vl);
vbool32_t vmfne_vf_f64m2_b32 (vfloat64m2_t op1, float64_t op2,
    size_t vl);
vbool16_t vmfne_vv_f64m4_b16 (vfloat64m4_t op1, vfloat64m4_t
    op2, size_t vl);
vbool16_t vmfne_vf_f64m4_b16 (vfloat64m4_t op1, float64_t op2,
    size_t vl);
vbool8_t vmfne_vv_f64m8_b8 (vfloat64m8_t op1, vfloat64m8_t op2,
    size_t vl);
vbool8_t vmfne_vf_f64m8_b8 (vfloat64m8_t op1, float64_t op2,
    size_t vl);
vbool64_t vmflt_vv_f16mf4_b64 (vfloat16mf4_t op1, vfloat16mf4_t
    op2, size_t vl);
vbool64_t vmflt_vf_f16mf4_b64 (vfloat16mf4_t op1, float16_t op2,
    size_t vl);
vbool32_t vmflt_vv_f16mf2_b32 (vfloat16mf2_t op1, vfloat16mf2_t
    op2, size_t vl);
vbool32_t vmflt_vf_f16mf2_b32 (vfloat16mf2_t op1, float16_t op2,
    size_t vl);
vbool16_t vmflt_vv_f16m1_b16 (vfloat16m1_t op1, vfloat16m1_t
    op2, size_t vl);
vbool16_t vmflt_vf_f16m1_b16 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
vbool8_t vmflt_vv_f16m2_b8 (vfloat16m2_t op1, vfloat16m2_t op2,
    size_t vl);
vbool8_t vmflt_vf_f16m2_b8 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
vbool4_t vmflt_vv_f16m4_b4 (vfloat16m4_t op1, vfloat16m4_t op2,
    size_t vl);
vbool4_t vmflt_vf_f16m4_b4 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vbool2_t vmflt_vv_f16m8_b2 (vfloat16m8_t op1, vfloat16m8_t op2,
    size_t vl);
vbool2_t vmflt_vf_f16m8_b2 (vfloat16m8_t op1, float16_t op2,
    size_t vl);
vbool64_t vmflt_vv_f32mf2_b64 (vfloat32mf2_t op1, vfloat32mf2_t
    op2, size_t vl);
vbool64_t vmflt_vf_f32mf2_b64 (vfloat32mf2_t op1, float32_t op2,
    size_t vl);
vbool32_t vmflt_vv_f32m1_b32 (vfloat32m1_t op1, vfloat32m1_t
    op2, size_t vl);
```

```
vbool32_t vmflt_vf_f32m1_b32 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vbool16_t vmflt_vv_f32m2_b16 (vfloat32m2_t op1, vfloat32m2_t
    op2, size_t vl);
vbool16_t vmflt_vf_f32m2_b16 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
vbool8_t vmflt_vv_f32m4_b8 (vfloat32m4_t op1, vfloat32m4_t op2,
    size_t vl);
vbool8_t vmflt_vf_f32m4_b8 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
vbool4_t vmflt_vv_f32m8_b4 (vfloat32m8_t op1, vfloat32m8_t op2,
    size_t vl);
vbool4_t vmflt_vf_f32m8_b4 (vfloat32m8_t op1, float32_t op2,
    size_t vl);
vbool64_t vmflt_vv_f64m1_b64 (vfloat64m1_t op1, vfloat64m1_t
    op2, size_t vl);
vbool64_t vmflt_vf_f64m1_b64 (vfloat64m1_t op1, float64_t op2,
    size_t vl);
vbool32_t vmflt_vv_f64m2_b32 (vfloat64m2_t op1, vfloat64m2_t
    op2, size_t vl);
vbool32_t vmflt_vf_f64m2_b32 (vfloat64m2_t op1, float64_t op2,
    size_t vl);
vbool16_t vmflt_vv_f64m4_b16 (vfloat64m4_t op1, vfloat64m4_t
    op2, size_t vl);
vbool16_t vmflt_vf_f64m4_b16 (vfloat64m4_t op1, float64_t op2,
    size_t vl);
vbool8_t vmflt_vv_f64m8_b8 (vfloat64m8_t op1, vfloat64m8_t op2,
    size_t vl);
vbool8_t vmflt_vf_f64m8_b8 (vfloat64m8_t op1, float64_t op2,
    size_t vl);
vbool64_t vmfle_vv_f16mf4_b64 (vfloat16mf4_t op1, vfloat16mf4_t
    op2, size_t vl);
vbool64_t vmfle_vf_f16mf4_b64 (vfloat16mf4_t op1, float16_t op2,
    size_t vl);
vbool32_t vmfle_vv_f16mf2_b32 (vfloat16mf2_t op1, vfloat16mf2_t
    op2, size_t vl);
vbool32_t vmfle_vf_f16mf2_b32 (vfloat16mf2_t op1, float16_t op2,
    size_t vl);
vbool16_t vmfle_vv_f16m1_b16 (vfloat16m1_t op1, vfloat16m1_t
    op2, size_t vl);
vbool16_t vmfle_vf_f16m1_b16 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
vbool8_t vmfle_vv_f16m2_b8 (vfloat16m2_t op1, vfloat16m2_t op2,
    size_t vl);
vbool8_t vmfle_vf_f16m2_b8 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
```

```
vbool4_t vmfle_vv_f16m4_b4 (vfloat16m4_t op1, vfloat16m4_t op2,
    size_t vl);
vbool4_t vmfle_vf_f16m4_b4 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vbool2_t vmfle_vv_f16m8_b2 (vfloat16m8_t op1, vfloat16m8_t op2,
    size_t vl);
vbool2_t vmfle_vf_f16m8_b2 (vfloat16m8_t op1, float16_t op2,
    size_t vl);
vbool64_t vmfle_vv_f32mf2_b64 (vfloat32mf2_t op1, vfloat32mf2_t
    op2, size_t vl);
vbool64_t vmfle_vf_f32mf2_b64 (vfloat32mf2_t op1, float32_t op2,
    size_t vl);
vbool32_t vmfle_vv_f32m1_b32 (vfloat32m1_t op1, vfloat32m1_t
    op2, size_t vl);
vbool32_t vmfle_vf_f32m1_b32 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vbool16_t vmfle_vv_f32m2_b16 (vfloat32m2_t op1, vfloat32m2_t
    op2, size_t vl);
vbool16_t vmfle_vf_f32m2_b16 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
vbool8_t vmfle_vv_f32m4_b8 (vfloat32m4_t op1, vfloat32m4_t op2,
    size_t vl);
vbool8_t vmfle_vf_f32m4_b8 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
vbool4_t vmfle_vv_f32m8_b4 (vfloat32m8_t op1, vfloat32m8_t op2,
    size_t vl);
vbool4_t vmfle_vf_f32m8_b4 (vfloat32m8_t op1, float32_t op2,
    size_t vl);
vbool64_t vmfle_vv_f64m1_b64 (vfloat64m1_t op1, vfloat64m1_t
    op2, size_t vl);
vbool64_t vmfle_vf_f64m1_b64 (vfloat64m1_t op1, float64_t op2,
    size_t vl);
vbool32_t vmfle_vv_f64m2_b32 (vfloat64m2_t op1, vfloat64m2_t
    op2, size_t vl);
vbool32_t vmfle_vf_f64m2_b32 (vfloat64m2_t op1, float64_t op2,
    size_t vl);
vbool16_t vmfle_vv_f64m4_b16 (vfloat64m4_t op1, vfloat64m4_t
    op2, size_t vl);
vbool16_t vmfle_vf_f64m4_b16 (vfloat64m4_t op1, float64_t op2,
    size_t vl);
vbool8_t vmfle_vv_f64m8_b8 (vfloat64m8_t op1, vfloat64m8_t op2,
    size_t vl);
vbool8_t vmfle_vf_f64m8_b8 (vfloat64m8_t op1, float64_t op2,
    size_t vl);
vbool64_t vmfgt_vv_f16mf4_b64 (vfloat16mf4_t op1, vfloat16mf4_t
    op2, size_t vl);
```

```
vbool64_t vmfgt_vf_f16mf4_b64 (vfloat16mf4_t op1, float16_t op2,
    size_t vl);
vbool32_t vmfgt_vv_f16mf2_b32 (vfloat16mf2_t op1, vfloat16mf2_t
    op2, size_t vl);
vbool32_t vmfgt_vf_f16mf2_b32 (vfloat16mf2_t op1, float16_t op2,
    size_t vl);
vbool16_t vmfgt_vv_f16m1_b16 (vfloat16m1_t op1, vfloat16m1_t
    op2, size_t vl);
vbool16_t vmfgt_vf_f16m1_b16 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
vbool8_t vmfgt_vv_f16m2_b8 (vfloat16m2_t op1, vfloat16m2_t op2,
    size_t vl);
vbool8_t vmfgt_vf_f16m2_b8 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
vbool4_t vmfgt_vv_f16m4_b4 (vfloat16m4_t op1, vfloat16m4_t op2,
    size_t vl);
vbool4_t vmfgt_vf_f16m4_b4 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vbool2_t vmfgt_vv_f16m8_b2 (vfloat16m8_t op1, vfloat16m8_t op2,
    size_t vl);
vbool2_t vmfgt_vf_f16m8_b2 (vfloat16m8_t op1, float16_t op2,
    size_t vl);
vbool64_t vmfgt_vv_f32mf2_b64 (vfloat32mf2_t op1, vfloat32mf2_t
    op2, size_t vl);
vbool64_t vmfgt_vf_f32mf2_b64 (vfloat32mf2_t op1, float32_t op2,
    size_t vl);
vbool32_t vmfgt_vv_f32m1_b32 (vfloat32m1_t op1, vfloat32m1_t
    op2, size_t vl);
vbool32_t vmfgt_vf_f32m1_b32 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vbool16_t vmfgt_vv_f32m2_b16 (vfloat32m2_t op1, vfloat32m2_t
    op2, size_t vl);
vbool16_t vmfgt_vf_f32m2_b16 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
vbool8_t vmfgt_vv_f32m4_b8 (vfloat32m4_t op1, vfloat32m4_t op2,
    size_t vl);
vbool8_t vmfgt_vf_f32m4_b8 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
vbool4_t vmfgt_vv_f32m8_b4 (vfloat32m8_t op1, vfloat32m8_t op2,
    size_t vl);
vbool4_t vmfgt_vf_f32m8_b4 (vfloat32m8_t op1, float32_t op2,
    size_t vl);
vbool64_t vmfgt_vv_f64m1_b64 (vfloat64m1_t op1, vfloat64m1_t
    op2, size_t vl);
vbool64_t vmfgt_vf_f64m1_b64 (vfloat64m1_t op1, float64_t op2,
    size_t vl);
```

```
vbool32_t vmfgt_vv_f64m2_b32 (vfloat64m2_t op1, vfloat64m2_t
    op2, size_t vl);
vbool32_t vmfgt_vf_f64m2_b32 (vfloat64m2_t op1, float64_t op2,
    size_t vl);
vbool16_t vmfgt_vv_f64m4_b16 (vfloat64m4_t op1, vfloat64m4_t
    op2, size_t vl);
vbool16_t vmfgt_vf_f64m4_b16 (vfloat64m4_t op1, float64_t op2,
    size_t vl);
vbool8_t vmfgt_vv_f64m8_b8 (vfloat64m8_t op1, vfloat64m8_t op2,
    size_t vl);
vbool8_t vmfgt_vf_f64m8_b8 (vfloat64m8_t op1, float64_t op2,
    size_t vl);
vbool64_t vmfge_vv_f16mf4_b64 (vfloat16mf4_t op1, vfloat16mf4_t
    op2, size_t vl);
vbool64_t vmfge_vf_f16mf4_b64 (vfloat16mf4_t op1, float16_t op2,
    size_t vl);
vbool32_t vmfge_vv_f16mf2_b32 (vfloat16mf2_t op1, vfloat16mf2_t
    op2, size_t vl);
vbool32_t vmfge_vf_f16mf2_b32 (vfloat16mf2_t op1, float16_t op2,
    size_t vl);
vbool16_t vmfge_vv_f16m1_b16 (vfloat16m1_t op1, vfloat16m1_t
    op2, size_t vl);
vbool16_t vmfge_vf_f16m1_b16 (vfloat16m1_t op1, float16_t op2,
    size_t vl);
vbool8_t vmfge_vv_f16m2_b8 (vfloat16m2_t op1, vfloat16m2_t op2,
    size_t vl);
vbool8_t vmfge_vf_f16m2_b8 (vfloat16m2_t op1, float16_t op2,
    size_t vl);
vbool4_t vmfge_vv_f16m4_b4 (vfloat16m4_t op1, vfloat16m4_t op2,
    size_t vl);
vbool4_t vmfge_vf_f16m4_b4 (vfloat16m4_t op1, float16_t op2,
    size_t vl);
vbool2_t vmfge_vv_f16m8_b2 (vfloat16m8_t op1, vfloat16m8_t op2,
    size_t vl);
vbool2_t vmfge_vf_f16m8_b2 (vfloat16m8_t op1, float16_t op2,
    size_t vl);
vbool64_t vmfge_vv_f32mf2_b64 (vfloat32mf2_t op1, vfloat32mf2_t
    op2, size_t vl);
vbool64_t vmfge_vf_f32mf2_b64 (vfloat32mf2_t op1, float32_t op2,
    size_t vl);
vbool32_t vmfge_vv_f32m1_b32 (vfloat32m1_t op1, vfloat32m1_t
    op2, size_t vl);
vbool32_t vmfge_vf_f32m1_b32 (vfloat32m1_t op1, float32_t op2,
    size_t vl);
vbool16_t vmfge_vv_f32m2_b16 (vfloat32m2_t op1, vfloat32m2_t
    op2, size_t vl);
```

```
vbool16_t vmfge_vf_f32m2_b16 (vfloat32m2_t op1, float32_t op2,
    size_t vl);
vbool8_t vmfge_vv_f32m4_b8 (vfloat32m4_t op1, vfloat32m4_t op2,
    size_t vl);
vbool8_t vmfge_vf_f32m4_b8 (vfloat32m4_t op1, float32_t op2,
    size_t vl);
vbool4_t vmfge_vv_f32m8_b4 (vfloat32m8_t op1, vfloat32m8_t op2,
    size_t vl);
vbool4_t vmfge_vf_f32m8_b4 (vfloat32m8_t op1, float32_t op2,
    size_t vl);
vbool64_t vmfge_vv_f64m1_b64 (vfloat64m1_t op1, vfloat64m1_t
    op2, size_t vl);
vbool64_t vmfge_vf_f64m1_b64 (vfloat64m1_t op1, float64_t op2,
    size_t vl);
vbool32_t vmfge_vv_f64m2_b32 (vfloat64m2_t op1, vfloat64m2_t
    op2, size_t vl);
vbool32_t vmfge_vf_f64m2_b32 (vfloat64m2_t op1, float64_t op2,
    size_t vl);
vbool16_t vmfge_vv_f64m4_b16 (vfloat64m4_t op1, vfloat64m4_t
    op2, size_t vl);
vbool16_t vmfge_vf_f64m4_b16 (vfloat64m4_t op1, float64_t op2,
    size_t vl);
vbool8_t vmfge_vv_f64m8_b8 (vfloat64m8_t op1, vfloat64m8_t op2,
    size_t vl);
vbool8_t vmfge_vf_f64m8_b8 (vfloat64m8_t op1, float64_t op2,
    size_t vl);
// masked functions
vbool64_t vmfeq_vv_f16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat16mf4_t op1, vfloat16mf4_t op2, size_t vl);
vbool64_t vmfeq_vf_f16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
vbool32_t vmfeq_vv_f16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat16mf2_t op1, vfloat16mf2_t op2, size_t vl);
vbool32_t vmfeq_vf_f16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
vbool16_t vmfeq_vv_f16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat16m1_t op1, vfloat16m1_t op2, size_t vl);
vbool16_t vmfeq_vf_f16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
vbool8_t vmfeq_vv_f16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat16m2_t op1, vfloat16m2_t op2, size_t vl);
vbool8_t vmfeq_vf_f16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat16m2_t op1, float16_t op2, size_t vl);
vbool4_t vmfeq_vv_f16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat16m4_t op1, vfloat16m4_t op2, size_t vl);
```

```
vbool4_t vmfeq_vf_f16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat16m4_t op1, float16_t op2, size_t vl);
vbool2_t vmfeq_vv_f16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vfloat16m8_t op1, vfloat16m8_t op2, size_t vl);
vbool2_t vmfeq_vf_f16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vfloat16m8_t op1, float16_t op2, size_t vl);
vbool64_t vmfeq_vv_f32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat32mf2_t op1, vfloat32mf2_t op2, size_t vl);
vbool64_t vmfeq_vf_f32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vbool32_t vmfeq_vv_f32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat32m1_t op1, vfloat32m1_t op2, size_t vl);
vbool32_t vmfeq_vf_f32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vbool16_t vmfeq_vv_f32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat32m2_t op1, vfloat32m2_t op2, size_t vl);
vbool16_t vmfeq_vf_f32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
vbool8_t vmfeq_vv_f32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat32m4_t op1, vfloat32m4_t op2, size_t vl);
vbool8_t vmfeq_vf_f32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat32m4_t op1, float32_t op2, size_t vl);
vbool4_t vmfeq_vv_f32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat32m8_t op1, vfloat32m8_t op2, size_t vl);
vbool4_t vmfeq_vf_f32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat32m8_t op1, float32_t op2, size_t vl);
vbool64_t vmfeq_vv_f64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat64m1_t op1, vfloat64m1_t op2, size_t vl);
vbool64_t vmfeq_vf_f64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat64m1_t op1, float64_t op2, size_t vl);
vbool32_t vmfeq_vv_f64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat64m2_t op1, vfloat64m2_t op2, size_t vl);
vbool32_t vmfeq_vf_f64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat64m2_t op1, float64_t op2, size_t vl);
vbool16_t vmfeq_vv_f64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat64m4_t op1, vfloat64m4_t op2, size_t vl);
vbool16_t vmfeq_vf_f64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat64m4_t op1, float64_t op2, size_t vl);
vbool8_t vmfeq_vv_f64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat64m8_t op1, vfloat64m8_t op2, size_t vl);
vbool8_t vmfeq_vf_f64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat64m8_t op1, float64_t op2, size_t vl);
vbool64_t vmfne_vv_f16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat16mf4_t op1, vfloat16mf4_t op2, size_t vl);
vbool64_t vmfne_vf_f16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
```

```
vbool32_t vmfne_vv_f16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat16mf2_t op1, vfloat16mf2_t op2, size_t vl);
vbool32_t vmfne_vf_f16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
vbool16_t vmfne_vv_f16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat16m1_t op1, vfloat16m1_t op2, size_t vl);
vbool16_t vmfne_vf_f16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
vbool8_t vmfne_vv_f16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat16m2_t op1, vfloat16m2_t op2, size_t vl);
vbool8_t vmfne_vf_f16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat16m2_t op1, float16_t op2, size_t vl);
vbool4_t vmfne_vv_f16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat16m4_t op1, vfloat16m4_t op2, size_t vl);
vbool4_t vmfne_vf_f16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat16m4_t op1, float16_t op2, size_t vl);
vbool2_t vmfne_vv_f16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vfloat16m8_t op1, vfloat16m8_t op2, size_t vl);
vbool2_t vmfne_vf_f16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vfloat16m8_t op1, float16_t op2, size_t vl);
vbool64_t vmfne_vv_f32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat32mf2_t op1, vfloat32mf2_t op2, size_t vl);
vbool64_t vmfne_vf_f32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vbool32_t vmfne_vv_f32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat32m1_t op1, vfloat32m1_t op2, size_t vl);
vbool32_t vmfne_vf_f32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vbool16_t vmfne_vv_f32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat32m2_t op1, vfloat32m2_t op2, size_t vl);
vbool16_t vmfne_vf_f32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
vbool8_t vmfne_vv_f32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat32m4_t op1, vfloat32m4_t op2, size_t vl);
vbool8_t vmfne_vf_f32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat32m4_t op1, float32_t op2, size_t vl);
vbool4_t vmfne_vv_f32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat32m8_t op1, vfloat32m8_t op2, size_t vl);
vbool4_t vmfne_vf_f32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat32m8_t op1, float32_t op2, size_t vl);
vbool64_t vmfne_vv_f64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat64m1_t op1, vfloat64m1_t op2, size_t vl);
vbool64_t vmfne_vf_f64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat64m1_t op1, float64_t op2, size_t vl);
vbool32_t vmfne_vv_f64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat64m2_t op1, vfloat64m2_t op2, size_t vl);
```

```
vbool32_t vmfne_vf_f64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat64m2_t op1, float64_t op2, size_t vl);
vbool16_t vmfne_vv_f64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat64m4_t op1, vfloat64m4_t op2, size_t vl);
vbool16_t vmfne_vf_f64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat64m4_t op1, float64_t op2, size_t vl);
vbool8_t vmfne_vv_f64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat64m8_t op1, vfloat64m8_t op2, size_t vl);
vbool8_t vmfne_vf_f64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat64m8_t op1, float64_t op2, size_t vl);
vbool64_t vmflt_vv_f16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat16mf4_t op1, vfloat16mf4_t op2, size_t vl);
vbool64_t vmflt_vf_f16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
vbool32_t vmflt_vv_f16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat16mf2_t op1, vfloat16mf2_t op2, size_t vl);
vbool32_t vmflt_vf_f16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
vbool16_t vmflt_vv_f16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat16m1_t op1, vfloat16m1_t op2, size_t vl);
vbool16_t vmflt_vf_f16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
vbool8_t vmflt_vv_f16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat16m2_t op1, vfloat16m2_t op2, size_t vl);
vbool8_t vmflt_vf_f16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat16m2_t op1, float16_t op2, size_t vl);
vbool4_t vmflt_vv_f16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat16m4_t op1, vfloat16m4_t op2, size_t vl);
vbool4_t vmflt_vf_f16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat16m4_t op1, float16_t op2, size_t vl);
vbool2_t vmflt_vv_f16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vfloat16m8_t op1, vfloat16m8_t op2, size_t vl);
vbool2_t vmflt_vf_f16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vfloat16m8_t op1, float16_t op2, size_t vl);
vbool64_t vmflt_vv_f32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat32mf2_t op1, vfloat32mf2_t op2, size_t vl);
vbool64_t vmflt_vf_f32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vbool32_t vmflt_vv_f32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat32m1_t op1, vfloat32m1_t op2, size_t vl);
vbool32_t vmflt_vf_f32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vbool16_t vmflt_vv_f32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat32m2_t op1, vfloat32m2_t op2, size_t vl);
vbool16_t vmflt_vf_f32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
```

```
vbool8_t vmflt_vv_f32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat32m4_t op1, vfloat32m4_t op2, size_t vl);
vbool8_t vmflt_vf_f32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat32m4_t op1, float32_t op2, size_t vl);
vbool4_t vmflt_vv_f32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat32m8_t op1, vfloat32m8_t op2, size_t vl);
vbool4_t vmflt_vf_f32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat32m8_t op1, float32_t op2, size_t vl);
vbool64_t vmflt_vv_f64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat64m1_t op1, vfloat64m1_t op2, size_t vl);
vbool64_t vmflt_vf_f64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat64m1_t op1, float64_t op2, size_t vl);
vbool32_t vmflt_vv_f64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat64m2_t op1, vfloat64m2_t op2, size_t vl);
vbool32_t vmflt_vf_f64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat64m2_t op1, float64_t op2, size_t vl);
vbool16_t vmflt_vv_f64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat64m4_t op1, vfloat64m4_t op2, size_t vl);
vbool16_t vmflt_vf_f64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat64m4_t op1, float64_t op2, size_t vl);
vbool8_t vmflt_vv_f64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat64m8_t op1, vfloat64m8_t op2, size_t vl);
vbool8_t vmflt_vf_f64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat64m8_t op1, float64_t op2, size_t vl);
vbool64_t vmfle_vv_f16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat16mf4_t op1, vfloat16mf4_t op2, size_t vl);
vbool64_t vmfle_vf_f16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
vbool32_t vmfle_vv_f16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat16mf2_t op1, vfloat16mf2_t op2, size_t vl);
vbool32_t vmfle_vf_f16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
vbool16_t vmfle_vv_f16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat16m1_t op1, vfloat16m1_t op2, size_t vl);
vbool16_t vmfle_vf_f16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
vbool8_t vmfle_vv_f16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat16m2_t op1, vfloat16m2_t op2, size_t vl);
vbool8_t vmfle_vf_f16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat16m2_t op1, float16_t op2, size_t vl);
vbool4_t vmfle_vv_f16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat16m4_t op1, vfloat16m4_t op2, size_t vl);
vbool4_t vmfle_vf_f16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat16m4_t op1, float16_t op2, size_t vl);
vbool2_t vmfle_vv_f16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vfloat16m8_t op1, vfloat16m8_t op2, size_t vl);
```

```
vbool2_t vmfle_vf_f16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vfloat16m8_t op1, float16_t op2, size_t vl);
vbool64_t vmfle_vv_f32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat32mf2_t op1, vfloat32mf2_t op2, size_t vl);
vbool64_t vmfle_vf_f32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vbool32_t vmfle_vv_f32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat32m1_t op1, vfloat32m1_t op2, size_t vl);
vbool32_t vmfle_vf_f32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vbool16_t vmfle_vv_f32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat32m2_t op1, vfloat32m2_t op2, size_t vl);
vbool16_t vmfle_vf_f32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
vbool8_t vmfle_vv_f32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat32m4_t op1, vfloat32m4_t op2, size_t vl);
vbool8_t vmfle_vf_f32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat32m4_t op1, float32_t op2, size_t vl);
vbool4_t vmfle_vv_f32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat32m8_t op1, vfloat32m8_t op2, size_t vl);
vbool4_t vmfle_vf_f32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat32m8_t op1, float32_t op2, size_t vl);
vbool64_t vmfle_vv_f64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat64m1_t op1, vfloat64m1_t op2, size_t vl);
vbool64_t vmfle_vf_f64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat64m1_t op1, float64_t op2, size_t vl);
vbool32_t vmfle_vv_f64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat64m2_t op1, vfloat64m2_t op2, size_t vl);
vbool32_t vmfle_vf_f64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat64m2_t op1, float64_t op2, size_t vl);
vbool16_t vmfle_vv_f64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat64m4_t op1, vfloat64m4_t op2, size_t vl);
vbool16_t vmfle_vf_f64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat64m4_t op1, float64_t op2, size_t vl);
vbool8_t vmfle_vv_f64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat64m8_t op1, vfloat64m8_t op2, size_t vl);
vbool8_t vmfle_vf_f64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat64m8_t op1, float64_t op2, size_t vl);
vbool64_t vmfgt_vv_f16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat16mf4_t op1, vfloat16mf4_t op2, size_t vl);
vbool64_t vmfgt_vf_f16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
vbool32_t vmfgt_vv_f16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat16mf2_t op1, vfloat16mf2_t op2, size_t vl);
vbool32_t vmfgt_vf_f16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
```

```
vbool16_t vmfgt_vv_f16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat16m1_t op1, vfloat16m1_t op2, size_t vl);
vbool16_t vmfgt_vf_f16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
vbool8_t vmfgt_vv_f16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat16m2_t op1, vfloat16m2_t op2, size_t vl);
vbool8_t vmfgt_vf_f16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat16m2_t op1, float16_t op2, size_t vl);
vbool4_t vmfgt_vv_f16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat16m4_t op1, vfloat16m4_t op2, size_t vl);
vbool4_t vmfgt_vf_f16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat16m4_t op1, float16_t op2, size_t vl);
vbool2_t vmfgt_vv_f16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vfloat16m8_t op1, vfloat16m8_t op2, size_t vl);
vbool2_t vmfgt_vf_f16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vfloat16m8_t op1, float16_t op2, size_t vl);
vbool64_t vmfgt_vv_f32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat32mf2_t op1, vfloat32mf2_t op2, size_t vl);
vbool64_t vmfgt_vf_f32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vbool32_t vmfgt_vv_f32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat32m1_t op1, vfloat32m1_t op2, size_t vl);
vbool32_t vmfgt_vf_f32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vbool16_t vmfgt_vv_f32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat32m2_t op1, vfloat32m2_t op2, size_t vl);
vbool16_t vmfgt_vf_f32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
vbool8_t vmfgt_vv_f32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat32m4_t op1, vfloat32m4_t op2, size_t vl);
vbool8_t vmfgt_vf_f32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat32m4_t op1, float32_t op2, size_t vl);
vbool4_t vmfgt_vv_f32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat32m8_t op1, vfloat32m8_t op2, size_t vl);
vbool4_t vmfgt_vf_f32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat32m8_t op1, float32_t op2, size_t vl);
vbool64_t vmfgt_vv_f64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat64m1_t op1, vfloat64m1_t op2, size_t vl);
vbool64_t vmfgt_vf_f64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat64m1_t op1, float64_t op2, size_t vl);
vbool32_t vmfgt_vv_f64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat64m2_t op1, vfloat64m2_t op2, size_t vl);
vbool32_t vmfgt_vf_f64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat64m2_t op1, float64_t op2, size_t vl);
vbool16_t vmfgt_vv_f64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat64m4_t op1, vfloat64m4_t op2, size_t vl);
```

```
vbool16_t vmfgt_vf_f64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat64m4_t op1, float64_t op2, size_t vl);
vbool8_t vmfgt_vv_f64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat64m8_t op1, vfloat64m8_t op2, size_t vl);
vbool8_t vmfgt_vf_f64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat64m8_t op1, float64_t op2, size_t vl);
vbool64_t vmfge_vv_f16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat16mf4_t op1, vfloat16mf4_t op2, size_t vl);
vbool64_t vmfge_vf_f16mf4_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat16mf4_t op1, float16_t op2, size_t vl);
vbool32_t vmfge_vv_f16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat16mf2_t op1, vfloat16mf2_t op2, size_t vl);
vbool32_t vmfge_vf_f16mf2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat16mf2_t op1, float16_t op2, size_t vl);
vbool16_t vmfge_vv_f16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat16m1_t op1, vfloat16m1_t op2, size_t vl);
vbool16_t vmfge_vf_f16m1_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat16m1_t op1, float16_t op2, size_t vl);
vbool8_t vmfge_vv_f16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat16m2_t op1, vfloat16m2_t op2, size_t vl);
vbool8_t vmfge_vf_f16m2_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat16m2_t op1, float16_t op2, size_t vl);
vbool4_t vmfge_vv_f16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat16m4_t op1, vfloat16m4_t op2, size_t vl);
vbool4_t vmfge_vf_f16m4_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat16m4_t op1, float16_t op2, size_t vl);
vbool2_t vmfge_vv_f16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vfloat16m8_t op1, vfloat16m8_t op2, size_t vl);
vbool2_t vmfge_vf_f16m8_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vfloat16m8_t op1, float16_t op2, size_t vl);
vbool64_t vmfge_vv_f32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat32mf2_t op1, vfloat32mf2_t op2, size_t vl);
vbool64_t vmfge_vf_f32mf2_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat32mf2_t op1, float32_t op2, size_t vl);
vbool32_t vmfge_vv_f32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat32m1_t op1, vfloat32m1_t op2, size_t vl);
vbool32_t vmfge_vf_f32m1_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat32m1_t op1, float32_t op2, size_t vl);
vbool16_t vmfge_vv_f32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat32m2_t op1, vfloat32m2_t op2, size_t vl);
vbool16_t vmfge_vf_f32m2_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat32m2_t op1, float32_t op2, size_t vl);
vbool8_t vmfge_vv_f32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat32m4_t op1, vfloat32m4_t op2, size_t vl);
vbool8_t vmfge_vf_f32m4_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat32m4_t op1, float32_t op2, size_t vl);
```

```
vbool4_t vmfge_vv_f32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat32m8_t op1, vfloat32m8_t op2, size_t vl);
vbool4_t vmfge_vf_f32m8_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vfloat32m8_t op1, float32_t op2, size_t vl);
vbool64_t vmfge_vv_f64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat64m1_t op1, vfloat64m1_t op2, size_t vl);
vbool64_t vmfge_vf_f64m1_b64_m (vbool64_t mask, vbool64_t
    maskedoff, vfloat64m1_t op1, float64_t op2, size_t vl);
vbool32_t vmfge_vv_f64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat64m2_t op1, vfloat64m2_t op2, size_t vl);
vbool32_t vmfge_vf_f64m2_b32_m (vbool32_t mask, vbool32_t
    maskedoff, vfloat64m2_t op1, float64_t op2, size_t vl);
vbool16_t vmfge_vv_f64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat64m4_t op1, vfloat64m4_t op2, size_t vl);
vbool16_t vmfge_vf_f64m4_b16_m (vbool16_t mask, vbool16_t
    maskedoff, vfloat64m4_t op1, float64_t op2, size_t vl);
vbool8_t vmfge_vv_f64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat64m8_t op1, vfloat64m8_t op2, size_t vl);
vbool8_t vmfge_vf_f64m8_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vfloat64m8_t op1, float64_t op2, size_t vl);
```

Vector Floating-Point Classify Functions:

Prototypes:

```
vuint16mf4_t vfclass_v_u16mf4 (vfloat16mf4_t op1, size_t vl);
vuint16mf2_t vfclass_v_u16mf2 (vfloat16mf2_t op1, size_t vl);
vuint16m1_t vfclass_v_u16m1 (vfloat16m1_t op1, size_t vl);
vuint16m2_t vfclass_v_u16m2 (vfloat16m2_t op1, size_t vl);
vuint16m4_t vfclass_v_u16m4 (vfloat16m4_t op1, size_t vl);
vuint16m8_t vfclass_v_u16m8 (vfloat16m8_t op1, size_t vl);
vuint32mf2_t vfclass_v_u32mf2 (vfloat32mf2_t op1, size_t vl);
vuint32m1_t vfclass_v_u32m1 (vfloat32m1_t op1, size_t vl);
vuint32m2_t vfclass_v_u32m2 (vfloat32m2_t op1, size_t vl);
vuint32m4_t vfclass_v_u32m4 (vfloat32m4_t op1, size_t vl);
vuint32m8_t vfclass_v_u32m8 (vfloat32m8_t op1, size_t vl);
vuint64m1_t vfclass_v_u64m1 (vfloat64m1_t op1, size_t vl);
vuint64m2_t vfclass_v_u64m2 (vfloat64m2_t op1, size_t vl);
vuint64m4_t vfclass_v_u64m4 (vfloat64m4_t op1, size_t vl);
vuint64m8_t vfclass_v_u64m8 (vfloat64m8_t op1, size_t vl);
// masked functions
vuint16mf4_t vfclass_v_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vfloat16mf4_t op1, size_t vl);
vuint16mf2_t vfclass_v_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vfloat16mf2_t op1, size_t vl);
```

```
vuint16m1_t vfclass_v_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vfloat16m1_t op1, size_t vl);
vuint16m2_t vfclass_v_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vfloat16m2_t op1, size_t vl);
vuint16m4_t vfclass_v_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vfloat16m4_t op1, size_t vl);
vuint16m8_t vfclass_v_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vfloat16m8_t op1, size_t vl);
vuint32mf2_t vfclass_v_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vfloat32mf2_t op1, size_t vl);
vuint32m1_t vfclass_v_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vfloat32m1_t op1, size_t vl);
vuint32m2_t vfclass_v_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vfloat32m2_t op1, size_t vl);
vuint32m4_t vfclass_v_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vfloat32m4_t op1, size_t vl);
vuint32m8_t vfclass_v_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vfloat32m8_t op1, size_t vl);
vuint64m1_t vfclass_v_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vfloat64m1_t op1, size_t vl);
vuint64m2_t vfclass_v_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vfloat64m2_t op1, size_t vl);
vuint64m4_t vfclass_v_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vfloat64m4_t op1, size_t vl);
vuint64m8_t vfclass_v_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vfloat64m8_t op1, size_t vl);
```

Vector Floating-Point Merge Functions:

Prototypes:

```
vfloat16mf4_t vmerge_vvm_f16mf4 (vbool64_t mask, vfloat16mf4_t
    op1, vfloat16mf4_t op2, size_t vl);
vfloat16mf4_t vfmerge_vfm_f16mf4 (vbool64_t mask, vfloat16mf4_t
    op1, float16_t op2, size_t vl);
vfloat16mf2_t vmerge_vvm_f16mf2 (vbool32_t mask, vfloat16mf2_t
    op1, vfloat16mf2_t op2, size_t vl);
vfloat16mf2_t vfmerge_vfm_f16mf2 (vbool32_t mask, vfloat16mf2_t
    op1, float16_t op2, size_t vl);
vfloat16m1_t vmerge_vvm_f16m1 (vbool16_t mask, vfloat16m1_t op1,
    vfloat16m1_t op2, size_t vl);
vfloat16m1_t vfmerge_vfm_f16m1 (vbool16_t mask, vfloat16m1_t
    op1, float16_t op2, size_t vl);
vfloat16m2_t vmerge_vvm_f16m2 (vbool8_t mask, vfloat16m2_t op1,
    vfloat16m2_t op2, size_t vl);
```

```
vfloat16m2_t vfmerge_vfm_f16m2 (vbool8_t mask, vfloat16m2_t op1,
    float16_t op2, size_t vl);
vfloat16m4_t vmerge_vvm_f16m4 (vbool4_t mask, vfloat16m4_t op1,
    vfloat16m4_t op2, size_t vl);
vfloat16m4_t vfmerge_vfm_f16m4 (vbool4_t mask, vfloat16m4_t op1,
    float16_t op2, size_t vl);
vfloat16m8_t vmerge_vvm_f16m8 (vbool2_t mask, vfloat16m8_t op1,
    vfloat16m8_t op2, size_t vl);
vfloat16m8_t vfmerge_vfm_f16m8 (vbool2_t mask, vfloat16m8_t op1,
    float16_t op2, size_t vl);
vfloat32mf2_t vmerge_vvm_f32mf2 (vbool64_t mask, vfloat32mf2_t
    op1, vfloat32mf2_t op2, size_t vl);
vfloat32mf2_t vfmerge_vfm_f32mf2 (vbool64_t mask, vfloat32mf2_t
    op1, float32_t op2, size_t vl);
vfloat32m1_t vmerge_vvm_f32m1 (vbool32_t mask, vfloat32m1_t op1,
    vfloat32m1_t op2, size_t vl);
vfloat32m1_t vfmerge_vfm_f32m1 (vbool32_t mask, vfloat32m1_t
    op1, float32_t op2, size_t vl);
vfloat32m2_t vmerge_vvm_f32m2 (vbool16_t mask, vfloat32m2_t op1,
    vfloat32m2_t op2, size_t vl);
vfloat32m2_t vfmerge_vfm_f32m2 (vbool16_t mask, vfloat32m2_t
    op1, float32_t op2, size_t vl);
vfloat32m4_t vmerge_vvm_f32m4 (vbool8_t mask, vfloat32m4_t op1,
    vfloat32m4_t op2, size_t vl);
vfloat32m4_t vfmerge_vfm_f32m4 (vbool8_t mask, vfloat32m4_t op1,
    float32_t op2, size_t vl);
vfloat32m8_t vmerge_vvm_f32m8 (vbool4_t mask, vfloat32m8_t op1,
    vfloat32m8_t op2, size_t vl);
vfloat32m8_t vfmerge_vfm_f32m8 (vbool4_t mask, vfloat32m8_t op1,
    float32_t op2, size_t vl);
vfloat64m1_t vmerge_vvm_f64m1 (vbool64_t mask, vfloat64m1_t op1,
    vfloat64m1_t op2, size_t vl);
vfloat64m1_t vfmerge_vfm_f64m1 (vbool64_t mask, vfloat64m1_t
    op1, float64_t op2, size_t vl);
vfloat64m2_t vmerge_vvm_f64m2 (vbool32_t mask, vfloat64m2_t op1,
    vfloat64m2_t op2, size_t vl);
vfloat64m2_t vfmerge_vfm_f64m2 (vbool32_t mask, vfloat64m2_t
    op1, float64_t op2, size_t vl);
vfloat64m4_t vmerge_vvm_f64m4 (vbool16_t mask, vfloat64m4_t op1,
    vfloat64m4_t op2, size_t vl);
vfloat64m4_t vfmerge_vfm_f64m4 (vbool16_t mask, vfloat64m4_t
    op1, float64_t op2, size_t vl);
vfloat64m8_t vmerge_vvm_f64m8 (vbool8_t mask, vfloat64m8_t op1,
    vfloat64m8_t op2, size_t vl);
vfloat64m8_t vfmerge_vfm_f64m8 (vbool8_t mask, vfloat64m8_t op1,
    float64_t op2, size_t vl);
```

Vector Floating-Point Move Functions:

Prototypes:

```
vfloat16mf4_t vmv_v_v_f16mf4 (vfloat16mf4_t src, size_t vl);
vfloat16mf4_t vfmv_v_f_f16mf4 (float16_t src, size_t vl);
vfloat16mf2_t vmv_v_v_f16mf2 (vfloat16mf2_t src, size_t vl);
vfloat16mf2_t vfmv_v_f_f16mf2 (float16_t src, size_t vl);
vfloat16m1_t vmv_v_v_f16m1 (vfloat16m1_t src, size_t vl);
vfloat16m1_t vfmv_v_f_f16m1 (float16_t src, size_t vl);
vfloat16m2_t vmv_v_v_f16m2 (vfloat16m2_t src, size_t vl);
vfloat16m2_t vfmv_v_f_f16m2 (float16_t src, size_t vl);
vfloat16m4_t vmv_v_v_f16m4 (vfloat16m4_t src, size_t vl);
vfloat16m4_t vfmv_v_f_f16m4 (float16_t src, size_t vl);
vfloat16m8_t vmv_v_v_f16m8 (vfloat16m8_t src, size_t vl);
vfloat16m8_t vfmv_v_f_f16m8 (float16_t src, size_t vl);
vfloat32mf2_t vmv_v_v_f32mf2 (vfloat32mf2_t src, size_t vl);
vfloat32mf2_t vfmv_v_f_f32mf2 (float32_t src, size_t vl);
vfloat32m1_t vmv_v_v_f32m1 (vfloat32m1_t src, size_t vl);
vfloat32m1_t vfmv_v_f_f32m1 (float32_t src, size_t vl);
vfloat32m2_t vmv_v_v_f32m2 (vfloat32m2_t src, size_t vl);
vfloat32m2_t vfmv_v_f_f32m2 (float32_t src, size_t vl);
vfloat32m4_t vmv_v_v_f32m4 (vfloat32m4_t src, size_t vl);
vfloat32m4_t vfmv_v_f_f32m4 (float32_t src, size_t vl);
vfloat32m8_t vmv_v_v_f32m8 (vfloat32m8_t src, size_t vl);
vfloat32m8_t vfmv_v_f_f32m8 (float32_t src, size_t vl);
vfloat64m1_t vmv_v_v_f64m1 (vfloat64m1_t src, size_t vl);
vfloat64m1_t vfmv_v_f_f64m1 (float64_t src, size_t vl);
vfloat64m2_t vmv_v_v_f64m2 (vfloat64m2_t src, size_t vl);
vfloat64m2_t vfmv_v_f_f64m2 (float64_t src, size_t vl);
vfloat64m4_t vmv_v_v_f64m4 (vfloat64m4_t src, size_t vl);
vfloat64m4_t vfmv_v_f_f64m4 (float64_t src, size_t vl);
vfloat64m8_t vmv_v_v_f64m8 (vfloat64m8_t src, size_t vl);
vfloat64m8_t vfmv_v_f_f64m8 (float64_t src, size_t vl);
```

Single-Width Floating-Point/Integer Type-Convert Functions:

Prototypes:

```
vint16mf4_t vfcvt_x_f_v_i16mf4 (vfloat16mf4_t src, size_t vl);
vint16mf4_t vfcvt_rtz_x_f_v_i16mf4 (vfloat16mf4_t src, size_t
    vl);
vint16mf2_t vfcvt_x_f_v_i16mf2 (vfloat16mf2_t src, size_t vl);
vint16mf2_t vfcvt_rtz_x_f_v_i16mf2 (vfloat16mf2_t src, size_t
    vl);
vint16m1_t vfcvt_x_f_v_i16m1 (vfloat16m1_t src, size_t vl);
vint16m1_t vfcvt_rtz_x_f_v_i16m1 (vfloat16m1_t src, size_t vl);
```

```
vint16m2_t vfcvt_x_f_v_i16m2 (vfloat16m2_t src, size_t vl);
vint16m2_t vfcvt_rtz_x_f_v_i16m2 (vfloat16m2_t src, size_t vl);
vint16m4_t vfcvt_x_f_v_i16m4 (vfloat16m4_t src, size_t vl);
vint16m4_t vfcvt_rtz_x_f_v_i16m4 (vfloat16m4_t src, size_t vl);
vint16m8_t vfcvt_x_f_v_i16m8 (vfloat16m8_t src, size_t vl);
vint16m8_t vfcvt_rtz_x_f_v_i16m8 (vfloat16m8_t src, size_t vl);
vuint16mf4_t vfcvt_xu_f_v_u16mf4 (vfloat16mf4_t src, size_t vl);
vuint16mf4_t vfcvt_rtz_xu_f_v_u16mf4 (vfloat16mf4_t src, size_t
    vl);
vuint16mf2_t vfcvt_xu_f_v_u16mf2 (vfloat16mf2_t src, size_t vl);
vuint16mf2_t vfcvt_rtz_xu_f_v_u16mf2 (vfloat16mf2_t src, size_t
    vl);
vuint16m1_t vfcvt_xu_f_v_u16m1 (vfloat16m1_t src, size_t vl);
vuint16m1_t vfcvt_rtz_xu_f_v_u16m1 (vfloat16m1_t src, size_t vl);
vuint16m2_t vfcvt_xu_f_v_u16m2 (vfloat16m2_t src, size_t vl);
vuint16m2_t vfcvt_rtz_xu_f_v_u16m2 (vfloat16m2_t src, size_t vl);
vuint16m4_t vfcvt_xu_f_v_u16m4 (vfloat16m4_t src, size_t vl);
vuint16m4_t vfcvt_rtz_xu_f_v_u16m4 (vfloat16m4_t src, size_t vl);
vuint16m8_t vfcvt_xu_f_v_u16m8 (vfloat16m8_t src, size_t vl);
vuint16m8_t vfcvt_rtz_xu_f_v_u16m8 (vfloat16m8_t src, size_t vl);
vfloat16mf4_t vfcvt_f_x_v_f16mf4 (vint16mf4_t src, size_t vl);
vfloat16mf2_t vfcvt_f_x_v_f16mf2 (vint16mf2_t src, size_t vl);
vfloat16m1_t vfcvt_f_x_v_f16m1 (vint16m1_t src, size_t vl);
vfloat16m2_t vfcvt_f_x_v_f16m2 (vint16m2_t src, size_t vl);
vfloat16m4_t vfcvt_f_x_v_f16m4 (vint16m4_t src, size_t vl);
vfloat16m8_t vfcvt_f_x_v_f16m8 (vint16m8_t src, size_t vl);
vfloat16mf4_t vfcvt_f_xu_v_f16mf4 (vuint16mf4_t src, size_t vl);
vfloat16mf2_t vfcvt_f_xu_v_f16mf2 (vuint16mf2_t src, size_t vl);
vfloat16m1_t vfcvt_f_xu_v_f16m1 (vuint16m1_t src, size_t vl);
vfloat16m2_t vfcvt_f_xu_v_f16m2 (vuint16m2_t src, size_t vl);
vfloat16m4_t vfcvt_f_xu_v_f16m4 (vuint16m4_t src, size_t vl);
vfloat16m8_t vfcvt_f_xu_v_f16m8 (vuint16m8_t src, size_t vl);
vint32mf2_t vfcvt_x_f_v_i32mf2 (vfloat32mf2_t src, size_t vl);
vint32mf2_t vfcvt_rtz_x_f_v_i32mf2 (vfloat32mf2_t src, size_t
    vl);
vint32m1_t vfcvt_x_f_v_i32m1 (vfloat32m1_t src, size_t vl);
vint32m1_t vfcvt_rtz_x_f_v_i32m1 (vfloat32m1_t src, size_t vl);
vint32m2_t vfcvt_x_f_v_i32m2 (vfloat32m2_t src, size_t vl);
vint32m2_t vfcvt_rtz_x_f_v_i32m2 (vfloat32m2_t src, size_t vl);
vint32m4_t vfcvt_x_f_v_i32m4 (vfloat32m4_t src, size_t vl);
vint32m4_t vfcvt_rtz_x_f_v_i32m4 (vfloat32m4_t src, size_t vl);
vint32m8_t vfcvt_x_f_v_i32m8 (vfloat32m8_t src, size_t vl);
vint32m8_t vfcvt_rtz_x_f_v_i32m8 (vfloat32m8_t src, size_t vl);
vuint32mf2_t vfcvt_xu_f_v_u32mf2 (vfloat32mf2_t src, size_t vl);
vuint32mf2_t vfcvt_rtz_xu_f_v_u32mf2 (vfloat32mf2_t src, size_t
    vl);
```

```
vuint32m1_t vfcvt_xu_f_v_u32m1 (vfloat32m1_t src, size_t vl);
vuint32m1_t vfcvt_rtz_xu_f_v_u32m1 (vfloat32m1_t src, size_t vl);
vuint32m2_t vfcvt_xu_f_v_u32m2 (vfloat32m2_t src, size_t vl);
vuint32m2_t vfcvt_rtz_xu_f_v_u32m2 (vfloat32m2_t src, size_t vl);
vuint32m4_t vfcvt_xu_f_v_u32m4 (vfloat32m4_t src, size_t vl);
vuint32m4_t vfcvt_rtz_xu_f_v_u32m4 (vfloat32m4_t src, size_t vl);
vuint32m8_t vfcvt_xu_f_v_u32m8 (vfloat32m8_t src, size_t vl);
vuint32m8_t vfcvt_rtz_xu_f_v_u32m8 (vfloat32m8_t src, size_t vl);
vfloat32mf2_t vfcvt_f_x_v_f32mf2 (vint32mf2_t src, size_t vl);
vfloat32m1_t vfcvt_f_x_v_f32m1 (vint32m1_t src, size_t vl);
vfloat32m2_t vfcvt_f_x_v_f32m2 (vint32m2_t src, size_t vl);
vfloat32m4_t vfcvt_f_x_v_f32m4 (vint32m4_t src, size_t vl);
vfloat32m8_t vfcvt_f_x_v_f32m8 (vint32m8_t src, size_t vl);
vfloat32mf2_t vfcvt_f_xu_v_f32mf2 (vuint32mf2_t src, size_t vl);
vfloat32m1_t vfcvt_f_xu_v_f32m1 (vuint32m1_t src, size_t vl);
vfloat32m2_t vfcvt_f_xu_v_f32m2 (vuint32m2_t src, size_t vl);
vfloat32m4_t vfcvt_f_xu_v_f32m4 (vuint32m4_t src, size_t vl);
vfloat32m8_t vfcvt_f_xu_v_f32m8 (vuint32m8_t src, size_t vl);
vint64m1_t vfcvt_x_f_v_i64m1 (vfloat64m1_t src, size_t vl);
vint64m1_t vfcvt_rtz_x_f_v_i64m1 (vfloat64m1_t src, size_t vl);
vint64m2_t vfcvt_x_f_v_i64m2 (vfloat64m2_t src, size_t vl);
vint64m2_t vfcvt_rtz_x_f_v_i64m2 (vfloat64m2_t src, size_t vl);
vint64m4_t vfcvt_x_f_v_i64m4 (vfloat64m4_t src, size_t vl);
vint64m4_t vfcvt_rtz_x_f_v_i64m4 (vfloat64m4_t src, size_t vl);
vint64m8_t vfcvt_x_f_v_i64m8 (vfloat64m8_t src, size_t vl);
vint64m8_t vfcvt_rtz_x_f_v_i64m8 (vfloat64m8_t src, size_t vl);
vuint64m1_t vfcvt_xu_f_v_u64m1 (vfloat64m1_t src, size_t vl);
vuint64m1_t vfcvt_rtz_xu_f_v_u64m1 (vfloat64m1_t src, size_t vl);
vuint64m2_t vfcvt_xu_f_v_u64m2 (vfloat64m2_t src, size_t vl);
vuint64m2_t vfcvt_rtz_xu_f_v_u64m2 (vfloat64m2_t src, size_t vl);
vuint64m4_t vfcvt_xu_f_v_u64m4 (vfloat64m4_t src, size_t vl);
vuint64m4_t vfcvt_rtz_xu_f_v_u64m4 (vfloat64m4_t src, size_t vl);
vuint64m8_t vfcvt_xu_f_v_u64m8 (vfloat64m8_t src, size_t vl);
vuint64m8_t vfcvt_rtz_xu_f_v_u64m8 (vfloat64m8_t src, size_t vl);
vfloat64m1_t vfcvt_f_x_v_f64m1 (vint64m1_t src, size_t vl);
vfloat64m2_t vfcvt_f_x_v_f64m2 (vint64m2_t src, size_t vl);
vfloat64m4_t vfcvt_f_x_v_f64m4 (vint64m4_t src, size_t vl);
vfloat64m8_t vfcvt_f_x_v_f64m8 (vint64m8_t src, size_t vl);
vfloat64m1_t vfcvt_f_xu_v_f64m1 (vuint64m1_t src, size_t vl);
vfloat64m2_t vfcvt_f_xu_v_f64m2 (vuint64m2_t src, size_t vl);
vfloat64m4_t vfcvt_f_xu_v_f64m4 (vuint64m4_t src, size_t vl);
vfloat64m8_t vfcvt_f_xu_v_f64m8 (vuint64m8_t src, size_t vl);
// masked functions
vint16mf4_t vfcvt_x_f_v_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vfloat16mf4_t src, size_t vl);
```

```
vint16mf4_t vfcvt_rtz_x_f_v_i16mf4_m (vbool64_t mask,
    vint16mf4_t maskedoff, vfloat16mf4_t src, size_t vl);
vint16mf2_t vfcvt_x_f_v_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vfloat16mf2_t src, size_t vl);
vint16mf2_t vfcvt_rtz_x_f_v_i16mf2_m (vbool32_t mask,
    vint16mf2_t maskedoff, vfloat16mf2_t src, size_t vl);
vint16m1_t vfcvt_x_f_v_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vfloat16m1_t src, size_t vl);
vint16m1_t vfcvt_rtz_x_f_v_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vfloat16m1_t src, size_t vl);
vint16m2_t vfcvt_x_f_v_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vfloat16m2_t src, size_t vl);
vint16m2_t vfcvt_rtz_x_f_v_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vfloat16m2_t src, size_t vl);
vint16m4_t vfcvt_x_f_v_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vfloat16m4_t src, size_t vl);
vint16m4_t vfcvt_rtz_x_f_v_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vfloat16m4_t src, size_t vl);
vint16m8_t vfcvt_x_f_v_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vfloat16m8_t src, size_t vl);
vint16m8_t vfcvt_rtz_x_f_v_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vfloat16m8_t src, size_t vl);
vuint16mf4_t vfcvt_xu_f_v_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vfloat16mf4_t src, size_t vl);
vuint16mf4_t vfcvt_rtz_xu_f_v_u16mf4_m (vbool64_t mask,
    vuint16mf4_t maskedoff, vfloat16mf4_t src, size_t vl);
vuint16mf2_t vfcvt_xu_f_v_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vfloat16mf2_t src, size_t vl);
vuint16mf2_t vfcvt_rtz_xu_f_v_u16mf2_m (vbool32_t mask,
    vuint16mf2_t maskedoff, vfloat16mf2_t src, size_t vl);
vuint16m1_t vfcvt_xu_f_v_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vfloat16m1_t src, size_t vl);
vuint16m1_t vfcvt_rtz_xu_f_v_u16m1_m (vbool16_t mask,
    vuint16m1_t maskedoff, vfloat16m1_t src, size_t vl);
vuint16m2_t vfcvt_xu_f_v_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vfloat16m2_t src, size_t vl);
vuint16m2_t vfcvt_rtz_xu_f_v_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vfloat16m2_t src, size_t vl);
vuint16m4_t vfcvt_xu_f_v_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vfloat16m4_t src, size_t vl);
vuint16m4_t vfcvt_rtz_xu_f_v_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vfloat16m4_t src, size_t vl);
vuint16m8_t vfcvt_xu_f_v_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vfloat16m8_t src, size_t vl);
vuint16m8_t vfcvt_rtz_xu_f_v_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vfloat16m8_t src, size_t vl);
```

```
vfloat16mf4_t vfcvt_f_x_v_f16mf4_m (vbool64_t mask,
    vfloat16mf4_t maskedoff, vint16mf4_t src, size_t vl);
vfloat16mf2_t vfcvt_f_x_v_f16mf2_m (vbool32_t mask,
    vfloat16mf2_t maskedoff, vint16mf2_t src, size_t vl);
vfloat16m1_t vfcvt_f_x_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vint16m1_t src, size_t vl);
vfloat16m2_t vfcvt_f_x_v_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vint16m2_t src, size_t vl);
vfloat16m4_t vfcvt_f_x_v_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vint16m4_t src, size_t vl);
vfloat16m8_t vfcvt_f_x_v_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vint16m8_t src, size_t vl);
vfloat16mf4_t vfcvt_f_xu_v_f16mf4_m (vbool64_t mask,
    vfloat16mf4_t maskedoff, vuint16mf4_t src, size_t vl);
vfloat16mf2_t vfcvt_f_xu_v_f16mf2_m (vbool32_t mask,
    vfloat16mf2_t maskedoff, vuint16mf2_t src, size_t vl);
vfloat16m1_t vfcvt_f_xu_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vuint16m1_t src, size_t vl);
vfloat16m2_t vfcvt_f_xu_v_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vuint16m2_t src, size_t vl);
vfloat16m4_t vfcvt_f_xu_v_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vuint16m4_t src, size_t vl);
vfloat16m8_t vfcvt_f_xu_v_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vuint16m8_t src, size_t vl);
vint32mf2_t vfcvt_x_f_v_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vfloat32mf2_t src, size_t vl);
vint32mf2_t vfcvt_rtz_x_f_v_i32mf2_m (vbool64_t mask,
    vint32mf2_t maskedoff, vfloat32mf2_t src, size_t vl);
vint32m1_t vfcvt_x_f_v_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vfloat32m1_t src, size_t vl);
vint32m1_t vfcvt_rtz_x_f_v_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vfloat32m1_t src, size_t vl);
vint32m2_t vfcvt_x_f_v_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vfloat32m2_t src, size_t vl);
vint32m2_t vfcvt_rtz_x_f_v_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vfloat32m2_t src, size_t vl);
vint32m4_t vfcvt_x_f_v_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vfloat32m4_t src, size_t vl);
vint32m4_t vfcvt_rtz_x_f_v_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vfloat32m4_t src, size_t vl);
vint32m8_t vfcvt_x_f_v_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vfloat32m8_t src, size_t vl);
vint32m8_t vfcvt_rtz_x_f_v_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vfloat32m8_t src, size_t vl);
vuint32mf2_t vfcvt_xu_f_v_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vfloat32mf2_t src, size_t vl);
```

```
vuint32mf2_t vfcvt_rtz_xu_f_v_u32mf2_m (vbool64_t mask,
    vuint32mf2_t maskedoff, vfloat32mf2_t src, size_t vl);
vuint32m1_t vfcvt_xu_f_v_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vfloat32m1_t src, size_t vl);
vuint32m1_t vfcvt_rtz_xu_f_v_u32m1_m (vbool32_t mask,
    vuint32m1_t maskedoff, vfloat32m1_t src, size_t vl);
vuint32m2_t vfcvt_xu_f_v_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vfloat32m2_t src, size_t vl);
vuint32m2_t vfcvt_rtz_xu_f_v_u32m2_m (vbool16_t mask,
    vuint32m2_t maskedoff, vfloat32m2_t src, size_t vl);
vuint32m4_t vfcvt_xu_f_v_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vfloat32m4_t src, size_t vl);
vuint32m4_t vfcvt_rtz_xu_f_v_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vfloat32m4_t src, size_t vl);
vuint32m8_t vfcvt_xu_f_v_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vfloat32m8_t src, size_t vl);
vuint32m8_t vfcvt_rtz_xu_f_v_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vfloat32m8_t src, size_t vl);
vfloat32mf2_t vfcvt_f_x_v_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t maskedoff, vint32mf2_t src, size_t vl);
vfloat32m1_t vfcvt_f_x_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vint32m1_t src, size_t vl);
vfloat32m2_t vfcvt_f_x_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vint32m2_t src, size_t vl);
vfloat32m4_t vfcvt_f_x_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vint32m4_t src, size_t vl);
vfloat32m8_t vfcvt_f_x_v_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vint32m8_t src, size_t vl);
vfloat32mf2_t vfcvt_f_xu_v_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t maskedoff, vuint32mf2_t src, size_t vl);
vfloat32m1_t vfcvt_f_xu_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vuint32m1_t src, size_t vl);
vfloat32m2_t vfcvt_f_xu_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vuint32m2_t src, size_t vl);
vfloat32m4_t vfcvt_f_xu_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vuint32m4_t src, size_t vl);
vfloat32m8_t vfcvt_f_xu_v_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vuint32m8_t src, size_t vl);
vint64m1_t vfcvt_x_f_v_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vfloat64m1_t src, size_t vl);
vint64m1_t vfcvt_rtz_x_f_v_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vfloat64m1_t src, size_t vl);
vint64m2_t vfcvt_x_f_v_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vfloat64m2_t src, size_t vl);
vint64m2_t vfcvt_rtz_x_f_v_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vfloat64m2_t src, size_t vl);
```

```
vint64m4_t vfcvt_x_f_v_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vfloat64m4_t src, size_t vl);
vint64m4_t vfcvt_rtz_x_f_v_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vfloat64m4_t src, size_t vl);
vint64m8_t vfcvt_x_f_v_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vfloat64m8_t src, size_t vl);
vint64m8_t vfcvt_rtz_x_f_v_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vfloat64m8_t src, size_t vl);
vuint64m1_t vfcvt_xu_f_v_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vfloat64m1_t src, size_t vl);
vuint64m1_t vfcvt_rtz_xu_f_v_u64m1_m (vbool64_t mask,
    vuint64m1_t maskedoff, vfloat64m1_t src, size_t vl);
vuint64m2_t vfcvt_xu_f_v_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vfloat64m2_t src, size_t vl);
vuint64m2_t vfcvt_rtz_xu_f_v_u64m2_m (vbool32_t mask,
    vuint64m2_t maskedoff, vfloat64m2_t src, size_t vl);
vuint64m4_t vfcvt_xu_f_v_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vfloat64m4_t src, size_t vl);
vuint64m4_t vfcvt_rtz_xu_f_v_u64m4_m (vbool16_t mask,
    vuint64m4_t maskedoff, vfloat64m4_t src, size_t vl);
vuint64m8_t vfcvt_xu_f_v_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vfloat64m8_t src, size_t vl);
vuint64m8_t vfcvt_rtz_xu_f_v_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vfloat64m8_t src, size_t vl);
vfloat64m1_t vfcvt_f_x_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vint64m1_t src, size_t vl);
vfloat64m2_t vfcvt_f_x_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vint64m2_t src, size_t vl);
vfloat64m4_t vfcvt_f_x_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vint64m4_t src, size_t vl);
vfloat64m8_t vfcvt_f_x_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vint64m8_t src, size_t vl);
vfloat64m1_t vfcvt_f_xu_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vuint64m1_t src, size_t vl);
vfloat64m2_t vfcvt_f_xu_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vuint64m2_t src, size_t vl);
vfloat64m4_t vfcvt_f_xu_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vuint64m4_t src, size_t vl);
vfloat64m8_t vfcvt_f_xu_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vuint64m8_t src, size_t vl);
```

Widening Floating-Point/Integer Type-Convert Functions:

Prototypes:

```
vint16mf4_t vwcvt_x_x_v_i16mf4 (vint8mf8_t src, size_t vl);
```

```
vint16mf2_t vwcvt_x_x_v_i16mf2 (vint8mf4_t src, size_t vl);
vint16m1_t vwcvt_x_x_v_i16m1 (vint8mf2_t src, size_t vl);
vint16m2_t vwcvt_x_x_v_i16m2 (vint8m1_t src, size_t vl);
vint16m4_t vwcvt_x_x_v_i16m4 (vint8m2_t src, size_t vl);
vint16m8_t vwcvt_x_x_v_i16m8 (vint8m4_t src, size_t vl);
vuint16mf4_t vwcvtu_x_x_v_u16mf4 (vuint8mf8_t src, size_t vl);
vuint16mf2_t vwcvtu_x_x_v_u16mf2 (vuint8mf4_t src, size_t vl);
vuint16m1_t vwcvtu_x_x_v_u16m1 (vuint8mf2_t src, size_t vl);
vuint16m2_t vwcvtu_x_x_v_u16m2 (vuint8m1_t src, size_t vl);
vuint16m4_t vwcvtu_x_x_v_u16m4 (vuint8m2_t src, size_t vl);
vuint16m8_t vwcvtu_x_x_v_u16m8 (vuint8m4_t src, size_t vl);
vfloat16mf4_t vfwcvt_f_x_v_f16mf4 (vint8mf8_t src, size_t vl);
vfloat16mf2_t vfwcvt_f_x_v_f16mf2 (vint8mf4_t src, size_t vl);
vfloat16m1_t vfwcvt_f_x_v_f16m1 (vint8mf2_t src, size_t vl);
vfloat16m2_t vfwcvt_f_x_v_f16m2 (vint8m1_t src, size_t vl);
vfloat16m4_t vfwcvt_f_x_v_f16m4 (vint8m2_t src, size_t vl);
vfloat16m8_t vfwcvt_f_x_v_f16m8 (vint8m4_t src, size_t vl);
vfloat16mf4_t vfwcvt_f_xu_v_f16mf4 (vuint8mf8_t src, size_t vl);
vfloat16mf2_t vfwcvt_f_xu_v_f16mf2 (vuint8mf4_t src, size_t vl);
vfloat16m1_t vfwcvt_f_xu_v_f16m1 (vuint8mf2_t src, size_t vl);
vfloat16m2_t vfwcvt_f_xu_v_f16m2 (vuint8m1_t src, size_t vl);
vfloat16m4_t vfwcvt_f_xu_v_f16m4 (vuint8m2_t src, size_t vl);
vfloat16m8_t vfwcvt_f_xu_v_f16m8 (vuint8m4_t src, size_t vl);
vint32mf2_t vfwcvt_x_f_v_i32mf2 (vfloat16mf4_t src, size_t vl);
vint32mf2_t vfwcvt_rtz_x_f_v_i32mf2 (vfloat16mf4_t src, size_t
    vl);
vint32m1_t vfwcvt_x_f_v_i32m1 (vfloat16mf2_t src, size_t vl);
vint32m1_t vfwcvt_rtz_x_f_v_i32m1 (vfloat16mf2_t src, size_t vl);
vint32m2_t vfwcvt_x_f_v_i32m2 (vfloat16m1_t src, size_t vl);
vint32m2_t vfwcvt_rtz_x_f_v_i32m2 (vfloat16m1_t src, size_t vl);
vint32m4_t vfwcvt_x_f_v_i32m4 (vfloat16m2_t src, size_t vl);
vint32m4_t vfwcvt_rtz_x_f_v_i32m4 (vfloat16m2_t src, size_t vl);
vint32m8_t vfwcvt_x_f_v_i32m8 (vfloat16m4_t src, size_t vl);
vint32m8_t vfwcvt_rtz_x_f_v_i32m8 (vfloat16m4_t src, size_t vl);
vint32mf2_t vwcvt_x_x_v_i32mf2 (vint16mf4_t src, size_t vl);
vint32m1_t vwcvt_x_x_v_i32m1 (vint16mf2_t src, size_t vl);
vint32m2_t vwcvt_x_x_v_i32m2 (vint16m1_t src, size_t vl);
vint32m4_t vwcvt_x_x_v_i32m4 (vint16m2_t src, size_t vl);
vint32m8_t vwcvt_x_x_v_i32m8 (vint16m4_t src, size_t vl);
vuint32mf2_t vwcvtu_x_x_v_u32mf2 (vuint16mf4_t src, size_t vl);
vuint32m1_t vwcvtu_x_x_v_u32m1 (vuint16mf2_t src, size_t vl);
vuint32m2_t vwcvtu_x_x_v_u32m2 (vuint16m1_t src, size_t vl);
vuint32m4_t vwcvtu_x_x_v_u32m4 (vuint16m2_t src, size_t vl);
vuint32m8_t vwcvtu_x_x_v_u32m8 (vuint16m4_t src, size_t vl);
vuint32mf2_t vfwcvt_xu_f_v_u32mf2 (vfloat16mf4_t src, size_t vl);
```

```
vuint32mf2_t vfwcvt_rtz_xu_f_v_u32mf2 (vfloat16mf4_t src, size_t
    vl);
vuint32m1_t vfwcvt_xu_f_v_u32m1 (vfloat16mf2_t src, size_t vl);
vuint32m1_t vfwcvt_rtz_xu_f_v_u32m1 (vfloat16mf2_t src, size_t
    vl);
vuint32m2_t vfwcvt_xu_f_v_u32m2 (vfloat16m1_t src, size_t vl);
vuint32m2_t vfwcvt_rtz_xu_f_v_u32m2 (vfloat16m1_t src, size_t
    vl);
vuint32m4_t vfwcvt_xu_f_v_u32m4 (vfloat16m2_t src, size_t vl);
vuint32m4_t vfwcvt_rtz_xu_f_v_u32m4 (vfloat16m2_t src, size_t
    vl);
vuint32m8_t vfwcvt_xu_f_v_u32m8 (vfloat16m4_t src, size_t vl);
vuint32m8_t vfwcvt_rtz_xu_f_v_u32m8 (vfloat16m4_t src, size_t
    vl);
vfloat32mf2_t vfwcvt_f_x_v_f32mf2 (vint16mf4_t src, size_t vl);
vfloat32m1_t vfwcvt_f_x_v_f32m1 (vint16mf2_t src, size_t vl);
vfloat32m2_t vfwcvt_f_x_v_f32m2 (vint16m1_t src, size_t vl);
vfloat32m4_t vfwcvt_f_x_v_f32m4 (vint16m2_t src, size_t vl);
vfloat32m8_t vfwcvt_f_x_v_f32m8 (vint16m4_t src, size_t vl);
vfloat32mf2_t vfwcvt_f_xu_v_f32mf2 (vuint16mf4_t src, size_t vl);
vfloat32m1_t vfwcvt_f_xu_v_f32m1 (vuint16mf2_t src, size_t vl);
vfloat32m2_t vfwcvt_f_xu_v_f32m2 (vuint16m1_t src, size_t vl);
vfloat32m4_t vfwcvt_f_xu_v_f32m4 (vuint16m2_t src, size_t vl);
vfloat32m8_t vfwcvt_f_xu_v_f32m8 (vuint16m4_t src, size_t vl);
vfloat32mf2_t vfwcvt_f_f_v_f32mf2 (vfloat16mf4_t src, size_t vl);
vfloat32m1_t vfwcvt_f_f_v_f32m1 (vfloat16mf2_t src, size_t vl);
vfloat32m2_t vfwcvt_f_f_v_f32m2 (vfloat16m1_t src, size_t vl);
vfloat32m4_t vfwcvt_f_f_v_f32m4 (vfloat16m2_t src, size_t vl);
vfloat32m8_t vfwcvt_f_f_v_f32m8 (vfloat16m4_t src, size_t vl);
vint64m1_t vfwcvt_x_f_v_i64m1 (vfloat32mf2_t src, size_t vl);
vint64m1_t vfwcvt_rtz_x_f_v_i64m1 (vfloat32mf2_t src, size_t vl);
vint64m2_t vfwcvt_x_f_v_i64m2 (vfloat32m1_t src, size_t vl);
vint64m2_t vfwcvt_rtz_x_f_v_i64m2 (vfloat32m1_t src, size_t vl);
vint64m4_t vfwcvt_x_f_v_i64m4 (vfloat32m2_t src, size_t vl);
vint64m4_t vfwcvt_rtz_x_f_v_i64m4 (vfloat32m2_t src, size_t vl);
vint64m8_t vfwcvt_x_f_v_i64m8 (vfloat32m4_t src, size_t vl);
vint64m8_t vfwcvt_rtz_x_f_v_i64m8 (vfloat32m4_t src, size_t vl);
vint64m1_t vwcvt_x_x_v_i64m1 (vint32mf2_t src, size_t vl);
vint64m2_t vwcvt_x_x_v_i64m2 (vint32m1_t src, size_t vl);
vint64m4_t vwcvt_x_x_v_i64m4 (vint32m2_t src, size_t vl);
vint64m8_t vwcvt_x_x_v_i64m8 (vint32m4_t src, size_t vl);
vuint64m1_t vwcvtu_x_x_v_u64m1 (vuint32mf2_t src, size_t vl);
vuint64m2_t vwcvtu_x_x_v_u64m2 (vuint32m1_t src, size_t vl);
vuint64m4_t vwcvtu_x_x_v_u64m4 (vuint32m2_t src, size_t vl);
vuint64m8_t vwcvtu_x_x_v_u64m8 (vuint32m4_t src, size_t vl);
vuint64m1_t vfwcvt_xu_f_v_u64m1 (vfloat32mf2_t src, size_t vl);
```

```
vuint64m1_t vfwcvt_rtz_xu_f_v_u64m1 (vfloat32mf2_t src, size_t
    vl);
vuint64m2_t vfwcvt_xu_f_v_u64m2 (vfloat32m1_t src, size_t vl);
vuint64m2_t vfwcvt_rtz_xu_f_v_u64m2 (vfloat32m1_t src, size_t
    vl);
vuint64m4_t vfwcvt_xu_f_v_u64m4 (vfloat32m2_t src, size_t vl);
vuint64m4_t vfwcvt_rtz_xu_f_v_u64m4 (vfloat32m2_t src, size_t
    vl);
vuint64m8_t vfwcvt_xu_f_v_u64m8 (vfloat32m4_t src, size_t vl);
vuint64m8_t vfwcvt_rtz_xu_f_v_u64m8 (vfloat32m4_t src, size_t
    vl);
vfloat64m1_t vfwcvt_f_x_v_f64m1 (vint32mf2_t src, size_t vl);
vfloat64m2_t vfwcvt_f_x_v_f64m2 (vint32m1_t src, size_t vl);
vfloat64m4_t vfwcvt_f_x_v_f64m4 (vint32m2_t src, size_t vl);
vfloat64m8_t vfwcvt_f_x_v_f64m8 (vint32m4_t src, size_t vl);
vfloat64m1_t vfwcvt_f_xu_v_f64m1 (vuint32mf2_t src, size_t vl);
vfloat64m2_t vfwcvt_f_xu_v_f64m2 (vuint32m1_t src, size_t vl);
vfloat64m4_t vfwcvt_f_xu_v_f64m4 (vuint32m2_t src, size_t vl);
vfloat64m8_t vfwcvt_f_xu_v_f64m8 (vuint32m4_t src, size_t vl);
vfloat64m1_t vfwcvt_f_f_v_f64m1 (vfloat32mf2_t src, size_t vl);
vfloat64m2_t vfwcvt_f_f_v_f64m2 (vfloat32m1_t src, size_t vl);
vfloat64m4_t vfwcvt_f_f_v_f64m4 (vfloat32m2_t src, size_t vl);
vfloat64m8_t vfwcvt_f_f_v_f64m8 (vfloat32m4_t src, size_t vl);
// masked functions
vint16mf4_t vwcvt_x_x_v_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint8mf8_t src, size_t vl);
vint16mf2_t vwcvt_x_x_v_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint8mf4_t src, size_t vl);
vint16m1_t vwcvt_x_x_v_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint8mf2_t src, size_t vl);
vint16m2_t vwcvt_x_x_v_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint8m1_t src, size_t vl);
vint16m4_t vwcvt_x_x_v_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint8m2_t src, size_t vl);
vint16m8_t vwcvt_x_x_v_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint8m4_t src, size_t vl);
vuint16mf4_t vwcvtu_x_x_v_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint8mf8_t src, size_t vl);
vuint16mf2_t vwcvtu_x_x_v_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint8mf4_t src, size_t vl);
vuint16m1_t vwcvtu_x_x_v_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint8mf2_t src, size_t vl);
vuint16m2_t vwcvtu_x_x_v_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint8m1_t src, size_t vl);
vuint16m4_t vwcvtu_x_x_v_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint8m2_t src, size_t vl);
```

```
vuint16m8_t vwcvtu_x_x_v_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint8m4_t src, size_t vl);
vfloat16mf4_t vfwcvt_f_x_v_f16mf4_m (vbool64_t mask,
    vfloat16mf4_t maskedoff, vint8mf8_t src, size_t vl);
vfloat16mf2_t vfwcvt_f_x_v_f16mf2_m (vbool32_t mask,
    vfloat16mf2_t maskedoff, vint8mf4_t src, size_t vl);
vfloat16m1_t vfwcvt_f_x_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vint8mf2_t src, size_t vl);
vfloat16m2_t vfwcvt_f_x_v_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vint8m1_t src, size_t vl);
vfloat16m4_t vfwcvt_f_x_v_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vint8m2_t src, size_t vl);
vfloat16m8_t vfwcvt_f_x_v_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vint8m4_t src, size_t vl);
vfloat16mf4_t vfwcvt_f_xu_v_f16mf4_m (vbool64_t mask,
    vfloat16mf4_t maskedoff, vuint8mf8_t src, size_t vl);
vfloat16mf2_t vfwcvt_f_xu_v_f16mf2_m (vbool32_t mask,
    vfloat16mf2_t maskedoff, vuint8mf4_t src, size_t vl);
vfloat16m1_t vfwcvt_f_xu_v_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vuint8mf2_t src, size_t vl);
vfloat16m2_t vfwcvt_f_xu_v_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vuint8m1_t src, size_t vl);
vfloat16m4_t vfwcvt_f_xu_v_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vuint8m2_t src, size_t vl);
vfloat16m8_t vfwcvt_f_xu_v_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vuint8m4_t src, size_t vl);
vint32mf2_t vfwcvt_x_f_v_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vfloat16mf4_t src, size_t vl);
vint32mf2_t vfwcvt_rtz_x_f_v_i32mf2_m (vbool64_t mask,
    vint32mf2_t maskedoff, vfloat16mf4_t src, size_t vl);
vint32m1_t vfwcvt_x_f_v_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vfloat16mf2_t src, size_t vl);
vint32m1_t vfwcvt_rtz_x_f_v_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vfloat16mf2_t src, size_t vl);
vint32m2_t vfwcvt_x_f_v_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vfloat16m1_t src, size_t vl);
vint32m2_t vfwcvt_rtz_x_f_v_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vfloat16m1_t src, size_t vl);
vint32m4_t vfwcvt_x_f_v_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vfloat16m2_t src, size_t vl);
vint32m4_t vfwcvt_rtz_x_f_v_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vfloat16m2_t src, size_t vl);
vint32m8_t vfwcvt_x_f_v_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vfloat16m4_t src, size_t vl);
vint32m8_t vfwcvt_rtz_x_f_v_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vfloat16m4_t src, size_t vl);
```

```
vint32mf2_t vwcvt_x_x_v_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint16mf4_t src, size_t vl);
vint32m1_t vwcvt_x_x_v_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint16mf2_t src, size_t vl);
vint32m2_t vwcvt_x_x_v_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint16m1_t src, size_t vl);
vint32m4_t vwcvt_x_x_v_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint16m2_t src, size_t vl);
vint32m8_t vwcvt_x_x_v_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint16m4_t src, size_t vl);
vuint32mf2_t vwcvtu_x_x_v_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint16mf4_t src, size_t vl);
vuint32m1_t vwcvtu_x_x_v_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint16mf2_t src, size_t vl);
vuint32m2_t vwcvtu_x_x_v_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint16m1_t src, size_t vl);
vuint32m4_t vwcvtu_x_x_v_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint16m2_t src, size_t vl);
vuint32m8_t vwcvtu_x_x_v_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint16m4_t src, size_t vl);
vuint32mf2_t vfwcvt_xu_f_v_u32mf2_m (vbool64_t mask,
    vuint32mf2_t maskedoff, vfloat16mf4_t src, size_t vl);
vuint32mf2_t vfwcvt_rtz_xu_f_v_u32mf2_m (vbool64_t mask,
    vuint32mf2_t maskedoff, vfloat16mf4_t src, size_t vl);
vuint32m1_t vfwcvt_xu_f_v_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vfloat16mf2_t src, size_t vl);
vuint32m1_t vfwcvt_rtz_xu_f_v_u32m1_m (vbool32_t mask,
    vuint32m1_t maskedoff, vfloat16mf2_t src, size_t vl);
vuint32m2_t vfwcvt_xu_f_v_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vfloat16m1_t src, size_t vl);
vuint32m2_t vfwcvt_rtz_xu_f_v_u32m2_m (vbool16_t mask,
    vuint32m2_t maskedoff, vfloat16m1_t src, size_t vl);
vuint32m4_t vfwcvt_xu_f_v_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vfloat16m2_t src, size_t vl);
vuint32m4_t vfwcvt_rtz_xu_f_v_u32m4_m (vbool8_t mask,
    vuint32m4_t maskedoff, vfloat16m2_t src, size_t vl);
vuint32m8_t vfwcvt_xu_f_v_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vfloat16m4_t src, size_t vl);
vuint32m8_t vfwcvt_rtz_xu_f_v_u32m8_m (vbool4_t mask,
    vuint32m8_t maskedoff, vfloat16m4_t src, size_t vl);
vfloat32mf2_t vfwcvt_f_x_v_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t maskedoff, vint16mf4_t src, size_t vl);
vfloat32m1_t vfwcvt_f_x_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vint16mf2_t src, size_t vl);
vfloat32m2_t vfwcvt_f_x_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vint16m1_t src, size_t vl);
```

```
vfloat32m4_t vfwcvt_f_x_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vint16m2_t src, size_t vl);
vfloat32m8_t vfwcvt_f_x_v_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vint16m4_t src, size_t vl);
vfloat32mf2_t vfwcvt_f_xu_v_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t maskedoff, vuint16mf4_t src, size_t vl);
vfloat32m1_t vfwcvt_f_xu_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vuint16mf2_t src, size_t vl);
vfloat32m2_t vfwcvt_f_xu_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vuint16m1_t src, size_t vl);
vfloat32m4_t vfwcvt_f_xu_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vuint16m2_t src, size_t vl);
vfloat32m8_t vfwcvt_f_xu_v_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vuint16m4_t src, size_t vl);
vfloat32mf2_t vfwcvt_f_f_v_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t maskedoff, vfloat16mf4_t src, size_t vl);
vfloat32m1_t vfwcvt_f_f_v_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat16mf2_t src, size_t vl);
vfloat32m2_t vfwcvt_f_f_v_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat16m1_t src, size_t vl);
vfloat32m4_t vfwcvt_f_f_v_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat16m2_t src, size_t vl);
vfloat32m8_t vfwcvt_f_f_v_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat16m4_t src, size_t vl);
vint64m1_t vfwcvt_x_f_v_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vfloat32mf2_t src, size_t vl);
vint64m1_t vfwcvt_rtz_x_f_v_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vfloat32mf2_t src, size_t vl);
vint64m2_t vfwcvt_x_f_v_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vfloat32m1_t src, size_t vl);
vint64m2_t vfwcvt_rtz_x_f_v_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vfloat32m1_t src, size_t vl);
vint64m4_t vfwcvt_x_f_v_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vfloat32m2_t src, size_t vl);
vint64m4_t vfwcvt_rtz_x_f_v_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vfloat32m2_t src, size_t vl);
vint64m8_t vfwcvt_x_f_v_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vfloat32m4_t src, size_t vl);
vint64m8_t vfwcvt_rtz_x_f_v_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vfloat32m4_t src, size_t vl);
vint64m1_t vwcvt_x_x_v_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint32mf2_t src, size_t vl);
vint64m2_t vwcvt_x_x_v_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint32m1_t src, size_t vl);
vint64m4_t vwcvt_x_x_v_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint32m2_t src, size_t vl);
```

```
vint64m8_t vwcvt_x_x_v_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint32m4_t src, size_t vl);
vuint64m1_t vwcvtu_x_x_v_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint32mf2_t src, size_t vl);
vuint64m2_t vwcvtu_x_x_v_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint32m1_t src, size_t vl);
vuint64m4_t vwcvtu_x_x_v_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint32m2_t src, size_t vl);
vuint64m8_t vwcvtu_x_x_v_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint32m4_t src, size_t vl);
vuint64m1_t vfwcvt_xu_f_v_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vfloat32mf2_t src, size_t vl);
vuint64m1_t vfwcvt_rtz_xu_f_v_u64m1_m (vbool64_t mask,
    vuint64m1_t maskedoff, vfloat32mf2_t src, size_t vl);
vuint64m2_t vfwcvt_xu_f_v_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vfloat32m1_t src, size_t vl);
vuint64m2_t vfwcvt_rtz_xu_f_v_u64m2_m (vbool32_t mask,
    vuint64m2_t maskedoff, vfloat32m1_t src, size_t vl);
vuint64m4_t vfwcvt_xu_f_v_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vfloat32m2_t src, size_t vl);
vuint64m4_t vfwcvt_rtz_xu_f_v_u64m4_m (vbool16_t mask,
    vuint64m4_t maskedoff, vfloat32m2_t src, size_t vl);
vuint64m8_t vfwcvt_xu_f_v_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vfloat32m4_t src, size_t vl);
vuint64m8_t vfwcvt_rtz_xu_f_v_u64m8_m (vbool8_t mask,
    vuint64m8_t maskedoff, vfloat32m4_t src, size_t vl);
vfloat64m1_t vfwcvt_f_x_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vint32mf2_t src, size_t vl);
vfloat64m2_t vfwcvt_f_x_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vint32m1_t src, size_t vl);
vfloat64m4_t vfwcvt_f_x_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vint32m2_t src, size_t vl);
vfloat64m8_t vfwcvt_f_x_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vint32m4_t src, size_t vl);
vfloat64m1_t vfwcvt_f_xu_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vuint32mf2_t src, size_t vl);
vfloat64m2_t vfwcvt_f_xu_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vuint32m1_t src, size_t vl);
vfloat64m4_t vfwcvt_f_xu_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vuint32m2_t src, size_t vl);
vfloat64m8_t vfwcvt_f_xu_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vuint32m4_t src, size_t vl);
vfloat64m1_t vfwcvt_f_f_v_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat32mf2_t src, size_t vl);
vfloat64m2_t vfwcvt_f_f_v_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat32m1_t src, size_t vl);
```

```
vfloat64m4_t vfwcvt_f_f_v_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat32m2_t src, size_t vl);
vfloat64m8_t vfwcvt_f_f_v_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat32m4_t src, size_t vl);
```

Narrowing Floating-Point/Integer Type-Convert Functions:

Prototypes:

```
vint8mf8_t vfncvt_x_f_w_i8mf8 (vfloat16mf4_t src, size_t vl);
vint8mf8_t vfncvt_rtz_x_f_w_i8mf8 (vfloat16mf4_t src, size_t vl);
vint8mf4_t vfncvt_x_f_w_i8mf4 (vfloat16mf2_t src, size_t vl);
vint8mf4_t vfncvt_rtz_x_f_w_i8mf4 (vfloat16mf2_t src, size_t vl);
vint8mf2_t vfncvt_x_f_w_i8mf2 (vfloat16m1_t src, size_t vl);
vint8mf2_t vfncvt_rtz_x_f_w_i8mf2 (vfloat16m1_t src, size_t vl);
vint8m1_t vfncvt_x_f_w_i8m1 (vfloat16m2_t src, size_t vl);
vint8m1_t vfncvt_rtz_x_f_w_i8m1 (vfloat16m2_t src, size_t vl);
vint8m2_t vfncvt_x_f_w_i8m2 (vfloat16m4_t src, size_t vl);
vint8m2_t vfncvt_rtz_x_f_w_i8m2 (vfloat16m4_t src, size_t vl);
vint8m4_t vfncvt_x_f_w_i8m4 (vfloat16m8_t src, size_t vl);
vint8m4_t vfncvt_rtz_x_f_w_i8m4 (vfloat16m8_t src, size_t vl);
vint8mf8_t vncvt_x_x_w_i8mf8 (vint16mf4_t src, size_t vl);
vint8mf4_t vncvt_x_x_w_i8mf4 (vint16mf2_t src, size_t vl);
vint8mf2_t vncvt_x_x_w_i8mf2 (vint16m1_t src, size_t vl);
vint8m1_t vncvt_x_x_w_i8m1 (vint16m2_t src, size_t vl);
vint8m2_t vncvt_x_x_w_i8m2 (vint16m4_t src, size_t vl);
vint8m4_t vncvt_x_x_w_i8m4 (vint16m8_t src, size_t vl);
vuint8mf8_t vncvt_x_x_w_u8mf8 (vuint16mf4_t src, size_t vl);
vuint8mf4_t vncvt_x_x_w_u8mf4 (vuint16mf2_t src, size_t vl);
vuint8mf2_t vncvt_x_x_w_u8mf2 (vuint16m1_t src, size_t vl);
vuint8m1_t vncvt_x_x_w_u8m1 (vuint16m2_t src, size_t vl);
vuint8m2_t vncvt_x_x_w_u8m2 (vuint16m4_t src, size_t vl);
vuint8m4_t vncvt_x_x_w_u8m4 (vuint16m8_t src, size_t vl);
vuint8mf8_t vfncvt_xu_f_w_u8mf8 (vfloat16mf4_t src, size_t vl);
vuint8mf8_t vfncvt_rtz_xu_f_w_u8mf8 (vfloat16mf4_t src, size_t
    vl);
vuint8mf4_t vfncvt_xu_f_w_u8mf4 (vfloat16mf2_t src, size_t vl);
vuint8mf4_t vfncvt_rtz_xu_f_w_u8mf4 (vfloat16mf2_t src, size_t
    vl);
vuint8mf2_t vfncvt_xu_f_w_u8mf2 (vfloat16m1_t src, size_t vl);
vuint8mf2_t vfncvt_rtz_xu_f_w_u8mf2 (vfloat16m1_t src, size_t
    vl);
vuint8m1_t vfncvt_xu_f_w_u8m1 (vfloat16m2_t src, size_t vl);
vuint8m1_t vfncvt_rtz_xu_f_w_u8m1 (vfloat16m2_t src, size_t vl);
vuint8m2_t vfncvt_xu_f_w_u8m2 (vfloat16m4_t src, size_t vl);
vuint8m2_t vfncvt_rtz_xu_f_w_u8m2 (vfloat16m4_t src, size_t vl);
```

```
vuint8m4_t vfncvt_xu_f_w_u8m4 (vfloat16m8_t src, size_t vl);
vuint8m4_t vfncvt_rtz_xu_f_w_u8m4 (vfloat16m8_t src, size_t vl);
vint16mf4_t vfncvt_x_f_w_i16mf4 (vfloat32mf2_t src, size_t vl);
vint16mf4_t vfncvt_rtz_x_f_w_i16mf4 (vfloat32mf2_t src, size_t
    vl);
vint16mf2_t vfncvt_x_f_w_i16mf2 (vfloat32m1_t src, size_t vl);
vint16mf2_t vfncvt_rtz_x_f_w_i16mf2 (vfloat32m1_t src, size_t
    vl);
vint16m1_t vfncvt_x_f_w_i16m1 (vfloat32m2_t src, size_t vl);
vint16m1_t vfncvt_rtz_x_f_w_i16m1 (vfloat32m2_t src, size_t vl);
vint16m2_t vfncvt_x_f_w_i16m2 (vfloat32m4_t src, size_t vl);
vint16m2_t vfncvt_rtz_x_f_w_i16m2 (vfloat32m4_t src, size_t vl);
vint16m4_t vfncvt_x_f_w_i16m4 (vfloat32m8_t src, size_t vl);
vint16m4_t vfncvt_rtz_x_f_w_i16m4 (vfloat32m8_t src, size_t vl);
vint16mf4_t vncvt_x_x_w_i16mf4 (vint32mf2_t src, size_t vl);
vint16mf2_t vncvt_x_x_w_i16mf2 (vint32m1_t src, size_t vl);
vint16m1_t vncvt_x_x_w_i16m1 (vint32m2_t src, size_t vl);
vint16m2_t vncvt_x_x_w_i16m2 (vint32m4_t src, size_t vl);
vint16m4_t vncvt_x_x_w_i16m4 (vint32m8_t src, size_t vl);
vuint16mf4_t vncvt_x_x_w_u16mf4 (vuint32mf2_t src, size_t vl);
vuint16mf2_t vncvt_x_x_w_u16mf2 (vuint32m1_t src, size_t vl);
vuint16m1_t vncvt_x_x_w_u16m1 (vuint32m2_t src, size_t vl);
vuint16m2_t vncvt_x_x_w_u16m2 (vuint32m4_t src, size_t vl);
vuint16m4_t vncvt_x_x_w_u16m4 (vuint32m8_t src, size_t vl);
vuint16mf4_t vfncvt_xu_f_w_u16mf4 (vfloat32mf2_t src, size_t vl);
vuint16mf4_t vfncvt_rtz_xu_f_w_u16mf4 (vfloat32mf2_t src, size_t
    vl);
vuint16mf2_t vfncvt_xu_f_w_u16mf2 (vfloat32m1_t src, size_t vl);
vuint16mf2_t vfncvt_rtz_xu_f_w_u16mf2 (vfloat32m1_t src, size_t
    vl);
vuint16m1_t vfncvt_xu_f_w_u16m1 (vfloat32m2_t src, size_t vl);
vuint16m1_t vfncvt_rtz_xu_f_w_u16m1 (vfloat32m2_t src, size_t
    vl);
vuint16m2_t vfncvt_xu_f_w_u16m2 (vfloat32m4_t src, size_t vl);
vuint16m2_t vfncvt_rtz_xu_f_w_u16m2 (vfloat32m4_t src, size_t
    vl);
vuint16m4_t vfncvt_xu_f_w_u16m4 (vfloat32m8_t src, size_t vl);
vuint16m4_t vfncvt_rtz_xu_f_w_u16m4 (vfloat32m8_t src, size_t
    vl);
vfloat16mf4_t vfncvt_f_x_w_f16mf4 (vint32mf2_t src, size_t vl);
vfloat16mf2_t vfncvt_f_x_w_f16mf2 (vint32m1_t src, size_t vl);
vfloat16m1_t vfncvt_f_x_w_f16m1 (vint32m2_t src, size_t vl);
vfloat16m2_t vfncvt_f_x_w_f16m2 (vint32m4_t src, size_t vl);
vfloat16m4_t vfncvt_f_x_w_f16m4 (vint32m8_t src, size_t vl);
vfloat16mf4_t vfncvt_f_xu_w_f16mf4 (vuint32mf2_t src, size_t vl);
vfloat16mf2_t vfncvt_f_xu_w_f16mf2 (vuint32m1_t src, size_t vl);
```

```
vfloat16m1_t vfncvt_f_xu_w_f16m1 (vuint32m2_t src, size_t vl);
vfloat16m2_t vfncvt_f_xu_w_f16m2 (vuint32m4_t src, size_t vl);
vfloat16m4_t vfncvt_f_xu_w_f16m4 (vuint32m8_t src, size_t vl);
vfloat16mf4_t vfncvt_f_f_w_f16mf4 (vfloat32mf2_t src, size_t vl);
vfloat16mf4_t vfncvt_rod_f_f_w_f16mf4 (vfloat32mf2_t src, size_t
    vl);
vfloat16mf2_t vfncvt_f_f_w_f16mf2 (vfloat32m1_t src, size_t vl);
vfloat16mf2_t vfncvt_rod_f_f_w_f16mf2 (vfloat32m1_t src, size_t
    vl);
vfloat16m1_t vfncvt_f_f_w_f16m1 (vfloat32m2_t src, size_t vl);
vfloat16m1_t vfncvt_rod_f_f_w_f16m1 (vfloat32m2_t src, size_t
    vl);
vfloat16m2_t vfncvt_f_f_w_f16m2 (vfloat32m4_t src, size_t vl);
vfloat16m2_t vfncvt_rod_f_f_w_f16m2 (vfloat32m4_t src, size_t
    vl);
vfloat16m4_t vfncvt_f_f_w_f16m4 (vfloat32m8_t src, size_t vl);
vfloat16m4_t vfncvt_rod_f_f_w_f16m4 (vfloat32m8_t src, size_t
    vl);
vint32mf2_t vfncvt_x_f_w_i32mf2 (vfloat64m1_t src, size_t vl);
vint32mf2_t vfncvt_rtz_x_f_w_i32mf2 (vfloat64m1_t src, size_t
    vl);
vint32m1_t vfncvt_x_f_w_i32m1 (vfloat64m2_t src, size_t vl);
vint32m1_t vfncvt_rtz_x_f_w_i32m1 (vfloat64m2_t src, size_t vl);
vint32m2_t vfncvt_x_f_w_i32m2 (vfloat64m4_t src, size_t vl);
vint32m2_t vfncvt_rtz_x_f_w_i32m2 (vfloat64m4_t src, size_t vl);
vint32m4_t vfncvt_x_f_w_i32m4 (vfloat64m8_t src, size_t vl);
vint32m4_t vfncvt_rtz_x_f_w_i32m4 (vfloat64m8_t src, size_t vl);
vint32mf2_t vncvt_x_x_w_i32mf2 (vint64m1_t src, size_t vl);
vint32m1_t vncvt_x_x_w_i32m1 (vint64m2_t src, size_t vl);
vint32m2_t vncvt_x_x_w_i32m2 (vint64m4_t src, size_t vl);
vint32m4_t vncvt_x_x_w_i32m4 (vint64m8_t src, size_t vl);
vuint32mf2_t vncvt_x_x_w_u32mf2 (vuint64m1_t src, size_t vl);
vuint32m1_t vncvt_x_x_w_u32m1 (vuint64m2_t src, size_t vl);
vuint32m2_t vncvt_x_x_w_u32m2 (vuint64m4_t src, size_t vl);
vuint32m4_t vncvt_x_x_w_u32m4 (vuint64m8_t src, size_t vl);
vuint32mf2_t vfncvt_xu_f_w_u32mf2 (vfloat64m1_t src, size_t vl);
vuint32mf2_t vfncvt_rtz_xu_f_w_u32mf2 (vfloat64m1_t src, size_t
    vl);
vuint32m1_t vfncvt_xu_f_w_u32m1 (vfloat64m2_t src, size_t vl);
vuint32m1_t vfncvt_rtz_xu_f_w_u32m1 (vfloat64m2_t src, size_t
    vl);
vuint32m2_t vfncvt_xu_f_w_u32m2 (vfloat64m4_t src, size_t vl);
vuint32m2_t vfncvt_rtz_xu_f_w_u32m2 (vfloat64m4_t src, size_t
    vl);
vuint32m4_t vfncvt_xu_f_w_u32m4 (vfloat64m8_t src, size_t vl);
```

```
vuint32m4_t vfncvt_rtz_xu_f_w_u32m4 (vfloat64m8_t src, size_t
    vl);
vfloat32mf2_t vfncvt_f_x_w_f32mf2 (vint64m1_t src, size_t vl);
vfloat32m1_t vfncvt_f_x_w_f32m1 (vint64m2_t src, size_t vl);
vfloat32m2_t vfncvt_f_x_w_f32m2 (vint64m4_t src, size_t vl);
vfloat32m4_t vfncvt_f_x_w_f32m4 (vint64m8_t src, size_t vl);
vfloat32mf2_t vfncvt_f_xu_w_f32mf2 (vuint64m1_t src, size_t vl);
vfloat32m1_t vfncvt_f_xu_w_f32m1 (vuint64m2_t src, size_t vl);
vfloat32m2_t vfncvt_f_xu_w_f32m2 (vuint64m4_t src, size_t vl);
vfloat32m4_t vfncvt_f_xu_w_f32m4 (vuint64m8_t src, size_t vl);
vfloat32mf2_t vfncvt_f_f_w_f32mf2 (vfloat64m1_t src, size_t vl);
vfloat32mf2_t vfncvt_rod_f_f_w_f32mf2 (vfloat64m1_t src, size_t
    vl);
vfloat32m1_t vfncvt_f_f_w_f32m1 (vfloat64m2_t src, size_t vl);
vfloat32m1_t vfncvt_rod_f_f_w_f32m1 (vfloat64m2_t src, size_t
    vl);
vfloat32m2_t vfncvt_f_f_w_f32m2 (vfloat64m4_t src, size_t vl);
vfloat32m2_t vfncvt_rod_f_f_w_f32m2 (vfloat64m4_t src, size_t
    vl);
vfloat32m4_t vfncvt_f_f_w_f32m4 (vfloat64m8_t src, size_t vl);
vfloat32m4_t vfncvt_rod_f_f_w_f32m4 (vfloat64m8_t src, size_t
    vl);
// masked functions
vint8mf8_t vfncvt_x_f_w_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vfloat16mf4_t src, size_t vl);
vint8mf8_t vfncvt_rtz_x_f_w_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vfloat16mf4_t src, size_t vl);
vint8mf4_t vfncvt_x_f_w_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vfloat16mf2_t src, size_t vl);
vint8mf4_t vfncvt_rtz_x_f_w_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vfloat16mf2_t src, size_t vl);
vint8mf2_t vfncvt_x_f_w_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vfloat16m1_t src, size_t vl);
vint8mf2_t vfncvt_rtz_x_f_w_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vfloat16m1_t src, size_t vl);
vint8m1_t vfncvt_x_f_w_i8m1_m (vbool8_t mask, vint8m1_t
    maskedoff, vfloat16m2_t src, size_t vl);
vint8m1_t vfncvt_rtz_x_f_w_i8m1_m (vbool8_t mask, vint8m1_t
    maskedoff, vfloat16m2_t src, size_t vl);
vint8m2_t vfncvt_x_f_w_i8m2_m (vbool4_t mask, vint8m2_t
    maskedoff, vfloat16m4_t src, size_t vl);
vint8m2_t vfncvt_rtz_x_f_w_i8m2_m (vbool4_t mask, vint8m2_t
    maskedoff, vfloat16m4_t src, size_t vl);
vint8m4_t vfncvt_x_f_w_i8m4_m (vbool2_t mask, vint8m4_t
    maskedoff, vfloat16m8_t src, size_t vl);
```

```
vint8m4_t vfncvt_rtz_x_f_w_i8m4_m (vbool2_t mask, vint8m4_t
    maskedoff, vfloat16m8_t src, size_t vl);
vint8mf8_t vncvt_x_x_w_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint16mf4_t src, size_t vl);
vint8mf4_t vncvt_x_x_w_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint16mf2_t src, size_t vl);
vint8mf2_t vncvt_x_x_w_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint16m1_t src, size_t vl);
vint8m1_t vncvt_x_x_w_i8m1_m (vbool8_t mask, vint8m1_t
    maskedoff, vint16m2_t src, size_t vl);
vint8m2_t vncvt_x_x_w_i8m2_m (vbool4_t mask, vint8m2_t
    maskedoff, vint16m4_t src, size_t vl);
vint8m4_t vncvt_x_x_w_i8m4_m (vbool2_t mask, vint8m4_t
    maskedoff, vint16m8_t src, size_t vl);
vuint8mf8_t vncvt_x_x_w_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint16mf4_t src, size_t vl);
vuint8mf4_t vncvt_x_x_w_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint16mf2_t src, size_t vl);
vuint8mf2_t vncvt_x_x_w_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint16m1_t src, size_t vl);
vuint8m1_t vncvt_x_x_w_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint16m2_t src, size_t vl);
vuint8m2_t vncvt_x_x_w_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint16m4_t src, size_t vl);
vuint8m4_t vncvt_x_x_w_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint16m8_t src, size_t vl);
vuint8mf8_t vfncvt_xu_f_w_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vfloat16mf4_t src, size_t vl);
vuint8mf8_t vfncvt_rtz_xu_f_w_u8mf8_m (vbool64_t mask,
    vuint8mf8_t maskedoff, vfloat16mf4_t src, size_t vl);
vuint8mf4_t vfncvt_xu_f_w_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vfloat16mf2_t src, size_t vl);
vuint8mf4_t vfncvt_rtz_xu_f_w_u8mf4_m (vbool32_t mask,
    vuint8mf4_t maskedoff, vfloat16mf2_t src, size_t vl);
vuint8mf2_t vfncvt_xu_f_w_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vfloat16m1_t src, size_t vl);
vuint8mf2_t vfncvt_rtz_xu_f_w_u8mf2_m (vbool16_t mask,
    vuint8mf2_t maskedoff, vfloat16m1_t src, size_t vl);
vuint8m1_t vfncvt_xu_f_w_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vfloat16m2_t src, size_t vl);
vuint8m1_t vfncvt_rtz_xu_f_w_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vfloat16m2_t src, size_t vl);
vuint8m2_t vfncvt_xu_f_w_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vfloat16m4_t src, size_t vl);
vuint8m2_t vfncvt_rtz_xu_f_w_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vfloat16m4_t src, size_t vl);
```

```
vuint8m4_t vfncvt_xu_f_w_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vfloat16m8_t src, size_t vl);
vuint8m4_t vfncvt_rtz_xu_f_w_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vfloat16m8_t src, size_t vl);
vint16mf4_t vfncvt_x_f_w_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vfloat32mf2_t src, size_t vl);
vint16mf4_t vfncvt_rtz_x_f_w_i16mf4_m (vbool64_t mask,
    vint16mf4_t maskedoff, vfloat32mf2_t src, size_t vl);
vint16mf2_t vfncvt_x_f_w_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vfloat32m1_t src, size_t vl);
vint16mf2_t vfncvt_rtz_x_f_w_i16mf2_m (vbool32_t mask,
    vint16mf2_t maskedoff, vfloat32m1_t src, size_t vl);
vint16m1_t vfncvt_x_f_w_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vfloat32m2_t src, size_t vl);
vint16m1_t vfncvt_rtz_x_f_w_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vfloat32m2_t src, size_t vl);
vint16m2_t vfncvt_x_f_w_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vfloat32m4_t src, size_t vl);
vint16m2_t vfncvt_rtz_x_f_w_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vfloat32m4_t src, size_t vl);
vint16m4_t vfncvt_x_f_w_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vfloat32m8_t src, size_t vl);
vint16m4_t vfncvt_rtz_x_f_w_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vfloat32m8_t src, size_t vl);
vint16mf4_t vncvt_x_x_w_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint32mf2_t src, size_t vl);
vint16mf2_t vncvt_x_x_w_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint32m1_t src, size_t vl);
vint16m1_t vncvt_x_x_w_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint32m2_t src, size_t vl);
vint16m2_t vncvt_x_x_w_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint32m4_t src, size_t vl);
vint16m4_t vncvt_x_x_w_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint32m8_t src, size_t vl);
vuint16mf4_t vncvt_x_x_w_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint32mf2_t src, size_t vl);
vuint16mf2_t vncvt_x_x_w_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint32m1_t src, size_t vl);
vuint16m1_t vncvt_x_x_w_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint32m2_t src, size_t vl);
vuint16m2_t vncvt_x_x_w_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint32m4_t src, size_t vl);
vuint16m4_t vncvt_x_x_w_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint32m8_t src, size_t vl);
vuint16mf4_t vfncvt_xu_f_w_u16mf4_m (vbool64_t mask,
    vuint16mf4_t maskedoff, vfloat32mf2_t src, size_t vl);
```

```
vuint16mf4_t vfncvt_rtz_xu_f_w_u16mf4_m (vbool64_t mask,
    vuint16mf4_t maskedoff, vfloat32mf2_t src, size_t vl);
vuint16mf2_t vfncvt_xu_f_w_u16mf2_m (vbool32_t mask,
    vuint16mf2_t maskedoff, vfloat32m1_t src, size_t vl);
vuint16mf2_t vfncvt_rtz_xu_f_w_u16mf2_m (vbool32_t mask,
    vuint16mf2_t maskedoff, vfloat32m1_t src, size_t vl);
vuint16m1_t vfncvt_xu_f_w_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vfloat32m2_t src, size_t vl);
vuint16m1_t vfncvt_rtz_xu_f_w_u16m1_m (vbool16_t mask,
    vuint16m1_t maskedoff, vfloat32m2_t src, size_t vl);
vuint16m2_t vfncvt_xu_f_w_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vfloat32m4_t src, size_t vl);
vuint16m2_t vfncvt_rtz_xu_f_w_u16m2_m (vbool8_t mask,
    vuint16m2_t maskedoff, vfloat32m4_t src, size_t vl);
vuint16m4_t vfncvt_xu_f_w_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vfloat32m8_t src, size_t vl);
vuint16m4_t vfncvt_rtz_xu_f_w_u16m4_m (vbool4_t mask,
    vuint16m4_t maskedoff, vfloat32m8_t src, size_t vl);
vfloat16mf4_t vfncvt_f_x_w_f16mf4_m (vbool64_t mask,
    vfloat16mf4_t maskedoff, vint32mf2_t src, size_t vl);
vfloat16mf2_t vfncvt_f_x_w_f16mf2_m (vbool32_t mask,
    vfloat16mf2_t maskedoff, vint32m1_t src, size_t vl);
vfloat16m1_t vfncvt_f_x_w_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vint32m2_t src, size_t vl);
vfloat16m2_t vfncvt_f_x_w_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vint32m4_t src, size_t vl);
vfloat16m4_t vfncvt_f_x_w_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vint32m8_t src, size_t vl);
vfloat16mf4_t vfncvt_f_xu_w_f16mf4_m (vbool64_t mask,
    vfloat16mf4_t maskedoff, vuint32mf2_t src, size_t vl);
vfloat16mf2_t vfncvt_f_xu_w_f16mf2_m (vbool32_t mask,
    vfloat16mf2_t maskedoff, vuint32m1_t src, size_t vl);
vfloat16m1_t vfncvt_f_xu_w_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vuint32m2_t src, size_t vl);
vfloat16m2_t vfncvt_f_xu_w_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vuint32m4_t src, size_t vl);
vfloat16m4_t vfncvt_f_xu_w_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vuint32m8_t src, size_t vl);
vfloat16mf4_t vfncvt_f_f_w_f16mf4_m (vbool64_t mask,
    vfloat16mf4_t maskedoff, vfloat32mf2_t src, size_t vl);
vfloat16mf4_t vfncvt_rod_f_f_w_f16mf4_m (vbool64_t mask,
    vfloat16mf4_t maskedoff, vfloat32mf2_t src, size_t vl);
vfloat16mf2_t vfncvt_f_f_w_f16mf2_m (vbool32_t mask,
    vfloat16mf2_t maskedoff, vfloat32m1_t src, size_t vl);
vfloat16mf2_t vfncvt_rod_f_f_w_f16mf2_m (vbool32_t mask,
    vfloat16mf2_t maskedoff, vfloat32m1_t src, size_t vl);
```

```
vfloat16m1_t vfncvt_f_f_w_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat32m2_t src, size_t vl);
vfloat16m1_t vfncvt_rod_f_f_w_f16m1_m (vbool16_t mask,
    vfloat16m1_t maskedoff, vfloat32m2_t src, size_t vl);
vfloat16m2_t vfncvt_f_f_w_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat32m4_t src, size_t vl);
vfloat16m2_t vfncvt_rod_f_f_w_f16m2_m (vbool8_t mask,
    vfloat16m2_t maskedoff, vfloat32m4_t src, size_t vl);
vfloat16m4_t vfncvt_f_f_w_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat32m8_t src, size_t vl);
vfloat16m4_t vfncvt_rod_f_f_w_f16m4_m (vbool4_t mask,
    vfloat16m4_t maskedoff, vfloat32m8_t src, size_t vl);
vint32mf2_t vfncvt_x_f_w_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vfloat64m1_t src, size_t vl);
vint32mf2_t vfncvt_rtz_x_f_w_i32mf2_m (vbool64_t mask,
    vint32mf2_t maskedoff, vfloat64m1_t src, size_t vl);
vint32m1_t vfncvt_x_f_w_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vfloat64m2_t src, size_t vl);
vint32m1_t vfncvt_rtz_x_f_w_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vfloat64m2_t src, size_t vl);
vint32m2_t vfncvt_x_f_w_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vfloat64m4_t src, size_t vl);
vint32m2_t vfncvt_rtz_x_f_w_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vfloat64m4_t src, size_t vl);
vint32m4_t vfncvt_x_f_w_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vfloat64m8_t src, size_t vl);
vint32m4_t vfncvt_rtz_x_f_w_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vfloat64m8_t src, size_t vl);
vint32mf2_t vncvt_x_x_w_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint64m1_t src, size_t vl);
vint32m1_t vncvt_x_x_w_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint64m2_t src, size_t vl);
vint32m2_t vncvt_x_x_w_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint64m4_t src, size_t vl);
vint32m4_t vncvt_x_x_w_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint64m8_t src, size_t vl);
vuint32mf2_t vncvt_x_x_w_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint64m1_t src, size_t vl);
vuint32m1_t vncvt_x_x_w_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint64m2_t src, size_t vl);
vuint32m2_t vncvt_x_x_w_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint64m4_t src, size_t vl);
vuint32m4_t vncvt_x_x_w_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint64m8_t src, size_t vl);
vuint32mf2_t vfncvt_xu_f_w_u32mf2_m (vbool64_t mask,
    vuint32mf2_t maskedoff, vfloat64m1_t src, size_t vl);
```

847

```
vuint32mf2_t vfncvt_rtz_xu_f_w_u32mf2_m (vbool64_t mask,
    vuint32mf2_t maskedoff, vfloat64m1_t src, size_t vl);
vuint32m1_t vfncvt_xu_f_w_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vfloat64m2_t src, size_t vl);
vuint32m1_t vfncvt_rtz_xu_f_w_u32m1_m (vbool32_t mask,
    vuint32m1_t maskedoff, vfloat64m2_t src, size_t vl);
vuint32m2_t vfncvt_xu_f_w_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vfloat64m4_t src, size_t vl);
vuint32m2_t vfncvt_rtz_xu_f_w_u32m2_m (vbool16_t mask,
    vuint32m2_t maskedoff, vfloat64m4_t src, size_t vl);
vuint32m4_t vfncvt_xu_f_w_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vfloat64m8_t src, size_t vl);
vuint32m4_t vfncvt_rtz_xu_f_w_u32m4_m (vbool8_t mask,
    vuint32m4_t maskedoff, vfloat64m8_t src, size_t vl);
vfloat32mf2_t vfncvt_f_x_w_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t maskedoff, vint64m1_t src, size_t vl);
vfloat32m1_t vfncvt_f_x_w_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vint64m2_t src, size_t vl);
vfloat32m2_t vfncvt_f_x_w_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vint64m4_t src, size_t vl);
vfloat32m4_t vfncvt_f_x_w_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vint64m8_t src, size_t vl);
vfloat32mf2_t vfncvt_f_xu_w_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t maskedoff, vuint64m1_t src, size_t vl);
vfloat32m1_t vfncvt_f_xu_w_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vuint64m2_t src, size_t vl);
vfloat32m2_t vfncvt_f_xu_w_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vuint64m4_t src, size_t vl);
vfloat32m4_t vfncvt_f_xu_w_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vuint64m8_t src, size_t vl);
vfloat32mf2_t vfncvt_f_f_w_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t maskedoff, vfloat64m1_t src, size_t vl);
vfloat32mf2_t vfncvt_rod_f_f_w_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t maskedoff, vfloat64m1_t src, size_t vl);
vfloat32m1_t vfncvt_f_f_w_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat64m2_t src, size_t vl);
vfloat32m1_t vfncvt_rod_f_f_w_f32m1_m (vbool32_t mask,
    vfloat32m1_t maskedoff, vfloat64m2_t src, size_t vl);
vfloat32m2_t vfncvt_f_f_w_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat64m4_t src, size_t vl);
vfloat32m2_t vfncvt_rod_f_f_w_f32m2_m (vbool16_t mask,
    vfloat32m2_t maskedoff, vfloat64m4_t src, size_t vl);
vfloat32m4_t vfncvt_f_f_w_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat64m8_t src, size_t vl);
vfloat32m4_t vfncvt_rod_f_f_w_f32m4_m (vbool8_t mask,
    vfloat32m4_t maskedoff, vfloat64m8_t src, size_t vl);
```

Vector Reduction Functions:

Vector Single-Width Integer Reduction Functions:

Prototypes:

```
vint8m1_t vredsum_vs_i8mf8_i8m1 (vint8m1_t dest, vint8mf8_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredsum_vs_i8mf4_i8m1 (vint8m1_t dest, vint8mf4_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredsum_vs_i8mf2_i8m1 (vint8m1_t dest, vint8mf2_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredsum_vs_i8m1_i8m1 (vint8m1_t dest, vint8m1_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredsum_vs_i8m2_i8m1 (vint8m1_t dest, vint8m2_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredsum_vs_i8m4_i8m1 (vint8m1_t dest, vint8m4_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredsum_vs_i8m8_i8m1 (vint8m1_t dest, vint8m8_t
    vector, vint8m1_t scalar, size_t vl);
vint16m1_t vredsum_vs_i16mf4_i16m1 (vint16m1_t dest, vint16mf4_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredsum_vs_i16mf2_i16m1 (vint16m1_t dest, vint16mf2_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredsum_vs_i16m1_i16m1 (vint16m1_t dest, vint16m1_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredsum_vs_i16m2_i16m1 (vint16m1_t dest, vint16m2_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredsum_vs_i16m4_i16m1 (vint16m1_t dest, vint16m4_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredsum_vs_i16m8_i16m1 (vint16m1_t dest, vint16m8_t
    vector, vint16m1_t scalar, size_t vl);
vint32m1_t vredsum_vs_i32mf2_i32m1 (vint32m1_t dest, vint32mf2_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredsum_vs_i32m1_i32m1 (vint32m1_t dest, vint32m1_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredsum_vs_i32m2_i32m1 (vint32m1_t dest, vint32m2_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredsum_vs_i32m4_i32m1 (vint32m1_t dest, vint32m4_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredsum_vs_i32m8_i32m1 (vint32m1_t dest, vint32m8_t
    vector, vint32m1_t scalar, size_t vl);
vint64m1_t vredsum_vs_i64m1_i64m1 (vint64m1_t dest, vint64m1_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredsum_vs_i64m2_i64m1 (vint64m1_t dest, vint64m2_t
    vector, vint64m1_t scalar, size_t vl);
```

```
vint64m1_t vredsum_vs_i64m4_i64m1 (vint64m1_t dest, vint64m4_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredsum_vs_i64m8_i64m1 (vint64m1_t dest, vint64m8_t
    vector, vint64m1_t scalar, size_t vl);
vuint8m1_t vredsum_vs_u8mf8_u8m1 (vuint8m1_t dest, vuint8mf8_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredsum_vs_u8mf4_u8m1 (vuint8m1_t dest, vuint8mf4_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredsum_vs_u8mf2_u8m1 (vuint8m1_t dest, vuint8mf2_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredsum_vs_u8m1_u8m1 (vuint8m1_t dest, vuint8m1_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredsum_vs_u8m2_u8m1 (vuint8m1_t dest, vuint8m2_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredsum_vs_u8m4_u8m1 (vuint8m1_t dest, vuint8m4_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredsum_vs_u8m8_u8m1 (vuint8m1_t dest, vuint8m8_t
    vector, vuint8m1_t scalar, size_t vl);
vuint16m1_t vredsum_vs_u16mf4_u16m1 (vuint16m1_t dest,
    vuint16mf4_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredsum_vs_u16mf2_u16m1 (vuint16m1_t dest,
    vuint16mf2_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredsum_vs_u16m1_u16m1 (vuint16m1_t dest,
    vuint16m1_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredsum_vs_u16m2_u16m1 (vuint16m1_t dest,
    vuint16m2_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredsum_vs_u16m4_u16m1 (vuint16m1_t dest,
    vuint16m4_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredsum_vs_u16m8_u16m1 (vuint16m1_t dest,
    vuint16m8_t vector, vuint16m1_t scalar, size_t vl);
vuint32m1_t vredsum_vs_u32mf2_u32m1 (vuint32m1_t dest,
    vuint32mf2_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredsum_vs_u32m1_u32m1 (vuint32m1_t dest,
    vuint32m1_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredsum_vs_u32m2_u32m1 (vuint32m1_t dest,
    vuint32m2_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredsum_vs_u32m4_u32m1 (vuint32m1_t dest,
    vuint32m4_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredsum_vs_u32m8_u32m1 (vuint32m1_t dest,
    vuint32m8_t vector, vuint32m1_t scalar, size_t vl);
vuint64m1_t vredsum_vs_u64m1_u64m1 (vuint64m1_t dest,
    vuint64m1_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredsum_vs_u64m2_u64m1 (vuint64m1_t dest,
    vuint64m2_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredsum_vs_u64m4_u64m1 (vuint64m1_t dest,
    vuint64m4_t vector, vuint64m1_t scalar, size_t vl);
```

```
vuint64m1_t vredsum_vs_u64m8_u64m1 (vuint64m1_t dest,
    vuint64m8_t vector, vuint64m1_t scalar, size_t vl);
vint8m1_t vredmax_vs_i8mf8_i8m1 (vint8m1_t dest, vint8mf8_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmax_vs_i8mf4_i8m1 (vint8m1_t dest, vint8mf4_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmax_vs_i8mf2_i8m1 (vint8m1_t dest, vint8mf2_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmax_vs_i8m1_i8m1 (vint8m1_t dest, vint8m1_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmax_vs_i8m2_i8m1 (vint8m1_t dest, vint8m2_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmax_vs_i8m4_i8m1 (vint8m1_t dest, vint8m4_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmax_vs_i8m8_i8m1 (vint8m1_t dest, vint8m8_t
    vector, vint8m1_t scalar, size_t vl);
vint16m1_t vredmax_vs_i16mf4_i16m1 (vint16m1_t dest, vint16mf4_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmax_vs_i16mf2_i16m1 (vint16m1_t dest, vint16mf2_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmax_vs_i16m1_i16m1 (vint16m1_t dest, vint16m1_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmax_vs_i16m2_i16m1 (vint16m1_t dest, vint16m2_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmax_vs_i16m4_i16m1 (vint16m1_t dest, vint16m4_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmax_vs_i16m8_i16m1 (vint16m1_t dest, vint16m8_t
    vector, vint16m1_t scalar, size_t vl);
vint32m1_t vredmax_vs_i32mf2_i32m1 (vint32m1_t dest, vint32mf2_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredmax_vs_i32m1_i32m1 (vint32m1_t dest, vint32m1_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredmax_vs_i32m2_i32m1 (vint32m1_t dest, vint32m2_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredmax_vs_i32m4_i32m1 (vint32m1_t dest, vint32m4_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredmax_vs_i32m8_i32m1 (vint32m1_t dest, vint32m8_t
    vector, vint32m1_t scalar, size_t vl);
vint64m1_t vredmax_vs_i64m1_i64m1 (vint64m1_t dest, vint64m1_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredmax_vs_i64m2_i64m1 (vint64m1_t dest, vint64m2_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredmax_vs_i64m4_i64m1 (vint64m1_t dest, vint64m4_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredmax_vs_i64m8_i64m1 (vint64m1_t dest, vint64m8_t
    vector, vint64m1_t scalar, size_t vl);
```

```
vuint8m1_t vredmaxu_vs_u8mf8_u8m1 (vuint8m1_t dest, vuint8mf8_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredmaxu_vs_u8mf4_u8m1 (vuint8m1_t dest, vuint8mf4_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredmaxu_vs_u8mf2_u8m1 (vuint8m1_t dest, vuint8mf2_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredmaxu_vs_u8m1_u8m1 (vuint8m1_t dest, vuint8m1_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredmaxu_vs_u8m2_u8m1 (vuint8m1_t dest, vuint8m2_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredmaxu_vs_u8m4_u8m1 (vuint8m1_t dest, vuint8m4_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredmaxu_vs_u8m8_u8m1 (vuint8m1_t dest, vuint8m8_t
    vector, vuint8m1_t scalar, size_t vl);
vuint16m1_t vredmaxu_vs_u16mf4_u16m1 (vuint16m1_t dest,
    vuint16mf4_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredmaxu_vs_u16mf2_u16m1 (vuint16m1_t dest,
    vuint16mf2_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredmaxu_vs_u16m1_u16m1 (vuint16m1_t dest,
    vuint16m1_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredmaxu_vs_u16m2_u16m1 (vuint16m1_t dest,
    vuint16m2_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredmaxu_vs_u16m4_u16m1 (vuint16m1_t dest,
    vuint16m4_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredmaxu_vs_u16m8_u16m1 (vuint16m1_t dest,
    vuint16m8_t vector, vuint16m1_t scalar, size_t vl);
vuint32m1_t vredmaxu_vs_u32mf2_u32m1 (vuint32m1_t dest,
    vuint32mf2_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredmaxu_vs_u32m1_u32m1 (vuint32m1_t dest,
    vuint32m1_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredmaxu_vs_u32m2_u32m1 (vuint32m1_t dest,
    vuint32m2_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredmaxu_vs_u32m4_u32m1 (vuint32m1_t dest,
    vuint32m4_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredmaxu_vs_u32m8_u32m1 (vuint32m1_t dest,
    vuint32m8_t vector, vuint32m1_t scalar, size_t vl);
vuint64m1_t vredmaxu_vs_u64m1_u64m1 (vuint64m1_t dest,
    vuint64m1_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredmaxu_vs_u64m2_u64m1 (vuint64m1_t dest,
    vuint64m2_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredmaxu_vs_u64m4_u64m1 (vuint64m1_t dest,
    vuint64m4_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredmaxu_vs_u64m8_u64m1 (vuint64m1_t dest,
    vuint64m8_t vector, vuint64m1_t scalar, size_t vl);
vint8m1_t vredmin_vs_i8mf8_i8m1 (vint8m1_t dest, vint8mf8_t
    vector, vint8m1_t scalar, size_t vl);
```

```
vint8m1_t vredmin_vs_i8mf4_i8m1 (vint8m1_t dest, vint8mf4_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmin_vs_i8mf2_i8m1 (vint8m1_t dest, vint8mf2_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmin_vs_i8m1_i8m1 (vint8m1_t dest, vint8m1_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmin_vs_i8m2_i8m1 (vint8m1_t dest, vint8m2_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmin_vs_i8m4_i8m1 (vint8m1_t dest, vint8m4_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmin_vs_i8m8_i8m1 (vint8m1_t dest, vint8m8_t
    vector, vint8m1_t scalar, size_t vl);
vint16m1_t vredmin_vs_i16mf4_i16m1 (vint16m1_t dest, vint16mf4_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmin_vs_i16mf2_i16m1 (vint16m1_t dest, vint16mf2_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmin_vs_i16m1_i16m1 (vint16m1_t dest, vint16m1_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmin_vs_i16m2_i16m1 (vint16m1_t dest, vint16m2_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmin_vs_i16m4_i16m1 (vint16m1_t dest, vint16m4_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmin_vs_i16m8_i16m1 (vint16m1_t dest, vint16m8_t
    vector, vint16m1_t scalar, size_t vl);
vint32m1_t vredmin_vs_i32mf2_i32m1 (vint32m1_t dest, vint32mf2_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredmin_vs_i32m1_i32m1 (vint32m1_t dest, vint32m1_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredmin_vs_i32m2_i32m1 (vint32m1_t dest, vint32m2_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredmin_vs_i32m4_i32m1 (vint32m1_t dest, vint32m4_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredmin_vs_i32m8_i32m1 (vint32m1_t dest, vint32m8_t
    vector, vint32m1_t scalar, size_t vl);
vint64m1_t vredmin_vs_i64m1_i64m1 (vint64m1_t dest, vint64m1_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredmin_vs_i64m2_i64m1 (vint64m1_t dest, vint64m2_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredmin_vs_i64m4_i64m1 (vint64m1_t dest, vint64m4_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredmin_vs_i64m8_i64m1 (vint64m1_t dest, vint64m8_t
    vector, vint64m1_t scalar, size_t vl);
vuint8m1_t vredminu_vs_u8mf8_u8m1 (vuint8m1_t dest, vuint8mf8_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredminu_vs_u8mf4_u8m1 (vuint8m1_t dest, vuint8mf4_t
    vector, vuint8m1_t scalar, size_t vl);
```

```
vuint8m1_t vredminu_vs_u8mf2_u8m1 (vuint8m1_t dest, vuint8mf2_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredminu_vs_u8m1_u8m1 (vuint8m1_t dest, vuint8m1_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredminu_vs_u8m2_u8m1 (vuint8m1_t dest, vuint8m2_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredminu_vs_u8m4_u8m1 (vuint8m1_t dest, vuint8m4_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredminu_vs_u8m8_u8m1 (vuint8m1_t dest, vuint8m8_t
    vector, vuint8m1_t scalar, size_t vl);
vuint16m1_t vredminu_vs_u16mf4_u16m1 (vuint16m1_t dest,
    vuint16mf4_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredminu_vs_u16mf2_u16m1 (vuint16m1_t dest,
    vuint16mf2_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredminu_vs_u16m1_u16m1 (vuint16m1_t dest,
    vuint16m1_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredminu_vs_u16m2_u16m1 (vuint16m1_t dest,
    vuint16m2_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredminu_vs_u16m4_u16m1 (vuint16m1_t dest,
    vuint16m4_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredminu_vs_u16m8_u16m1 (vuint16m1_t dest,
    vuint16m8_t vector, vuint16m1_t scalar, size_t vl);
vuint32m1_t vredminu_vs_u32mf2_u32m1 (vuint32m1_t dest,
    vuint32mf2_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredminu_vs_u32m1_u32m1 (vuint32m1_t dest,
    vuint32m1_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredminu_vs_u32m2_u32m1 (vuint32m1_t dest,
    vuint32m2_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredminu_vs_u32m4_u32m1 (vuint32m1_t dest,
    vuint32m4_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredminu_vs_u32m8_u32m1 (vuint32m1_t dest,
    vuint32m8_t vector, vuint32m1_t scalar, size_t vl);
vuint64m1_t vredminu_vs_u64m1_u64m1 (vuint64m1_t dest,
    vuint64m1_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredminu_vs_u64m2_u64m1 (vuint64m1_t dest,
    vuint64m2_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredminu_vs_u64m4_u64m1 (vuint64m1_t dest,
    vuint64m4_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredminu_vs_u64m8_u64m1 (vuint64m1_t dest,
    vuint64m8_t vector, vuint64m1_t scalar, size_t vl);
vint8m1_t vredand_vs_i8mf8_i8m1 (vint8m1_t dest, vint8mf8_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredand_vs_i8mf4_i8m1 (vint8m1_t dest, vint8mf4_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredand_vs_i8mf2_i8m1 (vint8m1_t dest, vint8mf2_t
    vector, vint8m1_t scalar, size_t vl);
```

```
vint8m1_t vredand_vs_i8m1_i8m1 (vint8m1_t dest, vint8m1_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredand_vs_i8m2_i8m1 (vint8m1_t dest, vint8m2_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredand_vs_i8m4_i8m1 (vint8m1_t dest, vint8m4_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredand_vs_i8m8_i8m1 (vint8m1_t dest, vint8m8_t
    vector, vint8m1_t scalar, size_t vl);
vint16m1_t vredand_vs_i16mf4_i16m1 (vint16m1_t dest, vint16mf4_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredand_vs_i16mf2_i16m1 (vint16m1_t dest, vint16mf2_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredand_vs_i16m1_i16m1 (vint16m1_t dest, vint16m1_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredand_vs_i16m2_i16m1 (vint16m1_t dest, vint16m2_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredand_vs_i16m4_i16m1 (vint16m1_t dest, vint16m4_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredand_vs_i16m8_i16m1 (vint16m1_t dest, vint16m8_t
    vector, vint16m1_t scalar, size_t vl);
vint32m1_t vredand_vs_i32mf2_i32m1 (vint32m1_t dest, vint32mf2_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredand_vs_i32m1_i32m1 (vint32m1_t dest, vint32m1_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredand_vs_i32m2_i32m1 (vint32m1_t dest, vint32m2_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredand_vs_i32m4_i32m1 (vint32m1_t dest, vint32m4_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredand_vs_i32m8_i32m1 (vint32m1_t dest, vint32m8_t
    vector, vint32m1_t scalar, size_t vl);
vint64m1_t vredand_vs_i64m1_i64m1 (vint64m1_t dest, vint64m1_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredand_vs_i64m2_i64m1 (vint64m1_t dest, vint64m2_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredand_vs_i64m4_i64m1 (vint64m1_t dest, vint64m4_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredand_vs_i64m8_i64m1 (vint64m1_t dest, vint64m8_t
    vector, vint64m1_t scalar, size_t vl);
vuint8m1_t vredand_vs_u8mf8_u8m1 (vuint8m1_t dest, vuint8mf8_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredand_vs_u8mf4_u8m1 (vuint8m1_t dest, vuint8mf4_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredand_vs_u8mf2_u8m1 (vuint8m1_t dest, vuint8mf2_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredand_vs_u8m1_u8m1 (vuint8m1_t dest, vuint8m1_t
    vector, vuint8m1_t scalar, size_t vl);
```

```
vuint8m1_t vredand_vs_u8m2_u8m1 (vuint8m1_t dest, vuint8m2_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredand_vs_u8m4_u8m1 (vuint8m1_t dest, vuint8m4_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredand_vs_u8m8_u8m1 (vuint8m1_t dest, vuint8m8_t
    vector, vuint8m1_t scalar, size_t vl);
vuint16m1_t vredand_vs_u16mf4_u16m1 (vuint16m1_t dest,
    vuint16mf4_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredand_vs_u16mf2_u16m1 (vuint16m1_t dest,
    vuint16mf2_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredand_vs_u16m1_u16m1 (vuint16m1_t dest,
    vuint16m1_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredand_vs_u16m2_u16m1 (vuint16m1_t dest,
    vuint16m2_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredand_vs_u16m4_u16m1 (vuint16m1_t dest,
    vuint16m4_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredand_vs_u16m8_u16m1 (vuint16m1_t dest,
    vuint16m8_t vector, vuint16m1_t scalar, size_t vl);
vuint32m1_t vredand_vs_u32mf2_u32m1 (vuint32m1_t dest,
    vuint32mf2_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredand_vs_u32m1_u32m1 (vuint32m1_t dest,
    vuint32m1_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredand_vs_u32m2_u32m1 (vuint32m1_t dest,
    vuint32m2_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredand_vs_u32m4_u32m1 (vuint32m1_t dest,
    vuint32m4_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredand_vs_u32m8_u32m1 (vuint32m1_t dest,
    vuint32m8_t vector, vuint32m1_t scalar, size_t vl);
vuint64m1_t vredand_vs_u64m1_u64m1 (vuint64m1_t dest,
    vuint64m1_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredand_vs_u64m2_u64m1 (vuint64m1_t dest,
    vuint64m2_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredand_vs_u64m4_u64m1 (vuint64m1_t dest,
    vuint64m4_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredand_vs_u64m8_u64m1 (vuint64m1_t dest,
    vuint64m8_t vector, vuint64m1_t scalar, size_t vl);
vint8m1_t vredor_vs_i8mf8_i8m1 (vint8m1_t dest, vint8mf8_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredor_vs_i8mf4_i8m1 (vint8m1_t dest, vint8mf4_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredor_vs_i8mf2_i8m1 (vint8m1_t dest, vint8mf2_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredor_vs_i8m1_i8m1 (vint8m1_t dest, vint8m1_t vector,
    vint8m1_t scalar, size_t vl);
vint8m1_t vredor_vs_i8m2_i8m1 (vint8m1_t dest, vint8m2_t vector,
    vint8m1_t scalar, size_t vl);
```

```
vint8m1_t vredor_vs_i8m4_i8m1 (vint8m1_t dest, vint8m4_t vector,
    vint8m1_t scalar, size_t vl);
vint8m1_t vredor_vs_i8m8_i8m1 (vint8m1_t dest, vint8m8_t vector,
    vint8m1_t scalar, size_t vl);
vint16m1_t vredor_vs_i16mf4_i16m1 (vint16m1_t dest, vint16mf4_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredor_vs_i16mf2_i16m1 (vint16m1_t dest, vint16mf2_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredor_vs_i16m1_i16m1 (vint16m1_t dest, vint16m1_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredor_vs_i16m2_i16m1 (vint16m1_t dest, vint16m2_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredor_vs_i16m4_i16m1 (vint16m1_t dest, vint16m4_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredor_vs_i16m8_i16m1 (vint16m1_t dest, vint16m8_t
    vector, vint16m1_t scalar, size_t vl);
vint32m1_t vredor_vs_i32mf2_i32m1 (vint32m1_t dest, vint32mf2_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredor_vs_i32m1_i32m1 (vint32m1_t dest, vint32m1_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredor_vs_i32m2_i32m1 (vint32m1_t dest, vint32m2_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredor_vs_i32m4_i32m1 (vint32m1_t dest, vint32m4_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredor_vs_i32m8_i32m1 (vint32m1_t dest, vint32m8_t
    vector, vint32m1_t scalar, size_t vl);
vint64m1_t vredor_vs_i64m1_i64m1 (vint64m1_t dest, vint64m1_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredor_vs_i64m2_i64m1 (vint64m1_t dest, vint64m2_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredor_vs_i64m4_i64m1 (vint64m1_t dest, vint64m4_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredor_vs_i64m8_i64m1 (vint64m1_t dest, vint64m8_t
    vector, vint64m1_t scalar, size_t vl);
vuint8m1_t vredor_vs_u8mf8_u8m1 (vuint8m1_t dest, vuint8mf8_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredor_vs_u8mf4_u8m1 (vuint8m1_t dest, vuint8mf4_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredor_vs_u8mf2_u8m1 (vuint8m1_t dest, vuint8mf2_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredor_vs_u8m1_u8m1 (vuint8m1_t dest, vuint8m1_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredor_vs_u8m2_u8m1 (vuint8m1_t dest, vuint8m2_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredor_vs_u8m4_u8m1 (vuint8m1_t dest, vuint8m4_t
    vector, vuint8m1_t scalar, size_t vl);
```

```
vuint8m1_t vredor_vs_u8m8_u8m1 (vuint8m1_t dest, vuint8m8_t
    vector, vuint8m1_t scalar, size_t vl);
vuint16m1_t vredor_vs_u16mf4_u16m1 (vuint16m1_t dest,
    vuint16mf4_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredor_vs_u16mf2_u16m1 (vuint16m1_t dest,
    vuint16mf2_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredor_vs_u16m1_u16m1 (vuint16m1_t dest, vuint16m1_t
    vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredor_vs_u16m2_u16m1 (vuint16m1_t dest, vuint16m2_t
    vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredor_vs_u16m4_u16m1 (vuint16m1_t dest, vuint16m4_t
    vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredor_vs_u16m8_u16m1 (vuint16m1_t dest, vuint16m8_t
    vector, vuint16m1_t scalar, size_t vl);
vuint32m1_t vredor_vs_u32mf2_u32m1 (vuint32m1_t dest,
    vuint32mf2_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredor_vs_u32m1_u32m1 (vuint32m1_t dest, vuint32m1_t
    vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredor_vs_u32m2_u32m1 (vuint32m1_t dest, vuint32m2_t
    vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredor_vs_u32m4_u32m1 (vuint32m1_t dest, vuint32m4_t
    vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredor_vs_u32m8_u32m1 (vuint32m1_t dest, vuint32m8_t
    vector, vuint32m1_t scalar, size_t vl);
vuint64m1_t vredor_vs_u64m1_u64m1 (vuint64m1_t dest, vuint64m1_t
    vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredor_vs_u64m2_u64m1 (vuint64m1_t dest, vuint64m2_t
    vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredor_vs_u64m4_u64m1 (vuint64m1_t dest, vuint64m4_t
    vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredor_vs_u64m8_u64m1 (vuint64m1_t dest, vuint64m8_t
    vector, vuint64m1_t scalar, size_t vl);
vint8m1_t vredxor_vs_i8mf8_i8m1 (vint8m1_t dest, vint8mf8_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredxor_vs_i8mf4_i8m1 (vint8m1_t dest, vint8mf4_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredxor_vs_i8mf2_i8m1 (vint8m1_t dest, vint8mf2_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredxor_vs_i8m1_i8m1 (vint8m1_t dest, vint8m1_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredxor_vs_i8m2_i8m1 (vint8m1_t dest, vint8m2_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredxor_vs_i8m4_i8m1 (vint8m1_t dest, vint8m4_t
    vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredxor_vs_i8m8_i8m1 (vint8m1_t dest, vint8m8_t
    vector, vint8m1_t scalar, size_t vl);
```

```
vint16m1_t vredxor_vs_i16mf4_i16m1 (vint16m1_t dest, vint16mf4_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredxor_vs_i16mf2_i16m1 (vint16m1_t dest, vint16mf2_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredxor_vs_i16m1_i16m1 (vint16m1_t dest, vint16m1_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredxor_vs_i16m2_i16m1 (vint16m1_t dest, vint16m2_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredxor_vs_i16m4_i16m1 (vint16m1_t dest, vint16m4_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredxor_vs_i16m8_i16m1 (vint16m1_t dest, vint16m8_t
    vector, vint16m1_t scalar, size_t vl);
vint32m1_t vredxor_vs_i32mf2_i32m1 (vint32m1_t dest, vint32mf2_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredxor_vs_i32m1_i32m1 (vint32m1_t dest, vint32m1_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredxor_vs_i32m2_i32m1 (vint32m1_t dest, vint32m2_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredxor_vs_i32m4_i32m1 (vint32m1_t dest, vint32m4_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredxor_vs_i32m8_i32m1 (vint32m1_t dest, vint32m8_t
    vector, vint32m1_t scalar, size_t vl);
vint64m1_t vredxor_vs_i64m1_i64m1 (vint64m1_t dest, vint64m1_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredxor_vs_i64m2_i64m1 (vint64m1_t dest, vint64m2_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredxor_vs_i64m4_i64m1 (vint64m1_t dest, vint64m4_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredxor_vs_i64m8_i64m1 (vint64m1_t dest, vint64m8_t
    vector, vint64m1_t scalar, size_t vl);
vuint8m1_t vredxor_vs_u8mf8_u8m1 (vuint8m1_t dest, vuint8mf8_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredxor_vs_u8mf4_u8m1 (vuint8m1_t dest, vuint8mf4_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredxor_vs_u8mf2_u8m1 (vuint8m1_t dest, vuint8mf2_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredxor_vs_u8m1_u8m1 (vuint8m1_t dest, vuint8m1_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredxor_vs_u8m2_u8m1 (vuint8m1_t dest, vuint8m2_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredxor_vs_u8m4_u8m1 (vuint8m1_t dest, vuint8m4_t
    vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredxor_vs_u8m8_u8m1 (vuint8m1_t dest, vuint8m8_t
    vector, vuint8m1_t scalar, size_t vl);
vuint16m1_t vredxor_vs_u16mf4_u16m1 (vuint16m1_t dest,
    vuint16mf4_t vector, vuint16m1_t scalar, size_t vl);
```

```
vuint16m1_t vredxor_vs_u16mf2_u16m1 (vuint16m1_t dest,
    vuint16mf2_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredxor_vs_u16m1_u16m1 (vuint16m1_t dest,
    vuint16m1_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredxor_vs_u16m2_u16m1 (vuint16m1_t dest,
    vuint16m2_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredxor_vs_u16m4_u16m1 (vuint16m1_t dest,
    vuint16m4_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredxor_vs_u16m8_u16m1 (vuint16m1_t dest,
    vuint16m8_t vector, vuint16m1_t scalar, size_t vl);
vuint32m1_t vredxor_vs_u32mf2_u32m1 (vuint32m1_t dest,
    vuint32mf2_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredxor_vs_u32m1_u32m1 (vuint32m1_t dest,
    vuint32m1_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredxor_vs_u32m2_u32m1 (vuint32m1_t dest,
    vuint32m2_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredxor_vs_u32m4_u32m1 (vuint32m1_t dest,
    vuint32m4_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredxor_vs_u32m8_u32m1 (vuint32m1_t dest,
    vuint32m8_t vector, vuint32m1_t scalar, size_t vl);
vuint64m1_t vredxor_vs_u64m1_u64m1 (vuint64m1_t dest,
    vuint64m1_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredxor_vs_u64m2_u64m1 (vuint64m1_t dest,
    vuint64m2_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredxor_vs_u64m4_u64m1 (vuint64m1_t dest,
    vuint64m4_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredxor_vs_u64m8_u64m1 (vuint64m1_t dest,
    vuint64m8_t vector, vuint64m1_t scalar, size_t vl);
// masked functions
vint8m1_t vredsum_vs_i8mf8_i8m1_m (vbool64_t mask, vint8m1_t
    dest, vint8mf8_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredsum_vs_i8mf4_i8m1_m (vbool32_t mask, vint8m1_t
    dest, vint8mf4_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredsum_vs_i8mf2_i8m1_m (vbool16_t mask, vint8m1_t
    dest, vint8mf2_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredsum_vs_i8m1_i8m1_m (vbool8_t mask, vint8m1_t dest,
    vint8m1_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredsum_vs_i8m2_i8m1_m (vbool4_t mask, vint8m1_t dest,
    vint8m2_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredsum_vs_i8m4_i8m1_m (vbool2_t mask, vint8m1_t dest,
    vint8m4_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredsum_vs_i8m8_i8m1_m (vbool1_t mask, vint8m1_t dest,
    vint8m8_t vector, vint8m1_t scalar, size_t vl);
vint16m1_t vredsum_vs_i16mf4_i16m1_m (vbool64_t mask, vint16m1_t
    dest, vint16mf4_t vector, vint16m1_t scalar, size_t vl);
```

```
vint16m1_t vredsum_vs_i16mf2_i16m1_m (vbool32_t mask, vint16m1_t
    dest, vint16mf2_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredsum_vs_i16m1_i16m1_m (vbool16_t mask, vint16m1_t
    dest, vint16m1_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredsum_vs_i16m2_i16m1_m (vbool8_t mask, vint16m1_t
    dest, vint16m2_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredsum_vs_i16m4_i16m1_m (vbool4_t mask, vint16m1_t
    dest, vint16m4_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredsum_vs_i16m8_i16m1_m (vbool2_t mask, vint16m1_t
    dest, vint16m8_t vector, vint16m1_t scalar, size_t vl);
vint32m1_t vredsum_vs_i32mf2_i32m1_m (vbool64_t mask, vint32m1_t
    dest, vint32mf2_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredsum_vs_i32m1_i32m1_m (vbool32_t mask, vint32m1_t
    dest, vint32m1_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredsum_vs_i32m2_i32m1_m (vbool16_t mask, vint32m1_t
    dest, vint32m2_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredsum_vs_i32m4_i32m1_m (vbool8_t mask, vint32m1_t
    dest, vint32m4_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredsum_vs_i32m8_i32m1_m (vbool4_t mask, vint32m1_t
    dest, vint32m8_t vector, vint32m1_t scalar, size_t vl);
vint64m1_t vredsum_vs_i64m1_i64m1_m (vbool64_t mask, vint64m1_t
    dest, vint64m1_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredsum_vs_i64m2_i64m1_m (vbool32_t mask, vint64m1_t
    dest, vint64m2_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredsum_vs_i64m4_i64m1_m (vbool16_t mask, vint64m1_t
    dest, vint64m4_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredsum_vs_i64m8_i64m1_m (vbool8_t mask, vint64m1_t
    dest, vint64m8_t vector, vint64m1_t scalar, size_t vl);
vuint8m1_t vredsum_vs_u8mf8_u8m1_m (vbool64_t mask, vuint8m1_t
    dest, vuint8mf8_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredsum_vs_u8mf4_u8m1_m (vbool32_t mask, vuint8m1_t
    dest, vuint8mf4_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredsum_vs_u8mf2_u8m1_m (vbool16_t mask, vuint8m1_t
    dest, vuint8mf2_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredsum_vs_u8m1_u8m1_m (vbool8_t mask, vuint8m1_t
    dest, vuint8m1_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredsum_vs_u8m2_u8m1_m (vbool4_t mask, vuint8m1_t
    dest, vuint8m2_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredsum_vs_u8m4_u8m1_m (vbool2_t mask, vuint8m1_t
    dest, vuint8m4_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredsum_vs_u8m8_u8m1_m (vbool1_t mask, vuint8m1_t
    dest, vuint8m8_t vector, vuint8m1_t scalar, size_t vl);
vuint16m1_t vredsum_vs_u16mf4_u16m1_m (vbool64_t mask,
    vuint16m1_t dest, vuint16mf4_t vector, vuint16m1_t scalar,
    size_t vl);
```

```
vuint16m1_t vredsum_vs_u16mf2_u16m1_m (vbool32_t mask,
    vuint16m1_t dest, vuint16mf2_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredsum_vs_u16m1_u16m1_m (vbool16_t mask,
    vuint16m1_t dest, vuint16m1_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredsum_vs_u16m2_u16m1_m (vbool8_t mask, vuint16m1_t
    dest, vuint16m2_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredsum_vs_u16m4_u16m1_m (vbool4_t mask, vuint16m1_t
    dest, vuint16m4_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredsum_vs_u16m8_u16m1_m (vbool2_t mask, vuint16m1_t
    dest, vuint16m8_t vector, vuint16m1_t scalar, size_t vl);
vuint32m1_t vredsum_vs_u32mf2_u32m1_m (vbool64_t mask,
    vuint32m1_t dest, vuint32mf2_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vredsum_vs_u32m1_u32m1_m (vbool32_t mask,
    vuint32m1_t dest, vuint32m1_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vredsum_vs_u32m2_u32m1_m (vbool16_t mask,
    vuint32m1_t dest, vuint32m2_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vredsum_vs_u32m4_u32m1_m (vbool8_t mask, vuint32m1_t
    dest, vuint32m4_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredsum_vs_u32m8_u32m1_m (vbool4_t mask, vuint32m1_t
    dest, vuint32m8_t vector, vuint32m1_t scalar, size_t vl);
vuint64m1_t vredsum_vs_u64m1_u64m1_m (vbool64_t mask,
    vuint64m1_t dest, vuint64m1_t vector, vuint64m1_t scalar,
    size_t vl);
vuint64m1_t vredsum_vs_u64m2_u64m1_m (vbool32_t mask,
    vuint64m1_t dest, vuint64m2_t vector, vuint64m1_t scalar,
    size_t vl);
vuint64m1_t vredsum_vs_u64m4_u64m1_m (vbool16_t mask,
    vuint64m1_t dest, vuint64m4_t vector, vuint64m1_t scalar,
    size_t vl);
vuint64m1_t vredsum_vs_u64m8_u64m1_m (vbool8_t mask, vuint64m1_t
    dest, vuint64m8_t vector, vuint64m1_t scalar, size_t vl);
vint8m1_t vredmax_vs_i8mf8_i8m1_m (vbool64_t mask, vint8m1_t
    dest, vint8mf8_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmax_vs_i8mf4_i8m1_m (vbool32_t mask, vint8m1_t
    dest, vint8mf4_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmax_vs_i8mf2_i8m1_m (vbool16_t mask, vint8m1_t
    dest, vint8mf2_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmax_vs_i8m1_i8m1_m (vbool8_t mask, vint8m1_t dest,
    vint8m1_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmax_vs_i8m2_i8m1_m (vbool4_t mask, vint8m1_t dest,
    vint8m2_t vector, vint8m1_t scalar, size_t vl);
```

```
vint8m1_t vredmax_vs_i8m4_i8m1_m (vbool2_t mask, vint8m1_t dest,
    vint8m4_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmax_vs_i8m8_i8m1_m (vbool1_t mask, vint8m1_t dest,
    vint8m8_t vector, vint8m1_t scalar, size_t vl);
vint16m1_t vredmax_vs_i16mf4_i16m1_m (vbool64_t mask, vint16m1_t
    dest, vint16mf4_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmax_vs_i16mf2_i16m1_m (vbool32_t mask, vint16m1_t
    dest, vint16mf2_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmax_vs_i16m1_i16m1_m (vbool16_t mask, vint16m1_t
    dest, vint16m1_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmax_vs_i16m2_i16m1_m (vbool8_t mask, vint16m1_t
    dest, vint16m2_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmax_vs_i16m4_i16m1_m (vbool4_t mask, vint16m1_t
    dest, vint16m4_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmax_vs_i16m8_i16m1_m (vbool2_t mask, vint16m1_t
    dest, vint16m8_t vector, vint16m1_t scalar, size_t vl);
vint32m1_t vredmax_vs_i32mf2_i32m1_m (vbool64_t mask, vint32m1_t
    dest, vint32mf2_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredmax_vs_i32m1_i32m1_m (vbool32_t mask, vint32m1_t
    dest, vint32m1_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredmax_vs_i32m2_i32m1_m (vbool16_t mask, vint32m1_t
    dest, vint32m2_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredmax_vs_i32m4_i32m1_m (vbool8_t mask, vint32m1_t
    dest, vint32m4_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredmax_vs_i32m8_i32m1_m (vbool4_t mask, vint32m1_t
    dest, vint32m8_t vector, vint32m1_t scalar, size_t vl);
vint64m1_t vredmax_vs_i64m1_i64m1_m (vbool64_t mask, vint64m1_t
    dest, vint64m1_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredmax_vs_i64m2_i64m1_m (vbool32_t mask, vint64m1_t
    dest, vint64m2_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredmax_vs_i64m4_i64m1_m (vbool16_t mask, vint64m1_t
    dest, vint64m4_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredmax_vs_i64m8_i64m1_m (vbool8_t mask, vint64m1_t
    dest, vint64m8_t vector, vint64m1_t scalar, size_t vl);
vuint8m1_t vredmaxu_vs_u8mf8_u8m1_m (vbool64_t mask, vuint8m1_t
    dest, vuint8mf8_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredmaxu_vs_u8mf4_u8m1_m (vbool32_t mask, vuint8m1_t
    dest, vuint8mf4_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredmaxu_vs_u8mf2_u8m1_m (vbool16_t mask, vuint8m1_t
    dest, vuint8mf2_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredmaxu_vs_u8m1_u8m1_m (vbool8_t mask, vuint8m1_t
    dest, vuint8m1_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredmaxu_vs_u8m2_u8m1_m (vbool4_t mask, vuint8m1_t
    dest, vuint8m2_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredmaxu_vs_u8m4_u8m1_m (vbool2_t mask, vuint8m1_t
    dest, vuint8m4_t vector, vuint8m1_t scalar, size_t vl);
```

```
vuint8m1_t vredmaxu_vs_u8m8_u8m1_m (vbool1_t mask, vuint8m1_t
    dest, vuint8m8_t vector, vuint8m1_t scalar, size_t vl);
vuint16m1_t vredmaxu_vs_u16mf4_u16m1_m (vbool64_t mask,
    vuint16m1_t dest, vuint16mf4_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredmaxu_vs_u16mf2_u16m1_m (vbool32_t mask,
    vuint16m1_t dest, vuint16mf2_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredmaxu_vs_u16m1_u16m1_m (vbool16_t mask,
    vuint16m1_t dest, vuint16m1_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredmaxu_vs_u16m2_u16m1_m (vbool8_t mask,
    vuint16m1_t dest, vuint16m2_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredmaxu_vs_u16m4_u16m1_m (vbool4_t mask,
    vuint16m1_t dest, vuint16m4_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredmaxu_vs_u16m8_u16m1_m (vbool2_t mask,
    vuint16m1_t dest, vuint16m8_t vector, vuint16m1_t scalar,
    size_t vl);
vuint32m1_t vredmaxu_vs_u32mf2_u32m1_m (vbool64_t mask,
    vuint32m1_t dest, vuint32mf2_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vredmaxu_vs_u32m1_u32m1_m (vbool32_t mask,
    vuint32m1_t dest, vuint32m1_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vredmaxu_vs_u32m2_u32m1_m (vbool16_t mask,
    vuint32m1_t dest, vuint32m2_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vredmaxu_vs_u32m4_u32m1_m (vbool8_t mask,
    vuint32m1_t dest, vuint32m4_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vredmaxu_vs_u32m8_u32m1_m (vbool4_t mask,
    vuint32m1_t dest, vuint32m8_t vector, vuint32m1_t scalar,
    size_t vl);
vuint64m1_t vredmaxu_vs_u64m1_u64m1_m (vbool64_t mask,
    vuint64m1_t dest, vuint64m1_t vector, vuint64m1_t scalar,
    size_t vl);
vuint64m1_t vredmaxu_vs_u64m2_u64m1_m (vbool32_t mask,
    vuint64m1_t dest, vuint64m2_t vector, vuint64m1_t scalar,
    size_t vl);
vuint64m1_t vredmaxu_vs_u64m4_u64m1_m (vbool16_t mask,
    vuint64m1_t dest, vuint64m4_t vector, vuint64m1_t scalar,
    size_t vl);
vuint64m1_t vredmaxu_vs_u64m8_u64m1_m (vbool8_t mask,
    vuint64m1_t dest, vuint64m8_t vector, vuint64m1_t scalar,
```

```
        size_t vl);
vint8m1_t vredmin_vs_i8mf8_i8m1_m (vbool64_t mask, vint8m1_t
    dest, vint8mf8_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmin_vs_i8mf4_i8m1_m (vbool32_t mask, vint8m1_t
    dest, vint8mf4_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmin_vs_i8mf2_i8m1_m (vbool16_t mask, vint8m1_t
    dest, vint8mf2_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmin_vs_i8m1_i8m1_m (vbool8_t mask, vint8m1_t dest,
    vint8m1_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmin_vs_i8m2_i8m1_m (vbool4_t mask, vint8m1_t dest,
    vint8m2_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmin_vs_i8m4_i8m1_m (vbool2_t mask, vint8m1_t dest,
    vint8m4_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredmin_vs_i8m8_i8m1_m (vbool1_t mask, vint8m1_t dest,
    vint8m8_t vector, vint8m1_t scalar, size_t vl);
vint16m1_t vredmin_vs_i16mf4_i16m1_m (vbool64_t mask, vint16m1_t
    dest, vint16mf4_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmin_vs_i16mf2_i16m1_m (vbool32_t mask, vint16m1_t
    dest, vint16mf2_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmin_vs_i16m1_i16m1_m (vbool16_t mask, vint16m1_t
    dest, vint16m1_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmin_vs_i16m2_i16m1_m (vbool8_t mask, vint16m1_t
    dest, vint16m2_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmin_vs_i16m4_i16m1_m (vbool4_t mask, vint16m1_t
    dest, vint16m4_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredmin_vs_i16m8_i16m1_m (vbool2_t mask, vint16m1_t
    dest, vint16m8_t vector, vint16m1_t scalar, size_t vl);
vint32m1_t vredmin_vs_i32mf2_i32m1_m (vbool64_t mask, vint32m1_t
    dest, vint32mf2_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredmin_vs_i32m1_i32m1_m (vbool32_t mask, vint32m1_t
    dest, vint32m1_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredmin_vs_i32m2_i32m1_m (vbool16_t mask, vint32m1_t
    dest, vint32m2_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredmin_vs_i32m4_i32m1_m (vbool8_t mask, vint32m1_t
    dest, vint32m4_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredmin_vs_i32m8_i32m1_m (vbool4_t mask, vint32m1_t
    dest, vint32m8_t vector, vint32m1_t scalar, size_t vl);
vint64m1_t vredmin_vs_i64m1_i64m1_m (vbool64_t mask, vint64m1_t
    dest, vint64m1_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredmin_vs_i64m2_i64m1_m (vbool32_t mask, vint64m1_t
    dest, vint64m2_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredmin_vs_i64m4_i64m1_m (vbool16_t mask, vint64m1_t
    dest, vint64m4_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredmin_vs_i64m8_i64m1_m (vbool8_t mask, vint64m1_t
    dest, vint64m8_t vector, vint64m1_t scalar, size_t vl);
```

```
vuint8m1_t vredminu_vs_u8mf8_u8m1_m (vbool64_t mask, vuint8m1_t
    dest, vuint8mf8_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredminu_vs_u8mf4_u8m1_m (vbool32_t mask, vuint8m1_t
    dest, vuint8mf4_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredminu_vs_u8mf2_u8m1_m (vbool16_t mask, vuint8m1_t
    dest, vuint8mf2_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredminu_vs_u8m1_u8m1_m (vbool8_t mask, vuint8m1_t
    dest, vuint8m1_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredminu_vs_u8m2_u8m1_m (vbool4_t mask, vuint8m1_t
    dest, vuint8m2_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredminu_vs_u8m4_u8m1_m (vbool2_t mask, vuint8m1_t
    dest, vuint8m4_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredminu_vs_u8m8_u8m1_m (vbool1_t mask, vuint8m1_t
    dest, vuint8m8_t vector, vuint8m1_t scalar, size_t vl);
vuint16m1_t vredminu_vs_u16mf4_u16m1_m (vbool64_t mask,
    vuint16m1_t dest, vuint16mf4_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredminu_vs_u16mf2_u16m1_m (vbool32_t mask,
    vuint16m1_t dest, vuint16mf2_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredminu_vs_u16m1_u16m1_m (vbool16_t mask,
    vuint16m1_t dest, vuint16m1_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredminu_vs_u16m2_u16m1_m (vbool8_t mask,
    vuint16m1_t dest, vuint16m2_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredminu_vs_u16m4_u16m1_m (vbool4_t mask,
    vuint16m1_t dest, vuint16m4_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredminu_vs_u16m8_u16m1_m (vbool2_t mask,
    vuint16m1_t dest, vuint16m8_t vector, vuint16m1_t scalar,
    size_t vl);
vuint32m1_t vredminu_vs_u32mf2_u32m1_m (vbool64_t mask,
    vuint32m1_t dest, vuint32mf2_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vredminu_vs_u32m1_u32m1_m (vbool32_t mask,
    vuint32m1_t dest, vuint32m1_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vredminu_vs_u32m2_u32m1_m (vbool16_t mask,
    vuint32m1_t dest, vuint32m2_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vredminu_vs_u32m4_u32m1_m (vbool8_t mask,
    vuint32m1_t dest, vuint32m4_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vredminu_vs_u32m8_u32m1_m (vbool4_t mask,
    vuint32m1_t dest, vuint32m8_t vector, vuint32m1_t scalar,
```

```
      size_t vl);
vuint64m1_t vredminu_vs_u64m1_u64m1_m (vbool64_t mask,
    vuint64m1_t dest, vuint64m1_t vector, vuint64m1_t scalar,
    size_t vl);
vuint64m1_t vredminu_vs_u64m2_u64m1_m (vbool32_t mask,
    vuint64m1_t dest, vuint64m2_t vector, vuint64m1_t scalar,
    size_t vl);
vuint64m1_t vredminu_vs_u64m4_u64m1_m (vbool16_t mask,
    vuint64m1_t dest, vuint64m4_t vector, vuint64m1_t scalar,
    size_t vl);
vuint64m1_t vredminu_vs_u64m8_u64m1_m (vbool8_t mask,
    vuint64m1_t dest, vuint64m8_t vector, vuint64m1_t scalar,
    size_t vl);
vint8m1_t vredand_vs_i8mf8_i8m1_m (vbool64_t mask, vint8m1_t
    dest, vint8mf8_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredand_vs_i8mf4_i8m1_m (vbool32_t mask, vint8m1_t
    dest, vint8mf4_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredand_vs_i8mf2_i8m1_m (vbool16_t mask, vint8m1_t
    dest, vint8mf2_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredand_vs_i8m1_i8m1_m (vbool8_t mask, vint8m1_t dest,
    vint8m1_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredand_vs_i8m2_i8m1_m (vbool4_t mask, vint8m1_t dest,
    vint8m2_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredand_vs_i8m4_i8m1_m (vbool2_t mask, vint8m1_t dest,
    vint8m4_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredand_vs_i8m8_i8m1_m (vbool1_t mask, vint8m1_t dest,
    vint8m8_t vector, vint8m1_t scalar, size_t vl);
vint16m1_t vredand_vs_i16mf4_i16m1_m (vbool64_t mask, vint16m1_t
    dest, vint16mf4_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredand_vs_i16mf2_i16m1_m (vbool32_t mask, vint16m1_t
    dest, vint16mf2_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredand_vs_i16m1_i16m1_m (vbool16_t mask, vint16m1_t
    dest, vint16m1_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredand_vs_i16m2_i16m1_m (vbool8_t mask, vint16m1_t
    dest, vint16m2_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredand_vs_i16m4_i16m1_m (vbool4_t mask, vint16m1_t
    dest, vint16m4_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredand_vs_i16m8_i16m1_m (vbool2_t mask, vint16m1_t
    dest, vint16m8_t vector, vint16m1_t scalar, size_t vl);
vint32m1_t vredand_vs_i32mf2_i32m1_m (vbool64_t mask, vint32m1_t
    dest, vint32mf2_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredand_vs_i32m1_i32m1_m (vbool32_t mask, vint32m1_t
    dest, vint32m1_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredand_vs_i32m2_i32m1_m (vbool16_t mask, vint32m1_t
    dest, vint32m2_t vector, vint32m1_t scalar, size_t vl);
```

```
vint32m1_t vredand_vs_i32m4_i32m1_m (vbool8_t mask, vint32m1_t
    dest, vint32m4_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredand_vs_i32m8_i32m1_m (vbool4_t mask, vint32m1_t
    dest, vint32m8_t vector, vint32m1_t scalar, size_t vl);
vint64m1_t vredand_vs_i64m1_i64m1_m (vbool64_t mask, vint64m1_t
    dest, vint64m1_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredand_vs_i64m2_i64m1_m (vbool32_t mask, vint64m1_t
    dest, vint64m2_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredand_vs_i64m4_i64m1_m (vbool16_t mask, vint64m1_t
    dest, vint64m4_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredand_vs_i64m8_i64m1_m (vbool8_t mask, vint64m1_t
    dest, vint64m8_t vector, vint64m1_t scalar, size_t vl);
vuint8m1_t vredand_vs_u8mf8_u8m1_m (vbool64_t mask, vuint8m1_t
    dest, vuint8mf8_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredand_vs_u8mf4_u8m1_m (vbool32_t mask, vuint8m1_t
    dest, vuint8mf4_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredand_vs_u8mf2_u8m1_m (vbool16_t mask, vuint8m1_t
    dest, vuint8mf2_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredand_vs_u8m1_u8m1_m (vbool8_t mask, vuint8m1_t
    dest, vuint8m1_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredand_vs_u8m2_u8m1_m (vbool4_t mask, vuint8m1_t
    dest, vuint8m2_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredand_vs_u8m4_u8m1_m (vbool2_t mask, vuint8m1_t
    dest, vuint8m4_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredand_vs_u8m8_u8m1_m (vbool1_t mask, vuint8m1_t
    dest, vuint8m8_t vector, vuint8m1_t scalar, size_t vl);
vuint16m1_t vredand_vs_u16mf4_u16m1_m (vbool64_t mask,
    vuint16m1_t dest, vuint16mf4_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredand_vs_u16mf2_u16m1_m (vbool32_t mask,
    vuint16m1_t dest, vuint16mf2_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredand_vs_u16m1_u16m1_m (vbool16_t mask,
    vuint16m1_t dest, vuint16m1_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredand_vs_u16m2_u16m1_m (vbool8_t mask, vuint16m1_t
    dest, vuint16m2_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredand_vs_u16m4_u16m1_m (vbool4_t mask, vuint16m1_t
    dest, vuint16m4_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredand_vs_u16m8_u16m1_m (vbool2_t mask, vuint16m1_t
    dest, vuint16m8_t vector, vuint16m1_t scalar, size_t vl);
vuint32m1_t vredand_vs_u32mf2_u32m1_m (vbool64_t mask,
    vuint32m1_t dest, vuint32mf2_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vredand_vs_u32m1_u32m1_m (vbool32_t mask,
    vuint32m1_t dest, vuint32m1_t vector, vuint32m1_t scalar,
```

```
      size_t vl);
vuint32m1_t vredand_vs_u32m2_u32m1_m (vbool16_t mask,
    vuint32m1_t dest, vuint32m2_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vredand_vs_u32m4_u32m1_m (vbool8_t mask, vuint32m1_t
    dest, vuint32m4_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredand_vs_u32m8_u32m1_m (vbool4_t mask, vuint32m1_t
    dest, vuint32m8_t vector, vuint32m1_t scalar, size_t vl);
vuint64m1_t vredand_vs_u64m1_u64m1_m (vbool64_t mask,
    vuint64m1_t dest, vuint64m1_t vector, vuint64m1_t scalar,
    size_t vl);
vuint64m1_t vredand_vs_u64m2_u64m1_m (vbool32_t mask,
    vuint64m1_t dest, vuint64m2_t vector, vuint64m1_t scalar,
    size_t vl);
vuint64m1_t vredand_vs_u64m4_u64m1_m (vbool16_t mask,
    vuint64m1_t dest, vuint64m4_t vector, vuint64m1_t scalar,
    size_t vl);
vuint64m1_t vredand_vs_u64m8_u64m1_m (vbool8_t mask, vuint64m1_t
    dest, vuint64m8_t vector, vuint64m1_t scalar, size_t vl);
vint8m1_t vredor_vs_i8mf8_i8m1_m (vbool64_t mask, vint8m1_t
    dest, vint8mf8_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredor_vs_i8mf4_i8m1_m (vbool32_t mask, vint8m1_t
    dest, vint8mf4_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredor_vs_i8mf2_i8m1_m (vbool16_t mask, vint8m1_t
    dest, vint8mf2_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredor_vs_i8m1_i8m1_m (vbool8_t mask, vint8m1_t dest,
    vint8m1_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredor_vs_i8m2_i8m1_m (vbool4_t mask, vint8m1_t dest,
    vint8m2_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredor_vs_i8m4_i8m1_m (vbool2_t mask, vint8m1_t dest,
    vint8m4_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredor_vs_i8m8_i8m1_m (vbool1_t mask, vint8m1_t dest,
    vint8m8_t vector, vint8m1_t scalar, size_t vl);
vint16m1_t vredor_vs_i16mf4_i16m1_m (vbool64_t mask, vint16m1_t
    dest, vint16mf4_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredor_vs_i16mf2_i16m1_m (vbool32_t mask, vint16m1_t
    dest, vint16mf2_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredor_vs_i16m1_i16m1_m (vbool16_t mask, vint16m1_t
    dest, vint16m1_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredor_vs_i16m2_i16m1_m (vbool8_t mask, vint16m1_t
    dest, vint16m2_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredor_vs_i16m4_i16m1_m (vbool4_t mask, vint16m1_t
    dest, vint16m4_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredor_vs_i16m8_i16m1_m (vbool2_t mask, vint16m1_t
    dest, vint16m8_t vector, vint16m1_t scalar, size_t vl);
```

```
vint32m1_t vredor_vs_i32mf2_i32m1_m (vbool64_t mask, vint32m1_t
    dest, vint32mf2_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredor_vs_i32m1_i32m1_m (vbool32_t mask, vint32m1_t
    dest, vint32m1_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredor_vs_i32m2_i32m1_m (vbool16_t mask, vint32m1_t
    dest, vint32m2_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredor_vs_i32m4_i32m1_m (vbool8_t mask, vint32m1_t
    dest, vint32m4_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredor_vs_i32m8_i32m1_m (vbool4_t mask, vint32m1_t
    dest, vint32m8_t vector, vint32m1_t scalar, size_t vl);
vint64m1_t vredor_vs_i64m1_i64m1_m (vbool64_t mask, vint64m1_t
    dest, vint64m1_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredor_vs_i64m2_i64m1_m (vbool32_t mask, vint64m1_t
    dest, vint64m2_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredor_vs_i64m4_i64m1_m (vbool16_t mask, vint64m1_t
    dest, vint64m4_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredor_vs_i64m8_i64m1_m (vbool8_t mask, vint64m1_t
    dest, vint64m8_t vector, vint64m1_t scalar, size_t vl);
vuint8m1_t vredor_vs_u8mf8_u8m1_m (vbool64_t mask, vuint8m1_t
    dest, vuint8mf8_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredor_vs_u8mf4_u8m1_m (vbool32_t mask, vuint8m1_t
    dest, vuint8mf4_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredor_vs_u8mf2_u8m1_m (vbool16_t mask, vuint8m1_t
    dest, vuint8mf2_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredor_vs_u8m1_u8m1_m (vbool8_t mask, vuint8m1_t
    dest, vuint8m1_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredor_vs_u8m2_u8m1_m (vbool4_t mask, vuint8m1_t
    dest, vuint8m2_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredor_vs_u8m4_u8m1_m (vbool2_t mask, vuint8m1_t
    dest, vuint8m4_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredor_vs_u8m8_u8m1_m (vbool1_t mask, vuint8m1_t
    dest, vuint8m8_t vector, vuint8m1_t scalar, size_t vl);
vuint16m1_t vredor_vs_u16mf4_u16m1_m (vbool64_t mask,
    vuint16m1_t dest, vuint16mf4_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredor_vs_u16mf2_u16m1_m (vbool32_t mask,
    vuint16m1_t dest, vuint16mf2_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredor_vs_u16m1_u16m1_m (vbool16_t mask, vuint16m1_t
    dest, vuint16m1_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredor_vs_u16m2_u16m1_m (vbool8_t mask, vuint16m1_t
    dest, vuint16m2_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredor_vs_u16m4_u16m1_m (vbool4_t mask, vuint16m1_t
    dest, vuint16m4_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredor_vs_u16m8_u16m1_m (vbool2_t mask, vuint16m1_t
    dest, vuint16m8_t vector, vuint16m1_t scalar, size_t vl);
```

```
vuint32m1_t vredor_vs_u32mf2_u32m1_m (vbool64_t mask,
    vuint32m1_t dest, vuint32mf2_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vredor_vs_u32m1_u32m1_m (vbool32_t mask, vuint32m1_t
    dest, vuint32m1_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredor_vs_u32m2_u32m1_m (vbool16_t mask, vuint32m1_t
    dest, vuint32m2_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredor_vs_u32m4_u32m1_m (vbool8_t mask, vuint32m1_t
    dest, vuint32m4_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredor_vs_u32m8_u32m1_m (vbool4_t mask, vuint32m1_t
    dest, vuint32m8_t vector, vuint32m1_t scalar, size_t vl);
vuint64m1_t vredor_vs_u64m1_u64m1_m (vbool64_t mask, vuint64m1_t
    dest, vuint64m1_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredor_vs_u64m2_u64m1_m (vbool32_t mask, vuint64m1_t
    dest, vuint64m2_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredor_vs_u64m4_u64m1_m (vbool16_t mask, vuint64m1_t
    dest, vuint64m4_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vredor_vs_u64m8_u64m1_m (vbool8_t mask, vuint64m1_t
    dest, vuint64m8_t vector, vuint64m1_t scalar, size_t vl);
vint8m1_t vredxor_vs_i8mf8_i8m1_m (vbool64_t mask, vint8m1_t
    dest, vint8mf8_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredxor_vs_i8mf4_i8m1_m (vbool32_t mask, vint8m1_t
    dest, vint8mf4_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredxor_vs_i8mf2_i8m1_m (vbool16_t mask, vint8m1_t
    dest, vint8mf2_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredxor_vs_i8m1_i8m1_m (vbool8_t mask, vint8m1_t dest,
    vint8m1_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredxor_vs_i8m2_i8m1_m (vbool4_t mask, vint8m1_t dest,
    vint8m2_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredxor_vs_i8m4_i8m1_m (vbool2_t mask, vint8m1_t dest,
    vint8m4_t vector, vint8m1_t scalar, size_t vl);
vint8m1_t vredxor_vs_i8m8_i8m1_m (vbool1_t mask, vint8m1_t dest,
    vint8m8_t vector, vint8m1_t scalar, size_t vl);
vint16m1_t vredxor_vs_i16mf4_i16m1_m (vbool64_t mask, vint16m1_t
    dest, vint16mf4_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredxor_vs_i16mf2_i16m1_m (vbool32_t mask, vint16m1_t
    dest, vint16mf2_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredxor_vs_i16m1_i16m1_m (vbool16_t mask, vint16m1_t
    dest, vint16m1_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredxor_vs_i16m2_i16m1_m (vbool8_t mask, vint16m1_t
    dest, vint16m2_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredxor_vs_i16m4_i16m1_m (vbool4_t mask, vint16m1_t
    dest, vint16m4_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vredxor_vs_i16m8_i16m1_m (vbool2_t mask, vint16m1_t
    dest, vint16m8_t vector, vint16m1_t scalar, size_t vl);
```

```
vint32m1_t vredxor_vs_i32mf2_i32m1_m (vbool64_t mask, vint32m1_t
    dest, vint32mf2_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredxor_vs_i32m1_i32m1_m (vbool32_t mask, vint32m1_t
    dest, vint32m1_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredxor_vs_i32m2_i32m1_m (vbool16_t mask, vint32m1_t
    dest, vint32m2_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredxor_vs_i32m4_i32m1_m (vbool8_t mask, vint32m1_t
    dest, vint32m4_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vredxor_vs_i32m8_i32m1_m (vbool4_t mask, vint32m1_t
    dest, vint32m8_t vector, vint32m1_t scalar, size_t vl);
vint64m1_t vredxor_vs_i64m1_i64m1_m (vbool64_t mask, vint64m1_t
    dest, vint64m1_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredxor_vs_i64m2_i64m1_m (vbool32_t mask, vint64m1_t
    dest, vint64m2_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredxor_vs_i64m4_i64m1_m (vbool16_t mask, vint64m1_t
    dest, vint64m4_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vredxor_vs_i64m8_i64m1_m (vbool8_t mask, vint64m1_t
    dest, vint64m8_t vector, vint64m1_t scalar, size_t vl);
vuint8m1_t vredxor_vs_u8mf8_u8m1_m (vbool64_t mask, vuint8m1_t
    dest, vuint8mf8_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredxor_vs_u8mf4_u8m1_m (vbool32_t mask, vuint8m1_t
    dest, vuint8mf4_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredxor_vs_u8mf2_u8m1_m (vbool16_t mask, vuint8m1_t
    dest, vuint8mf2_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredxor_vs_u8m1_u8m1_m (vbool8_t mask, vuint8m1_t
    dest, vuint8m1_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredxor_vs_u8m2_u8m1_m (vbool4_t mask, vuint8m1_t
    dest, vuint8m2_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredxor_vs_u8m4_u8m1_m (vbool2_t mask, vuint8m1_t
    dest, vuint8m4_t vector, vuint8m1_t scalar, size_t vl);
vuint8m1_t vredxor_vs_u8m8_u8m1_m (vbool1_t mask, vuint8m1_t
    dest, vuint8m8_t vector, vuint8m1_t scalar, size_t vl);
vuint16m1_t vredxor_vs_u16mf4_u16m1_m (vbool64_t mask,
    vuint16m1_t dest, vuint16mf4_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredxor_vs_u16mf2_u16m1_m (vbool32_t mask,
    vuint16m1_t dest, vuint16mf2_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredxor_vs_u16m1_u16m1_m (vbool16_t mask,
    vuint16m1_t dest, vuint16m1_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vredxor_vs_u16m2_u16m1_m (vbool8_t mask, vuint16m1_t
    dest, vuint16m2_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vredxor_vs_u16m4_u16m1_m (vbool4_t mask, vuint16m1_t
    dest, vuint16m4_t vector, vuint16m1_t scalar, size_t vl);
```

```
vuint16m1_t vredxor_vs_u16m8_u16m1_m (vbool2_t mask, vuint16m1_t
    dest, vuint16m8_t vector, vuint16m1_t scalar, size_t vl);
vuint32m1_t vredxor_vs_u32mf2_u32m1_m (vbool64_t mask,
    vuint32m1_t dest, vuint32mf2_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vredxor_vs_u32m1_u32m1_m (vbool32_t mask,
    vuint32m1_t dest, vuint32m1_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vredxor_vs_u32m2_u32m1_m (vbool16_t mask,
    vuint32m1_t dest, vuint32m2_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vredxor_vs_u32m4_u32m1_m (vbool8_t mask, vuint32m1_t
    dest, vuint32m4_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vredxor_vs_u32m8_u32m1_m (vbool4_t mask, vuint32m1_t
    dest, vuint32m8_t vector, vuint32m1_t scalar, size_t vl);
vuint64m1_t vredxor_vs_u64m1_u64m1_m (vbool64_t mask,
    vuint64m1_t dest, vuint64m1_t vector, vuint64m1_t scalar,
    size_t vl);
vuint64m1_t vredxor_vs_u64m2_u64m1_m (vbool32_t mask,
    vuint64m1_t dest, vuint64m2_t vector, vuint64m1_t scalar,
    size_t vl);
vuint64m1_t vredxor_vs_u64m4_u64m1_m (vbool16_t mask,
    vuint64m1_t dest, vuint64m4_t vector, vuint64m1_t scalar,
    size_t vl);
vuint64m1_t vredxor_vs_u64m8_u64m1_m (vbool8_t mask, vuint64m1_t
    dest, vuint64m8_t vector, vuint64m1_t scalar, size_t vl);
```

Vector Widening Integer Reduction Functions:

Prototypes:

```
vint16m1_t vwredsum_vs_i8mf8_i16m1 (vint16m1_t dest, vint8mf8_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vwredsum_vs_i8mf4_i16m1 (vint16m1_t dest, vint8mf4_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vwredsum_vs_i8mf2_i16m1 (vint16m1_t dest, vint8mf2_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vwredsum_vs_i8m1_i16m1 (vint16m1_t dest, vint8m1_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vwredsum_vs_i8m2_i16m1 (vint16m1_t dest, vint8m2_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vwredsum_vs_i8m4_i16m1 (vint16m1_t dest, vint8m4_t
    vector, vint16m1_t scalar, size_t vl);
vint16m1_t vwredsum_vs_i8m8_i16m1 (vint16m1_t dest, vint8m8_t
    vector, vint16m1_t scalar, size_t vl);
```

```
vint32m1_t vwredsum_vs_i16mf4_i32m1 (vint32m1_t dest,
    vint16mf4_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vwredsum_vs_i16mf2_i32m1 (vint32m1_t dest,
    vint16mf2_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vwredsum_vs_i16m1_i32m1 (vint32m1_t dest, vint16m1_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vwredsum_vs_i16m2_i32m1 (vint32m1_t dest, vint16m2_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vwredsum_vs_i16m4_i32m1 (vint32m1_t dest, vint16m4_t
    vector, vint32m1_t scalar, size_t vl);
vint32m1_t vwredsum_vs_i16m8_i32m1 (vint32m1_t dest, vint16m8_t
    vector, vint32m1_t scalar, size_t vl);
vint64m1_t vwredsum_vs_i32mf2_i64m1 (vint64m1_t dest,
    vint32mf2_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vwredsum_vs_i32m1_i64m1 (vint64m1_t dest, vint32m1_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vwredsum_vs_i32m2_i64m1 (vint64m1_t dest, vint32m2_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vwredsum_vs_i32m4_i64m1 (vint64m1_t dest, vint32m4_t
    vector, vint64m1_t scalar, size_t vl);
vint64m1_t vwredsum_vs_i32m8_i64m1 (vint64m1_t dest, vint32m8_t
    vector, vint64m1_t scalar, size_t vl);
vuint16m1_t vwredsumu_vs_u8mf8_u16m1 (vuint16m1_t dest,
    vuint8mf8_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vwredsumu_vs_u8mf4_u16m1 (vuint16m1_t dest,
    vuint8mf4_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vwredsumu_vs_u8mf2_u16m1 (vuint16m1_t dest,
    vuint8mf2_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vwredsumu_vs_u8m1_u16m1 (vuint16m1_t dest,
    vuint8m1_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vwredsumu_vs_u8m2_u16m1 (vuint16m1_t dest,
    vuint8m2_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vwredsumu_vs_u8m4_u16m1 (vuint16m1_t dest,
    vuint8m4_t vector, vuint16m1_t scalar, size_t vl);
vuint16m1_t vwredsumu_vs_u8m8_u16m1 (vuint16m1_t dest,
    vuint8m8_t vector, vuint16m1_t scalar, size_t vl);
vuint32m1_t vwredsumu_vs_u16mf4_u32m1 (vuint32m1_t dest,
    vuint16mf4_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vwredsumu_vs_u16mf2_u32m1 (vuint32m1_t dest,
    vuint16mf2_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vwredsumu_vs_u16m1_u32m1 (vuint32m1_t dest,
    vuint16m1_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vwredsumu_vs_u16m2_u32m1 (vuint32m1_t dest,
    vuint16m2_t vector, vuint32m1_t scalar, size_t vl);
vuint32m1_t vwredsumu_vs_u16m4_u32m1 (vuint32m1_t dest,
    vuint16m4_t vector, vuint32m1_t scalar, size_t vl);
```

```
vuint32m1_t vwredsumu_vs_u16m8_u32m1 (vuint32m1_t dest,
    vuint16m8_t vector, vuint32m1_t scalar, size_t vl);
vuint64m1_t vwredsumu_vs_u32mf2_u64m1 (vuint64m1_t dest,
    vuint32mf2_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vwredsumu_vs_u32m1_u64m1 (vuint64m1_t dest,
    vuint32m1_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vwredsumu_vs_u32m2_u64m1 (vuint64m1_t dest,
    vuint32m2_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vwredsumu_vs_u32m4_u64m1 (vuint64m1_t dest,
    vuint32m4_t vector, vuint64m1_t scalar, size_t vl);
vuint64m1_t vwredsumu_vs_u32m8_u64m1 (vuint64m1_t dest,
    vuint32m8_t vector, vuint64m1_t scalar, size_t vl);
// masked functions
vint16m1_t vwredsum_vs_i8mf8_i16m1_m (vbool64_t mask, vint16m1_t
    dest, vint8mf8_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vwredsum_vs_i8mf4_i16m1_m (vbool32_t mask, vint16m1_t
    dest, vint8mf4_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vwredsum_vs_i8mf2_i16m1_m (vbool16_t mask, vint16m1_t
    dest, vint8mf2_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vwredsum_vs_i8m1_i16m1_m (vbool8_t mask, vint16m1_t
    dest, vint8m1_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vwredsum_vs_i8m2_i16m1_m (vbool4_t mask, vint16m1_t
    dest, vint8m2_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vwredsum_vs_i8m4_i16m1_m (vbool2_t mask, vint16m1_t
    dest, vint8m4_t vector, vint16m1_t scalar, size_t vl);
vint16m1_t vwredsum_vs_i8m8_i16m1_m (vbool1_t mask, vint16m1_t
    dest, vint8m8_t vector, vint16m1_t scalar, size_t vl);
vint32m1_t vwredsum_vs_i16mf4_i32m1_m (vbool64_t mask,
    vint32m1_t dest, vint16mf4_t vector, vint32m1_t scalar,
    size_t vl);
vint32m1_t vwredsum_vs_i16mf2_i32m1_m (vbool32_t mask,
    vint32m1_t dest, vint16mf2_t vector, vint32m1_t scalar,
    size_t vl);
vint32m1_t vwredsum_vs_i16m1_i32m1_m (vbool16_t mask, vint32m1_t
    dest, vint16m1_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vwredsum_vs_i16m2_i32m1_m (vbool8_t mask, vint32m1_t
    dest, vint16m2_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vwredsum_vs_i16m4_i32m1_m (vbool4_t mask, vint32m1_t
    dest, vint16m4_t vector, vint32m1_t scalar, size_t vl);
vint32m1_t vwredsum_vs_i16m8_i32m1_m (vbool2_t mask, vint32m1_t
    dest, vint16m8_t vector, vint32m1_t scalar, size_t vl);
vint64m1_t vwredsum_vs_i32mf2_i64m1_m (vbool64_t mask,
    vint64m1_t dest, vint32mf2_t vector, vint64m1_t scalar,
    size_t vl);
vint64m1_t vwredsum_vs_i32m1_i64m1_m (vbool32_t mask, vint64m1_t
    dest, vint32m1_t vector, vint64m1_t scalar, size_t vl);
```

```
vint64m1_t vwredsum_vs_i32m2_i64m1_m (vbool16_t mask, vint64m1_t
    dest, vint32m2_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vwredsum_vs_i32m4_i64m1_m (vbool8_t mask, vint64m1_t
    dest, vint32m4_t vector, vint64m1_t scalar, size_t vl);
vint64m1_t vwredsum_vs_i32m8_i64m1_m (vbool4_t mask, vint64m1_t
    dest, vint32m8_t vector, vint64m1_t scalar, size_t vl);
vuint16m1_t vwredsumu_vs_u8mf8_u16m1_m (vbool64_t mask,
    vuint16m1_t dest, vuint8mf8_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vwredsumu_vs_u8mf4_u16m1_m (vbool32_t mask,
    vuint16m1_t dest, vuint8mf4_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vwredsumu_vs_u8mf2_u16m1_m (vbool16_t mask,
    vuint16m1_t dest, vuint8mf2_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vwredsumu_vs_u8m1_u16m1_m (vbool8_t mask,
    vuint16m1_t dest, vuint8m1_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vwredsumu_vs_u8m2_u16m1_m (vbool4_t mask,
    vuint16m1_t dest, vuint8m2_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vwredsumu_vs_u8m4_u16m1_m (vbool2_t mask,
    vuint16m1_t dest, vuint8m4_t vector, vuint16m1_t scalar,
    size_t vl);
vuint16m1_t vwredsumu_vs_u8m8_u16m1_m (vbool1_t mask,
    vuint16m1_t dest, vuint8m8_t vector, vuint16m1_t scalar,
    size_t vl);
vuint32m1_t vwredsumu_vs_u16mf4_u32m1_m (vbool64_t mask,
    vuint32m1_t dest, vuint16mf4_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vwredsumu_vs_u16mf2_u32m1_m (vbool32_t mask,
    vuint32m1_t dest, vuint16mf2_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vwredsumu_vs_u16m1_u32m1_m (vbool16_t mask,
    vuint32m1_t dest, vuint16m1_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vwredsumu_vs_u16m2_u32m1_m (vbool8_t mask,
    vuint32m1_t dest, vuint16m2_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vwredsumu_vs_u16m4_u32m1_m (vbool4_t mask,
    vuint32m1_t dest, vuint16m4_t vector, vuint32m1_t scalar,
    size_t vl);
vuint32m1_t vwredsumu_vs_u16m8_u32m1_m (vbool2_t mask,
    vuint32m1_t dest, vuint16m8_t vector, vuint32m1_t scalar,
    size_t vl);
```

```
vuint64m1_t vwredsumu_vs_u32mf2_u64m1_m (vbool64_t mask,
    vuint64m1_t dest, vuint32mf2_t vector, vuint64m1_t scalar,
    size_t vl);
vuint64m1_t vwredsumu_vs_u32m1_u64m1_m (vbool32_t mask,
    vuint64m1_t dest, vuint32m1_t vector, vuint64m1_t scalar,
    size_t vl);
vuint64m1_t vwredsumu_vs_u32m2_u64m1_m (vbool16_t mask,
    vuint64m1_t dest, vuint32m2_t vector, vuint64m1_t scalar,
    size_t vl);
vuint64m1_t vwredsumu_vs_u32m4_u64m1_m (vbool8_t mask,
    vuint64m1_t dest, vuint32m4_t vector, vuint64m1_t scalar,
    size_t vl);
vuint64m1_t vwredsumu_vs_u32m8_u64m1_m (vbool4_t mask,
    vuint64m1_t dest, vuint32m8_t vector, vuint64m1_t scalar,
    size_t vl);
```

Vector Single-Width Floating-Point Reduction Functions:

Prototypes:

```
vfloat16m1_t vfredosum_vs_f16mf4_f16m1 (vfloat16m1_t dest,
    vfloat16mf4_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredosum_vs_f16mf2_f16m1 (vfloat16m1_t dest,
    vfloat16mf2_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredosum_vs_f16m1_f16m1 (vfloat16m1_t dest,
    vfloat16m1_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredosum_vs_f16m2_f16m1 (vfloat16m1_t dest,
    vfloat16m2_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredosum_vs_f16m4_f16m1 (vfloat16m1_t dest,
    vfloat16m4_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredosum_vs_f16m8_f16m1 (vfloat16m1_t dest,
    vfloat16m8_t vector, vfloat16m1_t scalar, size_t vl);
vfloat32m1_t vfredosum_vs_f32mf2_f32m1 (vfloat32m1_t dest,
    vfloat32mf2_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfredosum_vs_f32m1_f32m1 (vfloat32m1_t dest,
    vfloat32m1_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfredosum_vs_f32m2_f32m1 (vfloat32m1_t dest,
    vfloat32m2_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfredosum_vs_f32m4_f32m1 (vfloat32m1_t dest,
    vfloat32m4_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfredosum_vs_f32m8_f32m1 (vfloat32m1_t dest,
    vfloat32m8_t vector, vfloat32m1_t scalar, size_t vl);
vfloat64m1_t vfredosum_vs_f64m1_f64m1 (vfloat64m1_t dest,
    vfloat64m1_t vector, vfloat64m1_t scalar, size_t vl);
vfloat64m1_t vfredosum_vs_f64m2_f64m1 (vfloat64m1_t dest,
    vfloat64m2_t vector, vfloat64m1_t scalar, size_t vl);
```

```
vfloat64m1_t vfredosum_vs_f64m4_f64m1 (vfloat64m1_t dest,
    vfloat64m4_t vector, vfloat64m1_t scalar, size_t vl);
vfloat64m1_t vfredosum_vs_f64m8_f64m1 (vfloat64m1_t dest,
    vfloat64m8_t vector, vfloat64m1_t scalar, size_t vl);
vfloat16m1_t vfredusum_vs_f16mf4_f16m1 (vfloat16m1_t dest,
    vfloat16mf4_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredusum_vs_f16mf2_f16m1 (vfloat16m1_t dest,
    vfloat16mf2_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredusum_vs_f16m1_f16m1 (vfloat16m1_t dest,
    vfloat16m1_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredusum_vs_f16m2_f16m1 (vfloat16m1_t dest,
    vfloat16m2_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredusum_vs_f16m4_f16m1 (vfloat16m1_t dest,
    vfloat16m4_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredusum_vs_f16m8_f16m1 (vfloat16m1_t dest,
    vfloat16m8_t vector, vfloat16m1_t scalar, size_t vl);
vfloat32m1_t vfredusum_vs_f32mf2_f32m1 (vfloat32m1_t dest,
    vfloat32mf2_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfredusum_vs_f32m1_f32m1 (vfloat32m1_t dest,
    vfloat32m1_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfredusum_vs_f32m2_f32m1 (vfloat32m1_t dest,
    vfloat32m2_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfredusum_vs_f32m4_f32m1 (vfloat32m1_t dest,
    vfloat32m4_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfredusum_vs_f32m8_f32m1 (vfloat32m1_t dest,
    vfloat32m8_t vector, vfloat32m1_t scalar, size_t vl);
vfloat64m1_t vfredusum_vs_f64m1_f64m1 (vfloat64m1_t dest,
    vfloat64m1_t vector, vfloat64m1_t scalar, size_t vl);
vfloat64m1_t vfredusum_vs_f64m2_f64m1 (vfloat64m1_t dest,
    vfloat64m2_t vector, vfloat64m1_t scalar, size_t vl);
vfloat64m1_t vfredusum_vs_f64m4_f64m1 (vfloat64m1_t dest,
    vfloat64m4_t vector, vfloat64m1_t scalar, size_t vl);
vfloat64m1_t vfredusum_vs_f64m8_f64m1 (vfloat64m1_t dest,
    vfloat64m8_t vector, vfloat64m1_t scalar, size_t vl);
vfloat16m1_t vfredmax_vs_f16mf4_f16m1 (vfloat16m1_t dest,
    vfloat16mf4_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredmax_vs_f16mf2_f16m1 (vfloat16m1_t dest,
    vfloat16mf2_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredmax_vs_f16m1_f16m1 (vfloat16m1_t dest,
    vfloat16m1_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredmax_vs_f16m2_f16m1 (vfloat16m1_t dest,
    vfloat16m2_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredmax_vs_f16m4_f16m1 (vfloat16m1_t dest,
    vfloat16m4_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredmax_vs_f16m8_f16m1 (vfloat16m1_t dest,
    vfloat16m8_t vector, vfloat16m1_t scalar, size_t vl);
```

```
vfloat32m1_t vfredmax_vs_f32mf2_f32m1 (vfloat32m1_t dest,
    vfloat32mf2_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfredmax_vs_f32m1_f32m1 (vfloat32m1_t dest,
    vfloat32m1_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfredmax_vs_f32m2_f32m1 (vfloat32m1_t dest,
    vfloat32m2_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfredmax_vs_f32m4_f32m1 (vfloat32m1_t dest,
    vfloat32m4_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfredmax_vs_f32m8_f32m1 (vfloat32m1_t dest,
    vfloat32m8_t vector, vfloat32m1_t scalar, size_t vl);
vfloat64m1_t vfredmax_vs_f64m1_f64m1 (vfloat64m1_t dest,
    vfloat64m1_t vector, vfloat64m1_t scalar, size_t vl);
vfloat64m1_t vfredmax_vs_f64m2_f64m1 (vfloat64m1_t dest,
    vfloat64m2_t vector, vfloat64m1_t scalar, size_t vl);
vfloat64m1_t vfredmax_vs_f64m4_f64m1 (vfloat64m1_t dest,
    vfloat64m4_t vector, vfloat64m1_t scalar, size_t vl);
vfloat64m1_t vfredmax_vs_f64m8_f64m1 (vfloat64m1_t dest,
    vfloat64m8_t vector, vfloat64m1_t scalar, size_t vl);
vfloat16m1_t vfredmin_vs_f16mf4_f16m1 (vfloat16m1_t dest,
    vfloat16mf4_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredmin_vs_f16mf2_f16m1 (vfloat16m1_t dest,
    vfloat16mf2_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredmin_vs_f16m1_f16m1 (vfloat16m1_t dest,
    vfloat16m1_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredmin_vs_f16m2_f16m1 (vfloat16m1_t dest,
    vfloat16m2_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredmin_vs_f16m4_f16m1 (vfloat16m1_t dest,
    vfloat16m4_t vector, vfloat16m1_t scalar, size_t vl);
vfloat16m1_t vfredmin_vs_f16m8_f16m1 (vfloat16m1_t dest,
    vfloat16m8_t vector, vfloat16m1_t scalar, size_t vl);
vfloat32m1_t vfredmin_vs_f32mf2_f32m1 (vfloat32m1_t dest,
    vfloat32mf2_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfredmin_vs_f32m1_f32m1 (vfloat32m1_t dest,
    vfloat32m1_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfredmin_vs_f32m2_f32m1 (vfloat32m1_t dest,
    vfloat32m2_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfredmin_vs_f32m4_f32m1 (vfloat32m1_t dest,
    vfloat32m4_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfredmin_vs_f32m8_f32m1 (vfloat32m1_t dest,
    vfloat32m8_t vector, vfloat32m1_t scalar, size_t vl);
vfloat64m1_t vfredmin_vs_f64m1_f64m1 (vfloat64m1_t dest,
    vfloat64m1_t vector, vfloat64m1_t scalar, size_t vl);
vfloat64m1_t vfredmin_vs_f64m2_f64m1 (vfloat64m1_t dest,
    vfloat64m2_t vector, vfloat64m1_t scalar, size_t vl);
vfloat64m1_t vfredmin_vs_f64m4_f64m1 (vfloat64m1_t dest,
    vfloat64m4_t vector, vfloat64m1_t scalar, size_t vl);
```

```
vfloat64m1_t vfredmin_vs_f64m8_f64m1 (vfloat64m1_t dest,
    vfloat64m8_t vector, vfloat64m1_t scalar, size_t vl);
// masked functions
vfloat16m1_t vfredosum_vs_f16mf4_f16m1_m (vbool64_t mask,
    vfloat16m1_t dest, vfloat16mf4_t vector, vfloat16m1_t
    scalar, size_t vl);
vfloat16m1_t vfredosum_vs_f16mf2_f16m1_m (vbool32_t mask,
    vfloat16m1_t dest, vfloat16mf2_t vector, vfloat16m1_t
    scalar, size_t vl);
vfloat16m1_t vfredosum_vs_f16m1_f16m1_m (vbool16_t mask,
    vfloat16m1_t dest, vfloat16m1_t vector, vfloat16m1_t scalar,
    size_t vl);
vfloat16m1_t vfredosum_vs_f16m2_f16m1_m (vbool8_t mask,
    vfloat16m1_t dest, vfloat16m2_t vector, vfloat16m1_t scalar,
    size_t vl);
vfloat16m1_t vfredosum_vs_f16m4_f16m1_m (vbool4_t mask,
    vfloat16m1_t dest, vfloat16m4_t vector, vfloat16m1_t scalar,
    size_t vl);
vfloat16m1_t vfredosum_vs_f16m8_f16m1_m (vbool2_t mask,
    vfloat16m1_t dest, vfloat16m8_t vector, vfloat16m1_t scalar,
    size_t vl);
vfloat32m1_t vfredosum_vs_f32mf2_f32m1_m (vbool64_t mask,
    vfloat32m1_t dest, vfloat32mf2_t vector, vfloat32m1_t
    scalar, size_t vl);
vfloat32m1_t vfredosum_vs_f32m1_f32m1_m (vbool32_t mask,
    vfloat32m1_t dest, vfloat32m1_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat32m1_t vfredosum_vs_f32m2_f32m1_m (vbool16_t mask,
    vfloat32m1_t dest, vfloat32m2_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat32m1_t vfredosum_vs_f32m4_f32m1_m (vbool8_t mask,
    vfloat32m1_t dest, vfloat32m4_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat32m1_t vfredosum_vs_f32m8_f32m1_m (vbool4_t mask,
    vfloat32m1_t dest, vfloat32m8_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat64m1_t vfredosum_vs_f64m1_f64m1_m (vbool64_t mask,
    vfloat64m1_t dest, vfloat64m1_t vector, vfloat64m1_t scalar,
    size_t vl);
vfloat64m1_t vfredosum_vs_f64m2_f64m1_m (vbool32_t mask,
    vfloat64m1_t dest, vfloat64m2_t vector, vfloat64m1_t scalar,
    size_t vl);
vfloat64m1_t vfredosum_vs_f64m4_f64m1_m (vbool16_t mask,
    vfloat64m1_t dest, vfloat64m4_t vector, vfloat64m1_t scalar,
    size_t vl);
```

```
vfloat64m1_t vfredosum_vs_f64m8_f64m1_m (vbool8_t mask,
    vfloat64m1_t dest, vfloat64m8_t vector, vfloat64m1_t scalar,
    size_t vl);
vfloat16m1_t vfredusum_vs_f16mf4_f16m1_m (vbool64_t mask,
    vfloat16m1_t dest, vfloat16mf4_t vector, vfloat16m1_t
    scalar, size_t vl);
vfloat16m1_t vfredusum_vs_f16mf2_f16m1_m (vbool32_t mask,
    vfloat16m1_t dest, vfloat16mf2_t vector, vfloat16m1_t
    scalar, size_t vl);
vfloat16m1_t vfredusum_vs_f16m1_f16m1_m (vbool16_t mask,
    vfloat16m1_t dest, vfloat16m1_t vector, vfloat16m1_t scalar,
    size_t vl);
vfloat16m1_t vfredusum_vs_f16m2_f16m1_m (vbool8_t mask,
    vfloat16m1_t dest, vfloat16m2_t vector, vfloat16m1_t scalar,
    size_t vl);
vfloat16m1_t vfredusum_vs_f16m4_f16m1_m (vbool4_t mask,
    vfloat16m1_t dest, vfloat16m4_t vector, vfloat16m1_t scalar,
    size_t vl);
vfloat16m1_t vfredusum_vs_f16m8_f16m1_m (vbool2_t mask,
    vfloat16m1_t dest, vfloat16m8_t vector, vfloat16m1_t scalar,
    size_t vl);
vfloat32m1_t vfredusum_vs_f32mf2_f32m1_m (vbool64_t mask,
    vfloat32m1_t dest, vfloat32mf2_t vector, vfloat32m1_t
    scalar, size_t vl);
vfloat32m1_t vfredusum_vs_f32m1_f32m1_m (vbool32_t mask,
    vfloat32m1_t dest, vfloat32m1_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat32m1_t vfredusum_vs_f32m2_f32m1_m (vbool16_t mask,
    vfloat32m1_t dest, vfloat32m2_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat32m1_t vfredusum_vs_f32m4_f32m1_m (vbool8_t mask,
    vfloat32m1_t dest, vfloat32m4_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat32m1_t vfredusum_vs_f32m8_f32m1_m (vbool4_t mask,
    vfloat32m1_t dest, vfloat32m8_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat64m1_t vfredusum_vs_f64m1_f64m1_m (vbool64_t mask,
    vfloat64m1_t dest, vfloat64m1_t vector, vfloat64m1_t scalar,
    size_t vl);
vfloat64m1_t vfredusum_vs_f64m2_f64m1_m (vbool32_t mask,
    vfloat64m1_t dest, vfloat64m2_t vector, vfloat64m1_t scalar,
    size_t vl);
vfloat64m1_t vfredusum_vs_f64m4_f64m1_m (vbool16_t mask,
    vfloat64m1_t dest, vfloat64m4_t vector, vfloat64m1_t scalar,
    size_t vl);
```

```
vfloat64m1_t vfredusum_vs_f64m8_f64m1_m (vbool8_t mask,
    vfloat64m1_t dest, vfloat64m8_t vector, vfloat64m1_t scalar,
    size_t vl);
vfloat16m1_t vfredmax_vs_f16mf4_f16m1_m (vbool64_t mask,
    vfloat16m1_t dest, vfloat16mf4_t vector, vfloat16m1_t
    scalar, size_t vl);
vfloat16m1_t vfredmax_vs_f16mf2_f16m1_m (vbool32_t mask,
    vfloat16m1_t dest, vfloat16mf2_t vector, vfloat16m1_t
    scalar, size_t vl);
vfloat16m1_t vfredmax_vs_f16m1_f16m1_m (vbool16_t mask,
    vfloat16m1_t dest, vfloat16m1_t vector, vfloat16m1_t scalar,
    size_t vl);
vfloat16m1_t vfredmax_vs_f16m2_f16m1_m (vbool8_t mask,
    vfloat16m1_t dest, vfloat16m2_t vector, vfloat16m1_t scalar,
    size_t vl);
vfloat16m1_t vfredmax_vs_f16m4_f16m1_m (vbool4_t mask,
    vfloat16m1_t dest, vfloat16m4_t vector, vfloat16m1_t scalar,
    size_t vl);
vfloat16m1_t vfredmax_vs_f16m8_f16m1_m (vbool2_t mask,
    vfloat16m1_t dest, vfloat16m8_t vector, vfloat16m1_t scalar,
    size_t vl);
vfloat32m1_t vfredmax_vs_f32mf2_f32m1_m (vbool64_t mask,
    vfloat32m1_t dest, vfloat32mf2_t vector, vfloat32m1_t
    scalar, size_t vl);
vfloat32m1_t vfredmax_vs_f32m1_f32m1_m (vbool32_t mask,
    vfloat32m1_t dest, vfloat32m1_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat32m1_t vfredmax_vs_f32m2_f32m1_m (vbool16_t mask,
    vfloat32m1_t dest, vfloat32m2_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat32m1_t vfredmax_vs_f32m4_f32m1_m (vbool8_t mask,
    vfloat32m1_t dest, vfloat32m4_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat32m1_t vfredmax_vs_f32m8_f32m1_m (vbool4_t mask,
    vfloat32m1_t dest, vfloat32m8_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat64m1_t vfredmax_vs_f64m1_f64m1_m (vbool64_t mask,
    vfloat64m1_t dest, vfloat64m1_t vector, vfloat64m1_t scalar,
    size_t vl);
vfloat64m1_t vfredmax_vs_f64m2_f64m1_m (vbool32_t mask,
    vfloat64m1_t dest, vfloat64m2_t vector, vfloat64m1_t scalar,
    size_t vl);
vfloat64m1_t vfredmax_vs_f64m4_f64m1_m (vbool16_t mask,
    vfloat64m1_t dest, vfloat64m4_t vector, vfloat64m1_t scalar,
    size_t vl);
```

```
vfloat64m1_t vfredmax_vs_f64m8_f64m1_m (vbool8_t mask,
    vfloat64m1_t dest, vfloat64m8_t vector, vfloat64m1_t scalar,
    size_t vl);
vfloat16m1_t vfredmin_vs_f16mf4_f16m1_m (vbool64_t mask,
    vfloat16m1_t dest, vfloat16mf4_t vector, vfloat16m1_t
    scalar, size_t vl);
vfloat16m1_t vfredmin_vs_f16mf2_f16m1_m (vbool32_t mask,
    vfloat16m1_t dest, vfloat16mf2_t vector, vfloat16m1_t
    scalar, size_t vl);
vfloat16m1_t vfredmin_vs_f16m1_f16m1_m (vbool16_t mask,
    vfloat16m1_t dest, vfloat16m1_t vector, vfloat16m1_t scalar,
    size_t vl);
vfloat16m1_t vfredmin_vs_f16m2_f16m1_m (vbool8_t mask,
    vfloat16m1_t dest, vfloat16m2_t vector, vfloat16m1_t scalar,
    size_t vl);
vfloat16m1_t vfredmin_vs_f16m4_f16m1_m (vbool4_t mask,
    vfloat16m1_t dest, vfloat16m4_t vector, vfloat16m1_t scalar,
    size_t vl);
vfloat16m1_t vfredmin_vs_f16m8_f16m1_m (vbool2_t mask,
    vfloat16m1_t dest, vfloat16m8_t vector, vfloat16m1_t scalar,
    size_t vl);
vfloat32m1_t vfredmin_vs_f32mf2_f32m1_m (vbool64_t mask,
    vfloat32m1_t dest, vfloat32mf2_t vector, vfloat32m1_t
    scalar, size_t vl);
vfloat32m1_t vfredmin_vs_f32m1_f32m1_m (vbool32_t mask,
    vfloat32m1_t dest, vfloat32m1_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat32m1_t vfredmin_vs_f32m2_f32m1_m (vbool16_t mask,
    vfloat32m1_t dest, vfloat32m2_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat32m1_t vfredmin_vs_f32m4_f32m1_m (vbool8_t mask,
    vfloat32m1_t dest, vfloat32m4_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat32m1_t vfredmin_vs_f32m8_f32m1_m (vbool4_t mask,
    vfloat32m1_t dest, vfloat32m8_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat64m1_t vfredmin_vs_f64m1_f64m1_m (vbool64_t mask,
    vfloat64m1_t dest, vfloat64m1_t vector, vfloat64m1_t scalar,
    size_t vl);
vfloat64m1_t vfredmin_vs_f64m2_f64m1_m (vbool32_t mask,
    vfloat64m1_t dest, vfloat64m2_t vector, vfloat64m1_t scalar,
    size_t vl);
vfloat64m1_t vfredmin_vs_f64m4_f64m1_m (vbool16_t mask,
    vfloat64m1_t dest, vfloat64m4_t vector, vfloat64m1_t scalar,
    size_t vl);
```

```
vfloat64m1_t vfredmin_vs_f64m8_f64m1_m (vbool8_t mask,
    vfloat64m1_t dest, vfloat64m8_t vector, vfloat64m1_t scalar,
    size_t vl);
```

Vector Widening Floating-Point Reduction Functions:

Prototypes:

```
vfloat32m1_t vfwredosum_vs_f16mf4_f32m1 (vfloat32m1_t dest,
    vfloat16mf4_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfwredosum_vs_f16mf2_f32m1 (vfloat32m1_t dest,
    vfloat16mf2_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfwredosum_vs_f16m1_f32m1 (vfloat32m1_t dest,
    vfloat16m1_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfwredosum_vs_f16m2_f32m1 (vfloat32m1_t dest,
    vfloat16m2_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfwredosum_vs_f16m4_f32m1 (vfloat32m1_t dest,
    vfloat16m4_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfwredosum_vs_f16m8_f32m1 (vfloat32m1_t dest,
    vfloat16m8_t vector, vfloat32m1_t scalar, size_t vl);
vfloat64m1_t vfwredosum_vs_f32mf2_f64m1 (vfloat64m1_t dest,
    vfloat32mf2_t vector, vfloat64m1_t scalar, size_t vl);
vfloat64m1_t vfwredosum_vs_f32m1_f64m1 (vfloat64m1_t dest,
    vfloat32m1_t vector, vfloat64m1_t scalar, size_t vl);
vfloat64m1_t vfwredosum_vs_f32m2_f64m1 (vfloat64m1_t dest,
    vfloat32m2_t vector, vfloat64m1_t scalar, size_t vl);
vfloat64m1_t vfwredosum_vs_f32m4_f64m1 (vfloat64m1_t dest,
    vfloat32m4_t vector, vfloat64m1_t scalar, size_t vl);
vfloat64m1_t vfwredosum_vs_f32m8_f64m1 (vfloat64m1_t dest,
    vfloat32m8_t vector, vfloat64m1_t scalar, size_t vl);
vfloat32m1_t vfwredusum_vs_f16mf4_f32m1 (vfloat32m1_t dest,
    vfloat16mf4_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfwredusum_vs_f16mf2_f32m1 (vfloat32m1_t dest,
    vfloat16mf2_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfwredusum_vs_f16m1_f32m1 (vfloat32m1_t dest,
    vfloat16m1_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfwredusum_vs_f16m2_f32m1 (vfloat32m1_t dest,
    vfloat16m2_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfwredusum_vs_f16m4_f32m1 (vfloat32m1_t dest,
    vfloat16m4_t vector, vfloat32m1_t scalar, size_t vl);
vfloat32m1_t vfwredusum_vs_f16m8_f32m1 (vfloat32m1_t dest,
    vfloat16m8_t vector, vfloat32m1_t scalar, size_t vl);
vfloat64m1_t vfwredusum_vs_f32mf2_f64m1 (vfloat64m1_t dest,
    vfloat32mf2_t vector, vfloat64m1_t scalar, size_t vl);
vfloat64m1_t vfwredusum_vs_f32m1_f64m1 (vfloat64m1_t dest,
    vfloat32m1_t vector, vfloat64m1_t scalar, size_t vl);
```

```
vfloat64m1_t vfwredusum_vs_f32m2_f64m1 (vfloat64m1_t dest,
    vfloat32m2_t vector, vfloat64m1_t scalar, size_t vl);
vfloat64m1_t vfwredusum_vs_f32m4_f64m1 (vfloat64m1_t dest,
    vfloat32m4_t vector, vfloat64m1_t scalar, size_t vl);
vfloat64m1_t vfwredusum_vs_f32m8_f64m1 (vfloat64m1_t dest,
    vfloat32m8_t vector, vfloat64m1_t scalar, size_t vl);
// masked functions
vfloat32m1_t vfwredosum_vs_f16mf4_f32m1_m (vbool64_t mask,
    vfloat32m1_t dest, vfloat16mf4_t vector, vfloat32m1_t
    scalar, size_t vl);
vfloat32m1_t vfwredosum_vs_f16mf2_f32m1_m (vbool32_t mask,
    vfloat32m1_t dest, vfloat16mf2_t vector, vfloat32m1_t
    scalar, size_t vl);
vfloat32m1_t vfwredosum_vs_f16m1_f32m1_m (vbool16_t mask,
    vfloat32m1_t dest, vfloat16m1_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat32m1_t vfwredosum_vs_f16m2_f32m1_m (vbool8_t mask,
    vfloat32m1_t dest, vfloat16m2_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat32m1_t vfwredosum_vs_f16m4_f32m1_m (vbool4_t mask,
    vfloat32m1_t dest, vfloat16m4_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat32m1_t vfwredosum_vs_f16m8_f32m1_m (vbool2_t mask,
    vfloat32m1_t dest, vfloat16m8_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat64m1_t vfwredosum_vs_f32mf2_f64m1_m (vbool64_t mask,
    vfloat64m1_t dest, vfloat32mf2_t vector, vfloat64m1_t
    scalar, size_t vl);
vfloat64m1_t vfwredosum_vs_f32m1_f64m1_m (vbool32_t mask,
    vfloat64m1_t dest, vfloat32m1_t vector, vfloat64m1_t scalar,
    size_t vl);
vfloat64m1_t vfwredosum_vs_f32m2_f64m1_m (vbool16_t mask,
    vfloat64m1_t dest, vfloat32m2_t vector, vfloat64m1_t scalar,
    size_t vl);
vfloat64m1_t vfwredosum_vs_f32m4_f64m1_m (vbool8_t mask,
    vfloat64m1_t dest, vfloat32m4_t vector, vfloat64m1_t scalar,
    size_t vl);
vfloat64m1_t vfwredosum_vs_f32m8_f64m1_m (vbool4_t mask,
    vfloat64m1_t dest, vfloat32m8_t vector, vfloat64m1_t scalar,
    size_t vl);
vfloat32m1_t vfwredusum_vs_f16mf4_f32m1_m (vbool64_t mask,
    vfloat32m1_t dest, vfloat16mf4_t vector, vfloat32m1_t
    scalar, size_t vl);
vfloat32m1_t vfwredusum_vs_f16mf2_f32m1_m (vbool32_t mask,
    vfloat32m1_t dest, vfloat16mf2_t vector, vfloat32m1_t
    scalar, size_t vl);
```

```
vfloat32m1_t vfwredusum_vs_f16m1_f32m1_m (vbool16_t mask,
    vfloat32m1_t dest, vfloat16m1_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat32m1_t vfwredusum_vs_f16m2_f32m1_m (vbool8_t mask,
    vfloat32m1_t dest, vfloat16m2_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat32m1_t vfwredusum_vs_f16m4_f32m1_m (vbool4_t mask,
    vfloat32m1_t dest, vfloat16m4_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat32m1_t vfwredusum_vs_f16m8_f32m1_m (vbool2_t mask,
    vfloat32m1_t dest, vfloat16m8_t vector, vfloat32m1_t scalar,
    size_t vl);
vfloat64m1_t vfwredusum_vs_f32mf2_f64m1_m (vbool64_t mask,
    vfloat64m1_t dest, vfloat32mf2_t vector, vfloat64m1_t
    scalar, size_t vl);
vfloat64m1_t vfwredusum_vs_f32m1_f64m1_m (vbool32_t mask,
    vfloat64m1_t dest, vfloat32m1_t vector, vfloat64m1_t scalar,
    size_t vl);
vfloat64m1_t vfwredusum_vs_f32m2_f64m1_m (vbool16_t mask,
    vfloat64m1_t dest, vfloat32m2_t vector, vfloat64m1_t scalar,
    size_t vl);
vfloat64m1_t vfwredusum_vs_f32m4_f64m1_m (vbool8_t mask,
    vfloat64m1_t dest, vfloat32m4_t vector, vfloat64m1_t scalar,
    size_t vl);
vfloat64m1_t vfwredusum_vs_f32m8_f64m1_m (vbool4_t mask,
    vfloat64m1_t dest, vfloat32m8_t vector, vfloat64m1_t scalar,
    size_t vl);
```

Vector Mask Functions:

Vector Mask Load/Store Functions:

Prototypes:

```
vbool1_t vlm_v_b1 (const uint8_t *base, size_t vl);
vbool2_t vlm_v_b2 (const uint8_t *base, size_t vl);
vbool4_t vlm_v_b4 (const uint8_t *base, size_t vl);
vbool8_t vlm_v_b8 (const uint8_t *base, size_t vl);
vbool16_t vlm_v_b16 (const uint8_t *base, size_t vl);
vbool32_t vlm_v_b32 (const uint8_t *base, size_t vl);
vbool64_t vlm_v_b64 (const uint8_t *base, size_t vl);
void vsm_v_b1 (uint8_t *base, vbool1_t value, size_t vl);
void vsm_v_b2 (uint8_t *base, vbool2_t value, size_t vl);
void vsm_v_b4 (uint8_t *base, vbool4_t value, size_t vl);
void vsm_v_b8 (uint8_t *base, vbool8_t value, size_t vl);
void vsm_v_b16 (uint8_t *base, vbool16_t value, size_t vl);
```

```
void vsm_v_b32 (uint8_t *base, vbool32_t value, size_t vl);
void vsm_v_b64 (uint8_t *base, vbool64_t value, size_t vl);
```

Vector Mask-Register Logical Functions:

Prototypes:

```
vbool1_t vmand_mm_b1 (vbool1_t op1, vbool1_t op2, size_t vl);
vbool2_t vmand_mm_b2 (vbool2_t op1, vbool2_t op2, size_t vl);
vbool4_t vmand_mm_b4 (vbool4_t op1, vbool4_t op2, size_t vl);
vbool8_t vmand_mm_b8 (vbool8_t op1, vbool8_t op2, size_t vl);
vbool16_t vmand_mm_b16 (vbool16_t op1, vbool16_t op2, size_t vl);
vbool32_t vmand_mm_b32 (vbool32_t op1, vbool32_t op2, size_t vl);
vbool64_t vmand_mm_b64 (vbool64_t op1, vbool64_t op2, size_t vl);
vbool1_t vmnand_mm_b1 (vbool1_t op1, vbool1_t op2, size_t vl);
vbool2_t vmnand_mm_b2 (vbool2_t op1, vbool2_t op2, size_t vl);
vbool4_t vmnand_mm_b4 (vbool4_t op1, vbool4_t op2, size_t vl);
vbool8_t vmnand_mm_b8 (vbool8_t op1, vbool8_t op2, size_t vl);
vbool16_t vmnand_mm_b16 (vbool16_t op1, vbool16_t op2, size_t
    vl);
vbool32_t vmnand_mm_b32 (vbool32_t op1, vbool32_t op2, size_t
    vl);
vbool64_t vmnand_mm_b64 (vbool64_t op1, vbool64_t op2, size_t
    vl);
vbool1_t vmandn_mm_b1 (vbool1_t op1, vbool1_t op2, size_t vl);
vbool2_t vmandn_mm_b2 (vbool2_t op1, vbool2_t op2, size_t vl);
vbool4_t vmandn_mm_b4 (vbool4_t op1, vbool4_t op2, size_t vl);
vbool8_t vmandn_mm_b8 (vbool8_t op1, vbool8_t op2, size_t vl);
vbool16_t vmandn_mm_b16 (vbool16_t op1, vbool16_t op2, size_t
    vl);
vbool32_t vmandn_mm_b32 (vbool32_t op1, vbool32_t op2, size_t
    vl);
vbool64_t vmandn_mm_b64 (vbool64_t op1, vbool64_t op2, size_t
    vl);
vbool1_t vmxor_mm_b1 (vbool1_t op1, vbool1_t op2, size_t vl);
vbool2_t vmxor_mm_b2 (vbool2_t op1, vbool2_t op2, size_t vl);
vbool4_t vmxor_mm_b4 (vbool4_t op1, vbool4_t op2, size_t vl);
vbool8_t vmxor_mm_b8 (vbool8_t op1, vbool8_t op2, size_t vl);
vbool16_t vmxor_mm_b16 (vbool16_t op1, vbool16_t op2, size_t vl);
vbool32_t vmxor_mm_b32 (vbool32_t op1, vbool32_t op2, size_t vl);
vbool64_t vmxor_mm_b64 (vbool64_t op1, vbool64_t op2, size_t vl);
vbool1_t vmor_mm_b1 (vbool1_t op1, vbool1_t op2, size_t vl);
vbool2_t vmor_mm_b2 (vbool2_t op1, vbool2_t op2, size_t vl);
vbool4_t vmor_mm_b4 (vbool4_t op1, vbool4_t op2, size_t vl);
vbool8_t vmor_mm_b8 (vbool8_t op1, vbool8_t op2, size_t vl);
vbool16_t vmor_mm_b16 (vbool16_t op1, vbool16_t op2, size_t vl);
```

```
vbool32_t vmor_mm_b32 (vbool32_t op1, vbool32_t op2, size_t vl);
vbool64_t vmor_mm_b64 (vbool64_t op1, vbool64_t op2, size_t vl);
vbool1_t vmnor_mm_b1 (vbool1_t op1, vbool1_t op2, size_t vl);
vbool2_t vmnor_mm_b2 (vbool2_t op1, vbool2_t op2, size_t vl);
vbool4_t vmnor_mm_b4 (vbool4_t op1, vbool4_t op2, size_t vl);
vbool8_t vmnor_mm_b8 (vbool8_t op1, vbool8_t op2, size_t vl);
vbool16_t vmnor_mm_b16 (vbool16_t op1, vbool16_t op2, size_t vl);
vbool32_t vmnor_mm_b32 (vbool32_t op1, vbool32_t op2, size_t vl);
vbool64_t vmnor_mm_b64 (vbool64_t op1, vbool64_t op2, size_t vl);
vbool1_t vmorn_mm_b1 (vbool1_t op1, vbool1_t op2, size_t vl);
vbool2_t vmorn_mm_b2 (vbool2_t op1, vbool2_t op2, size_t vl);
vbool4_t vmorn_mm_b4 (vbool4_t op1, vbool4_t op2, size_t vl);
vbool8_t vmorn_mm_b8 (vbool8_t op1, vbool8_t op2, size_t vl);
vbool16_t vmorn_mm_b16 (vbool16_t op1, vbool16_t op2, size_t vl);
vbool32_t vmorn_mm_b32 (vbool32_t op1, vbool32_t op2, size_t vl);
vbool64_t vmorn_mm_b64 (vbool64_t op1, vbool64_t op2, size_t vl);
vbool1_t vmxnor_mm_b1 (vbool1_t op1, vbool1_t op2, size_t vl);
vbool2_t vmxnor_mm_b2 (vbool2_t op1, vbool2_t op2, size_t vl);
vbool4_t vmxnor_mm_b4 (vbool4_t op1, vbool4_t op2, size_t vl);
vbool8_t vmxnor_mm_b8 (vbool8_t op1, vbool8_t op2, size_t vl);
vbool16_t vmxnor_mm_b16 (vbool16_t op1, vbool16_t op2, size_t
    vl);
vbool32_t vmxnor_mm_b32 (vbool32_t op1, vbool32_t op2, size_t
    vl);
vbool64_t vmxnor_mm_b64 (vbool64_t op1, vbool64_t op2, size_t
    vl);
vbool1_t vmmv_m_b1 (vbool1_t op1, size_t vl);
vbool2_t vmmv_m_b2 (vbool2_t op1, size_t vl);
vbool4_t vmmv_m_b4 (vbool4_t op1, size_t vl);
vbool8_t vmmv_m_b8 (vbool8_t op1, size_t vl);
vbool16_t vmmv_m_b16 (vbool16_t op1, size_t vl);
vbool32_t vmmv_m_b32 (vbool32_t op1, size_t vl);
vbool64_t vmmv_m_b64 (vbool64_t op1, size_t vl);
vbool1_t vmclr_m_b1 (size_t vl);
vbool2_t vmclr_m_b2 (size_t vl);
vbool4_t vmclr_m_b4 (size_t vl);
vbool8_t vmclr_m_b8 (size_t vl);
vbool16_t vmclr_m_b16 (size_t vl);
vbool32_t vmclr_m_b32 (size_t vl);
vbool64_t vmclr_m_b64 (size_t vl);
vbool1_t vmset_m_b1 (size_t vl);
vbool2_t vmset_m_b2 (size_t vl);
vbool4_t vmset_m_b4 (size_t vl);
vbool8_t vmset_m_b8 (size_t vl);
vbool16_t vmset_m_b16 (size_t vl);
vbool32_t vmset_m_b32 (size_t vl);
```

```
vbool64_t vmset_m_b64 (size_t vl);
vbool1_t vmnot_m_b1 (vbool1_t op1, size_t vl);
vbool2_t vmnot_m_b2 (vbool2_t op1, size_t vl);
vbool4_t vmnot_m_b4 (vbool4_t op1, size_t vl);
vbool8_t vmnot_m_b8 (vbool8_t op1, size_t vl);
vbool16_t vmnot_m_b16 (vbool16_t op1, size_t vl);
vbool32_t vmnot_m_b32 (vbool32_t op1, size_t vl);
vbool64_t vmnot_m_b64 (vbool64_t op1, size_t vl);
```

Vector mask population count Functions:

Prototypes:

```
unsigned long vcpop_m_b1 (vbool1_t op1, size_t vl);
unsigned long vcpop_m_b2 (vbool2_t op1, size_t vl);
unsigned long vcpop_m_b4 (vbool4_t op1, size_t vl);
unsigned long vcpop_m_b8 (vbool8_t op1, size_t vl);
unsigned long vcpop_m_b16 (vbool16_t op1, size_t vl);
unsigned long vcpop_m_b32 (vbool32_t op1, size_t vl);
unsigned long vcpop_m_b64 (vbool64_t op1, size_t vl);
// masked functions
unsigned long vcpop_m_b1_m (vbool1_t mask, vbool1_t op1, size_t
    vl);
unsigned long vcpop_m_b2_m (vbool2_t mask, vbool2_t op1, size_t
    vl);
unsigned long vcpop_m_b4_m (vbool4_t mask, vbool4_t op1, size_t
    vl);
unsigned long vcpop_m_b8_m (vbool8_t mask, vbool8_t op1, size_t
    vl);
unsigned long vcpop_m_b16_m (vbool16_t mask, vbool16_t op1,
    size_t vl);
unsigned long vcpop_m_b32_m (vbool32_t mask, vbool32_t op1,
    size_t vl);
unsigned long vcpop_m_b64_m (vbool64_t mask, vbool64_t op1,
    size_t vl);
```

Find-first-set mask bit Functions:

Prototypes:

```
long vfirst_m_b1 (vbool1_t op1, size_t vl);
long vfirst_m_b2 (vbool2_t op1, size_t vl);
long vfirst_m_b4 (vbool4_t op1, size_t vl);
long vfirst_m_b8 (vbool8_t op1, size_t vl);
long vfirst_m_b16 (vbool16_t op1, size_t vl);
long vfirst_m_b32 (vbool32_t op1, size_t vl);
```

```
long vfirst_m_b64 (vbool64_t op1, size_t vl);
// masked functions
long vfirst_m_b1_m (vbool1_t mask, vbool1_t op1, size_t vl);
long vfirst_m_b2_m (vbool2_t mask, vbool2_t op1, size_t vl);
long vfirst_m_b4_m (vbool4_t mask, vbool4_t op1, size_t vl);
long vfirst_m_b8_m (vbool8_t mask, vbool8_t op1, size_t vl);
long vfirst_m_b16_m (vbool16_t mask, vbool16_t op1, size_t vl);
long vfirst_m_b32_m (vbool32_t mask, vbool32_t op1, size_t vl);
long vfirst_m_b64_m (vbool64_t mask, vbool64_t op1, size_t vl);
```

Set-before-first mask bit Functions:

Prototypes:

```
vbool1_t vmsbf_m_b1 (vbool1_t op1, size_t vl);
vbool2_t vmsbf_m_b2 (vbool2_t op1, size_t vl);
vbool4_t vmsbf_m_b4 (vbool4_t op1, size_t vl);
vbool8_t vmsbf_m_b8 (vbool8_t op1, size_t vl);
vbool16_t vmsbf_m_b16 (vbool16_t op1, size_t vl);
vbool32_t vmsbf_m_b32 (vbool32_t op1, size_t vl);
vbool64_t vmsbf_m_b64 (vbool64_t op1, size_t vl);
// masked functions
vbool1_t vmsbf_m_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vbool1_t op1, size_t vl);
vbool2_t vmsbf_m_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vbool2_t op1, size_t vl);
vbool4_t vmsbf_m_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vbool4_t op1, size_t vl);
vbool8_t vmsbf_m_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vbool8_t op1, size_t vl);
vbool16_t vmsbf_m_b16_m (vbool16_t mask, vbool16_t maskedoff,
    vbool16_t op1, size_t vl);
vbool32_t vmsbf_m_b32_m (vbool32_t mask, vbool32_t maskedoff,
    vbool32_t op1, size_t vl);
vbool64_t vmsbf_m_b64_m (vbool64_t mask, vbool64_t maskedoff,
    vbool64_t op1, size_t vl);
```

Set-including-first mask bit Functions:

Prototypes:

```
vbool1_t vmsif_m_b1 (vbool1_t op1, size_t vl);
vbool2_t vmsif_m_b2 (vbool2_t op1, size_t vl);
vbool4_t vmsif_m_b4 (vbool4_t op1, size_t vl);
vbool8_t vmsif_m_b8 (vbool8_t op1, size_t vl);
vbool16_t vmsif_m_b16 (vbool16_t op1, size_t vl);
```

```
vbool32_t vmsif_m_b32 (vbool32_t op1, size_t vl);
vbool64_t vmsif_m_b64 (vbool64_t op1, size_t vl);
// masked functions
vbool1_t vmsif_m_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vbool1_t op1, size_t vl);
vbool2_t vmsif_m_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vbool2_t op1, size_t vl);
vbool4_t vmsif_m_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vbool4_t op1, size_t vl);
vbool8_t vmsif_m_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vbool8_t op1, size_t vl);
vbool16_t vmsif_m_b16_m (vbool16_t mask, vbool16_t maskedoff,
    vbool16_t op1, size_t vl);
vbool32_t vmsif_m_b32_m (vbool32_t mask, vbool32_t maskedoff,
    vbool32_t op1, size_t vl);
vbool64_t vmsif_m_b64_m (vbool64_t mask, vbool64_t maskedoff,
    vbool64_t op1, size_t vl);
```

Set-only-first mask bit Functions:

Prototypes:

```
vbool1_t vmsof_m_b1 (vbool1_t op1, size_t vl);
vbool2_t vmsof_m_b2 (vbool2_t op1, size_t vl);
vbool4_t vmsof_m_b4 (vbool4_t op1, size_t vl);
vbool8_t vmsof_m_b8 (vbool8_t op1, size_t vl);
vbool16_t vmsof_m_b16 (vbool16_t op1, size_t vl);
vbool32_t vmsof_m_b32 (vbool32_t op1, size_t vl);
vbool64_t vmsof_m_b64 (vbool64_t op1, size_t vl);
// masked functions
vbool1_t vmsof_m_b1_m (vbool1_t mask, vbool1_t maskedoff,
    vbool1_t op1, size_t vl);
vbool2_t vmsof_m_b2_m (vbool2_t mask, vbool2_t maskedoff,
    vbool2_t op1, size_t vl);
vbool4_t vmsof_m_b4_m (vbool4_t mask, vbool4_t maskedoff,
    vbool4_t op1, size_t vl);
vbool8_t vmsof_m_b8_m (vbool8_t mask, vbool8_t maskedoff,
    vbool8_t op1, size_t vl);
vbool16_t vmsof_m_b16_m (vbool16_t mask, vbool16_t maskedoff,
    vbool16_t op1, size_t vl);
vbool32_t vmsof_m_b32_m (vbool32_t mask, vbool32_t maskedoff,
    vbool32_t op1, size_t vl);
vbool64_t vmsof_m_b64_m (vbool64_t mask, vbool64_t maskedoff,
    vbool64_t op1, size_t vl);
```

Vector Iota Functions:

Prototypes:

```
vuint8mf8_t viota_m_u8mf8 (vbool64_t op1, size_t vl);
vuint8mf4_t viota_m_u8mf4 (vbool32_t op1, size_t vl);
vuint8mf2_t viota_m_u8mf2 (vbool16_t op1, size_t vl);
vuint8m1_t viota_m_u8m1 (vbool8_t op1, size_t vl);
vuint8m2_t viota_m_u8m2 (vbool4_t op1, size_t vl);
vuint8m4_t viota_m_u8m4 (vbool2_t op1, size_t vl);
vuint8m8_t viota_m_u8m8 (vbool1_t op1, size_t vl);
vuint16mf4_t viota_m_u16mf4 (vbool64_t op1, size_t vl);
vuint16mf2_t viota_m_u16mf2 (vbool32_t op1, size_t vl);
vuint16m1_t viota_m_u16m1 (vbool16_t op1, size_t vl);
vuint16m2_t viota_m_u16m2 (vbool8_t op1, size_t vl);
vuint16m4_t viota_m_u16m4 (vbool4_t op1, size_t vl);
vuint16m8_t viota_m_u16m8 (vbool2_t op1, size_t vl);
vuint32mf2_t viota_m_u32mf2 (vbool64_t op1, size_t vl);
vuint32m1_t viota_m_u32m1 (vbool32_t op1, size_t vl);
vuint32m2_t viota_m_u32m2 (vbool16_t op1, size_t vl);
vuint32m4_t viota_m_u32m4 (vbool8_t op1, size_t vl);
vuint32m8_t viota_m_u32m8 (vbool4_t op1, size_t vl);
vuint64m1_t viota_m_u64m1 (vbool64_t op1, size_t vl);
vuint64m2_t viota_m_u64m2 (vbool32_t op1, size_t vl);
vuint64m4_t viota_m_u64m4 (vbool16_t op1, size_t vl);
vuint64m8_t viota_m_u64m8 (vbool8_t op1, size_t vl);
// masked functions
vuint8mf8_t viota_m_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vbool64_t op1, size_t vl);
vuint8mf4_t viota_m_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vbool32_t op1, size_t vl);
vuint8mf2_t viota_m_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vbool16_t op1, size_t vl);
vuint8m1_t viota_m_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    vbool8_t op1, size_t vl);
vuint8m2_t viota_m_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    vbool4_t op1, size_t vl);
vuint8m4_t viota_m_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    vbool2_t op1, size_t vl);
vuint8m8_t viota_m_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    vbool1_t op1, size_t vl);
vuint16mf4_t viota_m_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vbool64_t op1, size_t vl);
vuint16mf2_t viota_m_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vbool32_t op1, size_t vl);
vuint16m1_t viota_m_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vbool16_t op1, size_t vl);
```

```
vuint16m2_t viota_m_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vbool8_t op1, size_t vl);
vuint16m4_t viota_m_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vbool4_t op1, size_t vl);
vuint16m8_t viota_m_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vbool2_t op1, size_t vl);
vuint32mf2_t viota_m_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vbool64_t op1, size_t vl);
vuint32m1_t viota_m_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vbool32_t op1, size_t vl);
vuint32m2_t viota_m_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vbool16_t op1, size_t vl);
vuint32m4_t viota_m_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vbool8_t op1, size_t vl);
vuint32m8_t viota_m_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vbool4_t op1, size_t vl);
vuint64m1_t viota_m_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vbool64_t op1, size_t vl);
vuint64m2_t viota_m_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vbool32_t op1, size_t vl);
vuint64m4_t viota_m_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vbool16_t op1, size_t vl);
vuint64m8_t viota_m_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vbool8_t op1, size_t vl);
```

Vector Element Index Functions:

Prototypes:

```
vuint8mf8_t vid_v_u8mf8 (size_t vl);
vuint8mf4_t vid_v_u8mf4 (size_t vl);
vuint8mf2_t vid_v_u8mf2 (size_t vl);
vuint8m1_t vid_v_u8m1 (size_t vl);
vuint8m2_t vid_v_u8m2 (size_t vl);
vuint8m4_t vid_v_u8m4 (size_t vl);
vuint8m8_t vid_v_u8m8 (size_t vl);
vuint16mf4_t vid_v_u16mf4 (size_t vl);
vuint16mf2_t vid_v_u16mf2 (size_t vl);
vuint16m1_t vid_v_u16m1 (size_t vl);
vuint16m2_t vid_v_u16m2 (size_t vl);
vuint16m4_t vid_v_u16m4 (size_t vl);
vuint16m8_t vid_v_u16m8 (size_t vl);
vuint32mf2_t vid_v_u32mf2 (size_t vl);
vuint32m1_t vid_v_u32m1 (size_t vl);
vuint32m2_t vid_v_u32m2 (size_t vl);
vuint32m4_t vid_v_u32m4 (size_t vl);
```

```
vuint32m8_t vid_v_u32m8 (size_t vl);
vuint64m1_t vid_v_u64m1 (size_t vl);
vuint64m2_t vid_v_u64m2 (size_t vl);
vuint64m4_t vid_v_u64m4 (size_t vl);
vuint64m8_t vid_v_u64m8 (size_t vl);
// masked functions
vuint8mf8_t vid_v_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, size_t vl);
vuint8mf4_t vid_v_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, size_t vl);
vuint8mf2_t vid_v_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, size_t vl);
vuint8m1_t vid_v_u8m1_m (vbool8_t mask, vuint8m1_t maskedoff,
    size_t vl);
vuint8m2_t vid_v_u8m2_m (vbool4_t mask, vuint8m2_t maskedoff,
    size_t vl);
vuint8m4_t vid_v_u8m4_m (vbool2_t mask, vuint8m4_t maskedoff,
    size_t vl);
vuint8m8_t vid_v_u8m8_m (vbool1_t mask, vuint8m8_t maskedoff,
    size_t vl);
vuint16mf4_t vid_v_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, size_t vl);
vuint16mf2_t vid_v_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, size_t vl);
vuint16m1_t vid_v_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, size_t vl);
vuint16m2_t vid_v_u16m2_m (vbool8_t mask, vuint16m2_t maskedoff,
    size_t vl);
vuint16m4_t vid_v_u16m4_m (vbool4_t mask, vuint16m4_t maskedoff,
    size_t vl);
vuint16m8_t vid_v_u16m8_m (vbool2_t mask, vuint16m8_t maskedoff,
    size_t vl);
vuint32mf2_t vid_v_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, size_t vl);
vuint32m1_t vid_v_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, size_t vl);
vuint32m2_t vid_v_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, size_t vl);
vuint32m4_t vid_v_u32m4_m (vbool8_t mask, vuint32m4_t maskedoff,
    size_t vl);
vuint32m8_t vid_v_u32m8_m (vbool4_t mask, vuint32m8_t maskedoff,
    size_t vl);
vuint64m1_t vid_v_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, size_t vl);
vuint64m2_t vid_v_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, size_t vl);
```

```
vuint64m4_t vid_v_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, size_t vl);
vuint64m8_t vid_v_u64m8_m (vbool8_t mask, vuint64m8_t maskedoff,
    size_t vl);
```

Vector Permutation Functions:

Integer and Floating-Point Scalar Move Functions:

Prototypes:

```
int8_t vmv_x_s_i8mf8_i8 (vint8mf8_t src);
vint8mf8_t vmv_s_x_i8mf8 (vint8mf8_t dest, int8_t src, size_t
    vl);
int8_t vmv_x_s_i8mf4_i8 (vint8mf4_t src);
vint8mf4_t vmv_s_x_i8mf4 (vint8mf4_t dest, int8_t src, size_t
    vl);
int8_t vmv_x_s_i8mf2_i8 (vint8mf2_t src);
vint8mf2_t vmv_s_x_i8mf2 (vint8mf2_t dest, int8_t src, size_t
    vl);
int8_t vmv_x_s_i8m1_i8 (vint8m1_t src);
vint8m1_t vmv_s_x_i8m1 (vint8m1_t dest, int8_t src, size_t vl);
int8_t vmv_x_s_i8m2_i8 (vint8m2_t src);
vint8m2_t vmv_s_x_i8m2 (vint8m2_t dest, int8_t src, size_t vl);
int8_t vmv_x_s_i8m4_i8 (vint8m4_t src);
vint8m4_t vmv_s_x_i8m4 (vint8m4_t dest, int8_t src, size_t vl);
int8_t vmv_x_s_i8m8_i8 (vint8m8_t src);
vint8m8_t vmv_s_x_i8m8 (vint8m8_t dest, int8_t src, size_t vl);
int16_t vmv_x_s_i16mf4_i16 (vint16mf4_t src);
vint16mf4_t vmv_s_x_i16mf4 (vint16mf4_t dest, int16_t src,
    size_t vl);
int16_t vmv_x_s_i16mf2_i16 (vint16mf2_t src);
vint16mf2_t vmv_s_x_i16mf2 (vint16mf2_t dest, int16_t src,
    size_t vl);
int16_t vmv_x_s_i16m1_i16 (vint16m1_t src);
vint16m1_t vmv_s_x_i16m1 (vint16m1_t dest, int16_t src, size_t
    vl);
int16_t vmv_x_s_i16m2_i16 (vint16m2_t src);
vint16m2_t vmv_s_x_i16m2 (vint16m2_t dest, int16_t src, size_t
    vl);
int16_t vmv_x_s_i16m4_i16 (vint16m4_t src);
vint16m4_t vmv_s_x_i16m4 (vint16m4_t dest, int16_t src, size_t
    vl);
int16_t vmv_x_s_i16m8_i16 (vint16m8_t src);
vint16m8_t vmv_s_x_i16m8 (vint16m8_t dest, int16_t src, size_t
    vl);
```

```
int32_t vmv_x_s_i32mf2_i32 (vint32mf2_t src);
vint32mf2_t vmv_s_x_i32mf2 (vint32mf2_t dest, int32_t src,
    size_t vl);
int32_t vmv_x_s_i32m1_i32 (vint32m1_t src);
vint32m1_t vmv_s_x_i32m1 (vint32m1_t dest, int32_t src, size_t
    vl);
int32_t vmv_x_s_i32m2_i32 (vint32m2_t src);
vint32m2_t vmv_s_x_i32m2 (vint32m2_t dest, int32_t src, size_t
    vl);
int32_t vmv_x_s_i32m4_i32 (vint32m4_t src);
vint32m4_t vmv_s_x_i32m4 (vint32m4_t dest, int32_t src, size_t
    vl);
int32_t vmv_x_s_i32m8_i32 (vint32m8_t src);
vint32m8_t vmv_s_x_i32m8 (vint32m8_t dest, int32_t src, size_t
    vl);
int64_t vmv_x_s_i64m1_i64 (vint64m1_t src);
vint64m1_t vmv_s_x_i64m1 (vint64m1_t dest, int64_t src, size_t
    vl);
int64_t vmv_x_s_i64m2_i64 (vint64m2_t src);
vint64m2_t vmv_s_x_i64m2 (vint64m2_t dest, int64_t src, size_t
    vl);
int64_t vmv_x_s_i64m4_i64 (vint64m4_t src);
vint64m4_t vmv_s_x_i64m4 (vint64m4_t dest, int64_t src, size_t
    vl);
int64_t vmv_x_s_i64m8_i64 (vint64m8_t src);
vint64m8_t vmv_s_x_i64m8 (vint64m8_t dest, int64_t src, size_t
    vl);
uint8_t vmv_x_s_u8mf8_u8 (vuint8mf8_t src);
vuint8mf8_t vmv_s_x_u8mf8 (vuint8mf8_t dest, uint8_t src, size_t
    vl);
uint8_t vmv_x_s_u8mf4_u8 (vuint8mf4_t src);
vuint8mf4_t vmv_s_x_u8mf4 (vuint8mf4_t dest, uint8_t src, size_t
    vl);
uint8_t vmv_x_s_u8mf2_u8 (vuint8mf2_t src);
vuint8mf2_t vmv_s_x_u8mf2 (vuint8mf2_t dest, uint8_t src, size_t
    vl);
uint8_t vmv_x_s_u8m1_u8 (vuint8m1_t src);
vuint8m1_t vmv_s_x_u8m1 (vuint8m1_t dest, uint8_t src, size_t
    vl);
uint8_t vmv_x_s_u8m2_u8 (vuint8m2_t src);
vuint8m2_t vmv_s_x_u8m2 (vuint8m2_t dest, uint8_t src, size_t
    vl);
uint8_t vmv_x_s_u8m4_u8 (vuint8m4_t src);
vuint8m4_t vmv_s_x_u8m4 (vuint8m4_t dest, uint8_t src, size_t
    vl);
uint8_t vmv_x_s_u8m8_u8 (vuint8m8_t src);
```

```
vuint8m8_t vmv_s_x_u8m8 (vuint8m8_t dest, uint8_t src, size_t
    vl);
uint16_t vmv_x_s_u16mf4_u16 (vuint16mf4_t src);
vuint16mf4_t vmv_s_x_u16mf4 (vuint16mf4_t dest, uint16_t src,
    size_t vl);
uint16_t vmv_x_s_u16mf2_u16 (vuint16mf2_t src);
vuint16mf2_t vmv_s_x_u16mf2 (vuint16mf2_t dest, uint16_t src,
    size_t vl);
uint16_t vmv_x_s_u16m1_u16 (vuint16m1_t src);
vuint16m1_t vmv_s_x_u16m1 (vuint16m1_t dest, uint16_t src,
    size_t vl);
uint16_t vmv_x_s_u16m2_u16 (vuint16m2_t src);
vuint16m2_t vmv_s_x_u16m2 (vuint16m2_t dest, uint16_t src,
    size_t vl);
uint16_t vmv_x_s_u16m4_u16 (vuint16m4_t src);
vuint16m4_t vmv_s_x_u16m4 (vuint16m4_t dest, uint16_t src,
    size_t vl);
uint16_t vmv_x_s_u16m8_u16 (vuint16m8_t src);
vuint16m8_t vmv_s_x_u16m8 (vuint16m8_t dest, uint16_t src,
    size_t vl);
uint32_t vmv_x_s_u32mf2_u32 (vuint32mf2_t src);
vuint32mf2_t vmv_s_x_u32mf2 (vuint32mf2_t dest, uint32_t src,
    size_t vl);
uint32_t vmv_x_s_u32m1_u32 (vuint32m1_t src);
vuint32m1_t vmv_s_x_u32m1 (vuint32m1_t dest, uint32_t src,
    size_t vl);
uint32_t vmv_x_s_u32m2_u32 (vuint32m2_t src);
vuint32m2_t vmv_s_x_u32m2 (vuint32m2_t dest, uint32_t src,
    size_t vl);
uint32_t vmv_x_s_u32m4_u32 (vuint32m4_t src);
vuint32m4_t vmv_s_x_u32m4 (vuint32m4_t dest, uint32_t src,
    size_t vl);
uint32_t vmv_x_s_u32m8_u32 (vuint32m8_t src);
vuint32m8_t vmv_s_x_u32m8 (vuint32m8_t dest, uint32_t src,
    size_t vl);
uint64_t vmv_x_s_u64m1_u64 (vuint64m1_t src);
vuint64m1_t vmv_s_x_u64m1 (vuint64m1_t dest, uint64_t src,
    size_t vl);
uint64_t vmv_x_s_u64m2_u64 (vuint64m2_t src);
vuint64m2_t vmv_s_x_u64m2 (vuint64m2_t dest, uint64_t src,
    size_t vl);
uint64_t vmv_x_s_u64m4_u64 (vuint64m4_t src);
vuint64m4_t vmv_s_x_u64m4 (vuint64m4_t dest, uint64_t src,
    size_t vl);
uint64_t vmv_x_s_u64m8_u64 (vuint64m8_t src);
```

```
vuint64m8_t vmv_s_x_u64m8 (vuint64m8_t dest, uint64_t src,
    size_t vl);
float16_t vfmv_f_s_f16mf4_f16 (vfloat16mf4_t src);
vfloat16mf4_t vfmv_s_f_f16mf4 (vfloat16mf4_t dest, float16_t
    src, size_t vl);
float16_t vfmv_f_s_f16mf2_f16 (vfloat16mf2_t src);
vfloat16mf2_t vfmv_s_f_f16mf2 (vfloat16mf2_t dest, float16_t
    src, size_t vl);
float16_t vfmv_f_s_f16m1_f16 (vfloat16m1_t src);
vfloat16m1_t vfmv_s_f_f16m1 (vfloat16m1_t dest, float16_t src,
    size_t vl);
float16_t vfmv_f_s_f16m2_f16 (vfloat16m2_t src);
vfloat16m2_t vfmv_s_f_f16m2 (vfloat16m2_t dest, float16_t src,
    size_t vl);
float16_t vfmv_f_s_f16m4_f16 (vfloat16m4_t src);
vfloat16m4_t vfmv_s_f_f16m4 (vfloat16m4_t dest, float16_t src,
    size_t vl);
float16_t vfmv_f_s_f16m8_f16 (vfloat16m8_t src);
vfloat16m8_t vfmv_s_f_f16m8 (vfloat16m8_t dest, float16_t src,
    size_t vl);
float32_t vfmv_f_s_f32mf2_f32 (vfloat32mf2_t src);
vfloat32mf2_t vfmv_s_f_f32mf2 (vfloat32mf2_t dest, float32_t
    src, size_t vl);
float32_t vfmv_f_s_f32m1_f32 (vfloat32m1_t src);
vfloat32m1_t vfmv_s_f_f32m1 (vfloat32m1_t dest, float32_t src,
    size_t vl);
float32_t vfmv_f_s_f32m2_f32 (vfloat32m2_t src);
vfloat32m2_t vfmv_s_f_f32m2 (vfloat32m2_t dest, float32_t src,
    size_t vl);
float32_t vfmv_f_s_f32m4_f32 (vfloat32m4_t src);
vfloat32m4_t vfmv_s_f_f32m4 (vfloat32m4_t dest, float32_t src,
    size_t vl);
float32_t vfmv_f_s_f32m8_f32 (vfloat32m8_t src);
vfloat32m8_t vfmv_s_f_f32m8 (vfloat32m8_t dest, float32_t src,
    size_t vl);
float64_t vfmv_f_s_f64m1_f64 (vfloat64m1_t src);
vfloat64m1_t vfmv_s_f_f64m1 (vfloat64m1_t dest, float64_t src,
    size_t vl);
float64_t vfmv_f_s_f64m2_f64 (vfloat64m2_t src);
vfloat64m2_t vfmv_s_f_f64m2 (vfloat64m2_t dest, float64_t src,
    size_t vl);
float64_t vfmv_f_s_f64m4_f64 (vfloat64m4_t src);
vfloat64m4_t vfmv_s_f_f64m4 (vfloat64m4_t dest, float64_t src,
    size_t vl);
float64_t vfmv_f_s_f64m8_f64 (vfloat64m8_t src);
```

```
vfloat64m8_t vfmv_s_f_f64m8 (vfloat64m8_t dest, float64_t src,
    size_t vl);
```

Vector Slideup and Slidedown Functions:

Prototypes:

```
vint8mf8_t vslideup_vx_i8mf8 (vint8mf8_t dest, vint8mf8_t src,
    size_t offset, size_t vl);
vint8mf4_t vslideup_vx_i8mf4 (vint8mf4_t dest, vint8mf4_t src,
    size_t offset, size_t vl);
vint8mf2_t vslideup_vx_i8mf2 (vint8mf2_t dest, vint8mf2_t src,
    size_t offset, size_t vl);
vint8m1_t vslideup_vx_i8m1 (vint8m1_t dest, vint8m1_t src,
    size_t offset, size_t vl);
vint8m2_t vslideup_vx_i8m2 (vint8m2_t dest, vint8m2_t src,
    size_t offset, size_t vl);
vint8m4_t vslideup_vx_i8m4 (vint8m4_t dest, vint8m4_t src,
    size_t offset, size_t vl);
vint8m8_t vslideup_vx_i8m8 (vint8m8_t dest, vint8m8_t src,
    size_t offset, size_t vl);
vint16mf4_t vslideup_vx_i16mf4 (vint16mf4_t dest, vint16mf4_t
    src, size_t offset, size_t vl);
vint16mf2_t vslideup_vx_i16mf2 (vint16mf2_t dest, vint16mf2_t
    src, size_t offset, size_t vl);
vint16m1_t vslideup_vx_i16m1 (vint16m1_t dest, vint16m1_t src,
    size_t offset, size_t vl);
vint16m2_t vslideup_vx_i16m2 (vint16m2_t dest, vint16m2_t src,
    size_t offset, size_t vl);
vint16m4_t vslideup_vx_i16m4 (vint16m4_t dest, vint16m4_t src,
    size_t offset, size_t vl);
vint16m8_t vslideup_vx_i16m8 (vint16m8_t dest, vint16m8_t src,
    size_t offset, size_t vl);
vint32mf2_t vslideup_vx_i32mf2 (vint32mf2_t dest, vint32mf2_t
    src, size_t offset, size_t vl);
vint32m1_t vslideup_vx_i32m1 (vint32m1_t dest, vint32m1_t src,
    size_t offset, size_t vl);
vint32m2_t vslideup_vx_i32m2 (vint32m2_t dest, vint32m2_t src,
    size_t offset, size_t vl);
vint32m4_t vslideup_vx_i32m4 (vint32m4_t dest, vint32m4_t src,
    size_t offset, size_t vl);
vint32m8_t vslideup_vx_i32m8 (vint32m8_t dest, vint32m8_t src,
    size_t offset, size_t vl);
vint64m1_t vslideup_vx_i64m1 (vint64m1_t dest, vint64m1_t src,
    size_t offset, size_t vl);
```

```
vint64m2_t vslideup_vx_i64m2 (vint64m2_t dest, vint64m2_t src,
    size_t offset, size_t vl);
vint64m4_t vslideup_vx_i64m4 (vint64m4_t dest, vint64m4_t src,
    size_t offset, size_t vl);
vint64m8_t vslideup_vx_i64m8 (vint64m8_t dest, vint64m8_t src,
    size_t offset, size_t vl);
vuint8mf8_t vslideup_vx_u8mf8 (vuint8mf8_t dest, vuint8mf8_t
    src, size_t offset, size_t vl);
vuint8mf4_t vslideup_vx_u8mf4 (vuint8mf4_t dest, vuint8mf4_t
    src, size_t offset, size_t vl);
vuint8mf2_t vslideup_vx_u8mf2 (vuint8mf2_t dest, vuint8mf2_t
    src, size_t offset, size_t vl);
vuint8m1_t vslideup_vx_u8m1 (vuint8m1_t dest, vuint8m1_t src,
    size_t offset, size_t vl);
vuint8m2_t vslideup_vx_u8m2 (vuint8m2_t dest, vuint8m2_t src,
    size_t offset, size_t vl);
vuint8m4_t vslideup_vx_u8m4 (vuint8m4_t dest, vuint8m4_t src,
    size_t offset, size_t vl);
vuint8m8_t vslideup_vx_u8m8 (vuint8m8_t dest, vuint8m8_t src,
    size_t offset, size_t vl);
vuint16mf4_t vslideup_vx_u16mf4 (vuint16mf4_t dest, vuint16mf4_t
    src, size_t offset, size_t vl);
vuint16mf2_t vslideup_vx_u16mf2 (vuint16mf2_t dest, vuint16mf2_t
    src, size_t offset, size_t vl);
vuint16m1_t vslideup_vx_u16m1 (vuint16m1_t dest, vuint16m1_t
    src, size_t offset, size_t vl);
vuint16m2_t vslideup_vx_u16m2 (vuint16m2_t dest, vuint16m2_t
    src, size_t offset, size_t vl);
vuint16m4_t vslideup_vx_u16m4 (vuint16m4_t dest, vuint16m4_t
    src, size_t offset, size_t vl);
vuint16m8_t vslideup_vx_u16m8 (vuint16m8_t dest, vuint16m8_t
    src, size_t offset, size_t vl);
vuint32mf2_t vslideup_vx_u32mf2 (vuint32mf2_t dest, vuint32mf2_t
    src, size_t offset, size_t vl);
vuint32m1_t vslideup_vx_u32m1 (vuint32m1_t dest, vuint32m1_t
    src, size_t offset, size_t vl);
vuint32m2_t vslideup_vx_u32m2 (vuint32m2_t dest, vuint32m2_t
    src, size_t offset, size_t vl);
vuint32m4_t vslideup_vx_u32m4 (vuint32m4_t dest, vuint32m4_t
    src, size_t offset, size_t vl);
vuint32m8_t vslideup_vx_u32m8 (vuint32m8_t dest, vuint32m8_t
    src, size_t offset, size_t vl);
vuint64m1_t vslideup_vx_u64m1 (vuint64m1_t dest, vuint64m1_t
    src, size_t offset, size_t vl);
vuint64m2_t vslideup_vx_u64m2 (vuint64m2_t dest, vuint64m2_t
    src, size_t offset, size_t vl);
```

```
vuint64m4_t vslideup_vx_u64m4 (vuint64m4_t dest, vuint64m4_t
    src, size_t offset, size_t vl);
vuint64m8_t vslideup_vx_u64m8 (vuint64m8_t dest, vuint64m8_t
    src, size_t offset, size_t vl);
vfloat16mf4_t vslideup_vx_f16mf4 (vfloat16mf4_t dest,
    vfloat16mf4_t src, size_t offset, size_t vl);
vfloat16mf2_t vslideup_vx_f16mf2 (vfloat16mf2_t dest,
    vfloat16mf2_t src, size_t offset, size_t vl);
vfloat16m1_t vslideup_vx_f16m1 (vfloat16m1_t dest, vfloat16m1_t
    src, size_t offset, size_t vl);
vfloat16m2_t vslideup_vx_f16m2 (vfloat16m2_t dest, vfloat16m2_t
    src, size_t offset, size_t vl);
vfloat16m4_t vslideup_vx_f16m4 (vfloat16m4_t dest, vfloat16m4_t
    src, size_t offset, size_t vl);
vfloat16m8_t vslideup_vx_f16m8 (vfloat16m8_t dest, vfloat16m8_t
    src, size_t offset, size_t vl);
vfloat32mf2_t vslideup_vx_f32mf2 (vfloat32mf2_t dest,
    vfloat32mf2_t src, size_t offset, size_t vl);
vfloat32m1_t vslideup_vx_f32m1 (vfloat32m1_t dest, vfloat32m1_t
    src, size_t offset, size_t vl);
vfloat32m2_t vslideup_vx_f32m2 (vfloat32m2_t dest, vfloat32m2_t
    src, size_t offset, size_t vl);
vfloat32m4_t vslideup_vx_f32m4 (vfloat32m4_t dest, vfloat32m4_t
    src, size_t offset, size_t vl);
vfloat32m8_t vslideup_vx_f32m8 (vfloat32m8_t dest, vfloat32m8_t
    src, size_t offset, size_t vl);
vfloat64m1_t vslideup_vx_f64m1 (vfloat64m1_t dest, vfloat64m1_t
    src, size_t offset, size_t vl);
vfloat64m2_t vslideup_vx_f64m2 (vfloat64m2_t dest, vfloat64m2_t
    src, size_t offset, size_t vl);
vfloat64m4_t vslideup_vx_f64m4 (vfloat64m4_t dest, vfloat64m4_t
    src, size_t offset, size_t vl);
vfloat64m8_t vslideup_vx_f64m8 (vfloat64m8_t dest, vfloat64m8_t
    src, size_t offset, size_t vl);
vint8mf8_t vslidedown_vx_i8mf8 (vint8mf8_t dest, vint8mf8_t src,
    size_t offset, size_t vl);
vint8mf4_t vslidedown_vx_i8mf4 (vint8mf4_t dest, vint8mf4_t src,
    size_t offset, size_t vl);
vint8mf2_t vslidedown_vx_i8mf2 (vint8mf2_t dest, vint8mf2_t src,
    size_t offset, size_t vl);
vint8m1_t vslidedown_vx_i8m1 (vint8m1_t dest, vint8m1_t src,
    size_t offset, size_t vl);
vint8m2_t vslidedown_vx_i8m2 (vint8m2_t dest, vint8m2_t src,
    size_t offset, size_t vl);
vint8m4_t vslidedown_vx_i8m4 (vint8m4_t dest, vint8m4_t src,
    size_t offset, size_t vl);
```

```
vint8m8_t vslidedown_vx_i8m8 (vint8m8_t dest, vint8m8_t src,
    size_t offset, size_t vl);
vint16mf4_t vslidedown_vx_i16mf4 (vint16mf4_t dest, vint16mf4_t
    src, size_t offset, size_t vl);
vint16mf2_t vslidedown_vx_i16mf2 (vint16mf2_t dest, vint16mf2_t
    src, size_t offset, size_t vl);
vint16m1_t vslidedown_vx_i16m1 (vint16m1_t dest, vint16m1_t src,
    size_t offset, size_t vl);
vint16m2_t vslidedown_vx_i16m2 (vint16m2_t dest, vint16m2_t src,
    size_t offset, size_t vl);
vint16m4_t vslidedown_vx_i16m4 (vint16m4_t dest, vint16m4_t src,
    size_t offset, size_t vl);
vint16m8_t vslidedown_vx_i16m8 (vint16m8_t dest, vint16m8_t src,
    size_t offset, size_t vl);
vint32mf2_t vslidedown_vx_i32mf2 (vint32mf2_t dest, vint32mf2_t
    src, size_t offset, size_t vl);
vint32m1_t vslidedown_vx_i32m1 (vint32m1_t dest, vint32m1_t src,
    size_t offset, size_t vl);
vint32m2_t vslidedown_vx_i32m2 (vint32m2_t dest, vint32m2_t src,
    size_t offset, size_t vl);
vint32m4_t vslidedown_vx_i32m4 (vint32m4_t dest, vint32m4_t src,
    size_t offset, size_t vl);
vint32m8_t vslidedown_vx_i32m8 (vint32m8_t dest, vint32m8_t src,
    size_t offset, size_t vl);
vint64m1_t vslidedown_vx_i64m1 (vint64m1_t dest, vint64m1_t src,
    size_t offset, size_t vl);
vint64m2_t vslidedown_vx_i64m2 (vint64m2_t dest, vint64m2_t src,
    size_t offset, size_t vl);
vint64m4_t vslidedown_vx_i64m4 (vint64m4_t dest, vint64m4_t src,
    size_t offset, size_t vl);
vint64m8_t vslidedown_vx_i64m8 (vint64m8_t dest, vint64m8_t src,
    size_t offset, size_t vl);
vuint8mf8_t vslidedown_vx_u8mf8 (vuint8mf8_t dest, vuint8mf8_t
    src, size_t offset, size_t vl);
vuint8mf4_t vslidedown_vx_u8mf4 (vuint8mf4_t dest, vuint8mf4_t
    src, size_t offset, size_t vl);
vuint8mf2_t vslidedown_vx_u8mf2 (vuint8mf2_t dest, vuint8mf2_t
    src, size_t offset, size_t vl);
vuint8m1_t vslidedown_vx_u8m1 (vuint8m1_t dest, vuint8m1_t src,
    size_t offset, size_t vl);
vuint8m2_t vslidedown_vx_u8m2 (vuint8m2_t dest, vuint8m2_t src,
    size_t offset, size_t vl);
vuint8m4_t vslidedown_vx_u8m4 (vuint8m4_t dest, vuint8m4_t src,
    size_t offset, size_t vl);
vuint8m8_t vslidedown_vx_u8m8 (vuint8m8_t dest, vuint8m8_t src,
    size_t offset, size_t vl);
```

```
vuint16mf4_t vslidedown_vx_u16mf4 (vuint16mf4_t dest,
    vuint16mf4_t src, size_t offset, size_t vl);
vuint16mf2_t vslidedown_vx_u16mf2 (vuint16mf2_t dest,
    vuint16mf2_t src, size_t offset, size_t vl);
vuint16m1_t vslidedown_vx_u16m1 (vuint16m1_t dest, vuint16m1_t
    src, size_t offset, size_t vl);
vuint16m2_t vslidedown_vx_u16m2 (vuint16m2_t dest, vuint16m2_t
    src, size_t offset, size_t vl);
vuint16m4_t vslidedown_vx_u16m4 (vuint16m4_t dest, vuint16m4_t
    src, size_t offset, size_t vl);
vuint16m8_t vslidedown_vx_u16m8 (vuint16m8_t dest, vuint16m8_t
    src, size_t offset, size_t vl);
vuint32mf2_t vslidedown_vx_u32mf2 (vuint32mf2_t dest,
    vuint32mf2_t src, size_t offset, size_t vl);
vuint32m1_t vslidedown_vx_u32m1 (vuint32m1_t dest, vuint32m1_t
    src, size_t offset, size_t vl);
vuint32m2_t vslidedown_vx_u32m2 (vuint32m2_t dest, vuint32m2_t
    src, size_t offset, size_t vl);
vuint32m4_t vslidedown_vx_u32m4 (vuint32m4_t dest, vuint32m4_t
    src, size_t offset, size_t vl);
vuint32m8_t vslidedown_vx_u32m8 (vuint32m8_t dest, vuint32m8_t
    src, size_t offset, size_t vl);
vuint64m1_t vslidedown_vx_u64m1 (vuint64m1_t dest, vuint64m1_t
    src, size_t offset, size_t vl);
vuint64m2_t vslidedown_vx_u64m2 (vuint64m2_t dest, vuint64m2_t
    src, size_t offset, size_t vl);
vuint64m4_t vslidedown_vx_u64m4 (vuint64m4_t dest, vuint64m4_t
    src, size_t offset, size_t vl);
vuint64m8_t vslidedown_vx_u64m8 (vuint64m8_t dest, vuint64m8_t
    src, size_t offset, size_t vl);
vfloat16mf4_t vslidedown_vx_f16mf4 (vfloat16mf4_t dest,
    vfloat16mf4_t src, size_t offset, size_t vl);
vfloat16mf2_t vslidedown_vx_f16mf2 (vfloat16mf2_t dest,
    vfloat16mf2_t src, size_t offset, size_t vl);
vfloat16m1_t vslidedown_vx_f16m1 (vfloat16m1_t dest,
    vfloat16m1_t src, size_t offset, size_t vl);
vfloat16m2_t vslidedown_vx_f16m2 (vfloat16m2_t dest,
    vfloat16m2_t src, size_t offset, size_t vl);
vfloat16m4_t vslidedown_vx_f16m4 (vfloat16m4_t dest,
    vfloat16m4_t src, size_t offset, size_t vl);
vfloat16m8_t vslidedown_vx_f16m8 (vfloat16m8_t dest,
    vfloat16m8_t src, size_t offset, size_t vl);
vfloat32mf2_t vslidedown_vx_f32mf2 (vfloat32mf2_t dest,
    vfloat32mf2_t src, size_t offset, size_t vl);
vfloat32m1_t vslidedown_vx_f32m1 (vfloat32m1_t dest,
    vfloat32m1_t src, size_t offset, size_t vl);
```

```
vfloat32m2_t vslidedown_vx_f32m2 (vfloat32m2_t dest,
    vfloat32m2_t src, size_t offset, size_t vl);
vfloat32m4_t vslidedown_vx_f32m4 (vfloat32m4_t dest,
    vfloat32m4_t src, size_t offset, size_t vl);
vfloat32m8_t vslidedown_vx_f32m8 (vfloat32m8_t dest,
    vfloat32m8_t src, size_t offset, size_t vl);
vfloat64m1_t vslidedown_vx_f64m1 (vfloat64m1_t dest,
    vfloat64m1_t src, size_t offset, size_t vl);
vfloat64m2_t vslidedown_vx_f64m2 (vfloat64m2_t dest,
    vfloat64m2_t src, size_t offset, size_t vl);
vfloat64m4_t vslidedown_vx_f64m4 (vfloat64m4_t dest,
    vfloat64m4_t src, size_t offset, size_t vl);
vfloat64m8_t vslidedown_vx_f64m8 (vfloat64m8_t dest,
    vfloat64m8_t src, size_t offset, size_t vl);
// masked functions
vint8mf8_t vslideup_vx_i8mf8_m (vbool64_t mask, vint8mf8_t dest,
    vint8mf8_t src, size_t offset, size_t vl);
vint8mf4_t vslideup_vx_i8mf4_m (vbool32_t mask, vint8mf4_t dest,
    vint8mf4_t src, size_t offset, size_t vl);
vint8mf2_t vslideup_vx_i8mf2_m (vbool16_t mask, vint8mf2_t dest,
    vint8mf2_t src, size_t offset, size_t vl);
vint8m1_t vslideup_vx_i8m1_m (vbool8_t mask, vint8m1_t dest,
    vint8m1_t src, size_t offset, size_t vl);
vint8m2_t vslideup_vx_i8m2_m (vbool4_t mask, vint8m2_t dest,
    vint8m2_t src, size_t offset, size_t vl);
vint8m4_t vslideup_vx_i8m4_m (vbool2_t mask, vint8m4_t dest,
    vint8m4_t src, size_t offset, size_t vl);
vint8m8_t vslideup_vx_i8m8_m (vbool1_t mask, vint8m8_t dest,
    vint8m8_t src, size_t offset, size_t vl);
vint16mf4_t vslideup_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    dest, vint16mf4_t src, size_t offset, size_t vl);
vint16mf2_t vslideup_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    dest, vint16mf2_t src, size_t offset, size_t vl);
vint16m1_t vslideup_vx_i16m1_m (vbool16_t mask, vint16m1_t dest,
    vint16m1_t src, size_t offset, size_t vl);
vint16m2_t vslideup_vx_i16m2_m (vbool8_t mask, vint16m2_t dest,
    vint16m2_t src, size_t offset, size_t vl);
vint16m4_t vslideup_vx_i16m4_m (vbool4_t mask, vint16m4_t dest,
    vint16m4_t src, size_t offset, size_t vl);
vint16m8_t vslideup_vx_i16m8_m (vbool2_t mask, vint16m8_t dest,
    vint16m8_t src, size_t offset, size_t vl);
vint32mf2_t vslideup_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    dest, vint32mf2_t src, size_t offset, size_t vl);
vint32m1_t vslideup_vx_i32m1_m (vbool32_t mask, vint32m1_t dest,
    vint32m1_t src, size_t offset, size_t vl);
```

```
vint32m2_t vslideup_vx_i32m2_m (vbool16_t mask, vint32m2_t dest,
    vint32m2_t src, size_t offset, size_t vl);
vint32m4_t vslideup_vx_i32m4_m (vbool8_t mask, vint32m4_t dest,
    vint32m4_t src, size_t offset, size_t vl);
vint32m8_t vslideup_vx_i32m8_m (vbool4_t mask, vint32m8_t dest,
    vint32m8_t src, size_t offset, size_t vl);
vint64m1_t vslideup_vx_i64m1_m (vbool64_t mask, vint64m1_t dest,
    vint64m1_t src, size_t offset, size_t vl);
vint64m2_t vslideup_vx_i64m2_m (vbool32_t mask, vint64m2_t dest,
    vint64m2_t src, size_t offset, size_t vl);
vint64m4_t vslideup_vx_i64m4_m (vbool16_t mask, vint64m4_t dest,
    vint64m4_t src, size_t offset, size_t vl);
vint64m8_t vslideup_vx_i64m8_m (vbool8_t mask, vint64m8_t dest,
    vint64m8_t src, size_t offset, size_t vl);
vuint8mf8_t vslideup_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    dest, vuint8mf8_t src, size_t offset, size_t vl);
vuint8mf4_t vslideup_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    dest, vuint8mf4_t src, size_t offset, size_t vl);
vuint8mf2_t vslideup_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    dest, vuint8mf2_t src, size_t offset, size_t vl);
vuint8m1_t vslideup_vx_u8m1_m (vbool8_t mask, vuint8m1_t dest,
    vuint8m1_t src, size_t offset, size_t vl);
vuint8m2_t vslideup_vx_u8m2_m (vbool4_t mask, vuint8m2_t dest,
    vuint8m2_t src, size_t offset, size_t vl);
vuint8m4_t vslideup_vx_u8m4_m (vbool2_t mask, vuint8m4_t dest,
    vuint8m4_t src, size_t offset, size_t vl);
vuint8m8_t vslideup_vx_u8m8_m (vbool1_t mask, vuint8m8_t dest,
    vuint8m8_t src, size_t offset, size_t vl);
vuint16mf4_t vslideup_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    dest, vuint16mf4_t src, size_t offset, size_t vl);
vuint16mf2_t vslideup_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    dest, vuint16mf2_t src, size_t offset, size_t vl);
vuint16m1_t vslideup_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    dest, vuint16m1_t src, size_t offset, size_t vl);
vuint16m2_t vslideup_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    dest, vuint16m2_t src, size_t offset, size_t vl);
vuint16m4_t vslideup_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    dest, vuint16m4_t src, size_t offset, size_t vl);
vuint16m8_t vslideup_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    dest, vuint16m8_t src, size_t offset, size_t vl);
vuint32mf2_t vslideup_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    dest, vuint32mf2_t src, size_t offset, size_t vl);
vuint32m1_t vslideup_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    dest, vuint32m1_t src, size_t offset, size_t vl);
vuint32m2_t vslideup_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    dest, vuint32m2_t src, size_t offset, size_t vl);
```

```
vuint32m4_t vslideup_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    dest, vuint32m4_t src, size_t offset, size_t vl);
vuint32m8_t vslideup_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    dest, vuint32m8_t src, size_t offset, size_t vl);
vuint64m1_t vslideup_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    dest, vuint64m1_t src, size_t offset, size_t vl);
vuint64m2_t vslideup_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    dest, vuint64m2_t src, size_t offset, size_t vl);
vuint64m4_t vslideup_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    dest, vuint64m4_t src, size_t offset, size_t vl);
vuint64m8_t vslideup_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    dest, vuint64m8_t src, size_t offset, size_t vl);
vfloat16mf4_t vslideup_vx_f16mf4_m (vbool64_t mask,
    vfloat16mf4_t dest, vfloat16mf4_t src, size_t offset, size_t
    vl);
vfloat16mf2_t vslideup_vx_f16mf2_m (vbool32_t mask,
    vfloat16mf2_t dest, vfloat16mf2_t src, size_t offset, size_t
    vl);
vfloat16m1_t vslideup_vx_f16m1_m (vbool16_t mask, vfloat16m1_t
    dest, vfloat16m1_t src, size_t offset, size_t vl);
vfloat16m2_t vslideup_vx_f16m2_m (vbool8_t mask, vfloat16m2_t
    dest, vfloat16m2_t src, size_t offset, size_t vl);
vfloat16m4_t vslideup_vx_f16m4_m (vbool4_t mask, vfloat16m4_t
    dest, vfloat16m4_t src, size_t offset, size_t vl);
vfloat16m8_t vslideup_vx_f16m8_m (vbool2_t mask, vfloat16m8_t
    dest, vfloat16m8_t src, size_t offset, size_t vl);
vfloat32mf2_t vslideup_vx_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t dest, vfloat32mf2_t src, size_t offset, size_t
    vl);
vfloat32m1_t vslideup_vx_f32m1_m (vbool32_t mask, vfloat32m1_t
    dest, vfloat32m1_t src, size_t offset, size_t vl);
vfloat32m2_t vslideup_vx_f32m2_m (vbool16_t mask, vfloat32m2_t
    dest, vfloat32m2_t src, size_t offset, size_t vl);
vfloat32m4_t vslideup_vx_f32m4_m (vbool8_t mask, vfloat32m4_t
    dest, vfloat32m4_t src, size_t offset, size_t vl);
vfloat32m8_t vslideup_vx_f32m8_m (vbool4_t mask, vfloat32m8_t
    dest, vfloat32m8_t src, size_t offset, size_t vl);
vfloat64m1_t vslideup_vx_f64m1_m (vbool64_t mask, vfloat64m1_t
    dest, vfloat64m1_t src, size_t offset, size_t vl);
vfloat64m2_t vslideup_vx_f64m2_m (vbool32_t mask, vfloat64m2_t
    dest, vfloat64m2_t src, size_t offset, size_t vl);
vfloat64m4_t vslideup_vx_f64m4_m (vbool16_t mask, vfloat64m4_t
    dest, vfloat64m4_t src, size_t offset, size_t vl);
vfloat64m8_t vslideup_vx_f64m8_m (vbool8_t mask, vfloat64m8_t
    dest, vfloat64m8_t src, size_t offset, size_t vl);
```

```
vint8mf8_t vslidedown_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    dest, vint8mf8_t src, size_t offset, size_t vl);
vint8mf4_t vslidedown_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    dest, vint8mf4_t src, size_t offset, size_t vl);
vint8mf2_t vslidedown_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    dest, vint8mf2_t src, size_t offset, size_t vl);
vint8m1_t vslidedown_vx_i8m1_m (vbool8_t mask, vint8m1_t dest,
    vint8m1_t src, size_t offset, size_t vl);
vint8m2_t vslidedown_vx_i8m2_m (vbool4_t mask, vint8m2_t dest,
    vint8m2_t src, size_t offset, size_t vl);
vint8m4_t vslidedown_vx_i8m4_m (vbool2_t mask, vint8m4_t dest,
    vint8m4_t src, size_t offset, size_t vl);
vint8m8_t vslidedown_vx_i8m8_m (vbool1_t mask, vint8m8_t dest,
    vint8m8_t src, size_t offset, size_t vl);
vint16mf4_t vslidedown_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    dest, vint16mf4_t src, size_t offset, size_t vl);
vint16mf2_t vslidedown_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    dest, vint16mf2_t src, size_t offset, size_t vl);
vint16m1_t vslidedown_vx_i16m1_m (vbool16_t mask, vint16m1_t
    dest, vint16m1_t src, size_t offset, size_t vl);
vint16m2_t vslidedown_vx_i16m2_m (vbool8_t mask, vint16m2_t
    dest, vint16m2_t src, size_t offset, size_t vl);
vint16m4_t vslidedown_vx_i16m4_m (vbool4_t mask, vint16m4_t
    dest, vint16m4_t src, size_t offset, size_t vl);
vint16m8_t vslidedown_vx_i16m8_m (vbool2_t mask, vint16m8_t
    dest, vint16m8_t src, size_t offset, size_t vl);
vint32mf2_t vslidedown_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    dest, vint32mf2_t src, size_t offset, size_t vl);
vint32m1_t vslidedown_vx_i32m1_m (vbool32_t mask, vint32m1_t
    dest, vint32m1_t src, size_t offset, size_t vl);
vint32m2_t vslidedown_vx_i32m2_m (vbool16_t mask, vint32m2_t
    dest, vint32m2_t src, size_t offset, size_t vl);
vint32m4_t vslidedown_vx_i32m4_m (vbool8_t mask, vint32m4_t
    dest, vint32m4_t src, size_t offset, size_t vl);
vint32m8_t vslidedown_vx_i32m8_m (vbool4_t mask, vint32m8_t
    dest, vint32m8_t src, size_t offset, size_t vl);
vint64m1_t vslidedown_vx_i64m1_m (vbool64_t mask, vint64m1_t
    dest, vint64m1_t src, size_t offset, size_t vl);
vint64m2_t vslidedown_vx_i64m2_m (vbool32_t mask, vint64m2_t
    dest, vint64m2_t src, size_t offset, size_t vl);
vint64m4_t vslidedown_vx_i64m4_m (vbool16_t mask, vint64m4_t
    dest, vint64m4_t src, size_t offset, size_t vl);
vint64m8_t vslidedown_vx_i64m8_m (vbool8_t mask, vint64m8_t
    dest, vint64m8_t src, size_t offset, size_t vl);
vuint8mf8_t vslidedown_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    dest, vuint8mf8_t src, size_t offset, size_t vl);
```

```
vuint8mf4_t vslidedown_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    dest, vuint8mf4_t src, size_t offset, size_t vl);
vuint8mf2_t vslidedown_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    dest, vuint8mf2_t src, size_t offset, size_t vl);
vuint8m1_t vslidedown_vx_u8m1_m (vbool8_t mask, vuint8m1_t dest,
    vuint8m1_t src, size_t offset, size_t vl);
vuint8m2_t vslidedown_vx_u8m2_m (vbool4_t mask, vuint8m2_t dest,
    vuint8m2_t src, size_t offset, size_t vl);
vuint8m4_t vslidedown_vx_u8m4_m (vbool2_t mask, vuint8m4_t dest,
    vuint8m4_t src, size_t offset, size_t vl);
vuint8m8_t vslidedown_vx_u8m8_m (vbool1_t mask, vuint8m8_t dest,
    vuint8m8_t src, size_t offset, size_t vl);
vuint16mf4_t vslidedown_vx_u16mf4_m (vbool64_t mask,
    vuint16mf4_t dest, vuint16mf4_t src, size_t offset, size_t
    vl);
vuint16mf2_t vslidedown_vx_u16mf2_m (vbool32_t mask,
    vuint16mf2_t dest, vuint16mf2_t src, size_t offset, size_t
    vl);
vuint16m1_t vslidedown_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    dest, vuint16m1_t src, size_t offset, size_t vl);
vuint16m2_t vslidedown_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    dest, vuint16m2_t src, size_t offset, size_t vl);
vuint16m4_t vslidedown_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    dest, vuint16m4_t src, size_t offset, size_t vl);
vuint16m8_t vslidedown_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    dest, vuint16m8_t src, size_t offset, size_t vl);
vuint32mf2_t vslidedown_vx_u32mf2_m (vbool64_t mask,
    vuint32mf2_t dest, vuint32mf2_t src, size_t offset, size_t
    vl);
vuint32m1_t vslidedown_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    dest, vuint32m1_t src, size_t offset, size_t vl);
vuint32m2_t vslidedown_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    dest, vuint32m2_t src, size_t offset, size_t vl);
vuint32m4_t vslidedown_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    dest, vuint32m4_t src, size_t offset, size_t vl);
vuint32m8_t vslidedown_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    dest, vuint32m8_t src, size_t offset, size_t vl);
vuint64m1_t vslidedown_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    dest, vuint64m1_t src, size_t offset, size_t vl);
vuint64m2_t vslidedown_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    dest, vuint64m2_t src, size_t offset, size_t vl);
vuint64m4_t vslidedown_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    dest, vuint64m4_t src, size_t offset, size_t vl);
vuint64m8_t vslidedown_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    dest, vuint64m8_t src, size_t offset, size_t vl);
```

```
vfloat16mf4_t vslidedown_vx_f16mf4_m (vbool64_t mask,
    vfloat16mf4_t dest, vfloat16mf4_t src, size_t offset, size_t
    vl);
vfloat16mf2_t vslidedown_vx_f16mf2_m (vbool32_t mask,
    vfloat16mf2_t dest, vfloat16mf2_t src, size_t offset, size_t
    vl);
vfloat16m1_t vslidedown_vx_f16m1_m (vbool16_t mask, vfloat16m1_t
    dest, vfloat16m1_t src, size_t offset, size_t vl);
vfloat16m2_t vslidedown_vx_f16m2_m (vbool8_t mask, vfloat16m2_t
    dest, vfloat16m2_t src, size_t offset, size_t vl);
vfloat16m4_t vslidedown_vx_f16m4_m (vbool4_t mask, vfloat16m4_t
    dest, vfloat16m4_t src, size_t offset, size_t vl);
vfloat16m8_t vslidedown_vx_f16m8_m (vbool2_t mask, vfloat16m8_t
    dest, vfloat16m8_t src, size_t offset, size_t vl);
vfloat32mf2_t vslidedown_vx_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t dest, vfloat32mf2_t src, size_t offset, size_t
    vl);
vfloat32m1_t vslidedown_vx_f32m1_m (vbool32_t mask, vfloat32m1_t
    dest, vfloat32m1_t src, size_t offset, size_t vl);
vfloat32m2_t vslidedown_vx_f32m2_m (vbool16_t mask, vfloat32m2_t
    dest, vfloat32m2_t src, size_t offset, size_t vl);
vfloat32m4_t vslidedown_vx_f32m4_m (vbool8_t mask, vfloat32m4_t
    dest, vfloat32m4_t src, size_t offset, size_t vl);
vfloat32m8_t vslidedown_vx_f32m8_m (vbool4_t mask, vfloat32m8_t
    dest, vfloat32m8_t src, size_t offset, size_t vl);
vfloat64m1_t vslidedown_vx_f64m1_m (vbool64_t mask, vfloat64m1_t
    dest, vfloat64m1_t src, size_t offset, size_t vl);
vfloat64m2_t vslidedown_vx_f64m2_m (vbool32_t mask, vfloat64m2_t
    dest, vfloat64m2_t src, size_t offset, size_t vl);
vfloat64m4_t vslidedown_vx_f64m4_m (vbool16_t mask, vfloat64m4_t
    dest, vfloat64m4_t src, size_t offset, size_t vl);
vfloat64m8_t vslidedown_vx_f64m8_m (vbool8_t mask, vfloat64m8_t
    dest, vfloat64m8_t src, size_t offset, size_t vl);
```

Vector Slide1up and Slide1down Functions:

Prototypes:

```
vint8mf8_t vslide1up_vx_i8mf8 (vint8mf8_t src, int8_t value,
    size_t vl);
vint8mf4_t vslide1up_vx_i8mf4 (vint8mf4_t src, int8_t value,
    size_t vl);
vint8mf2_t vslide1up_vx_i8mf2 (vint8mf2_t src, int8_t value,
    size_t vl);
vint8m1_t vslide1up_vx_i8m1 (vint8m1_t src, int8_t value, size_t
    vl);
```

```
vint8m2_t vslide1up_vx_i8m2 (vint8m2_t src, int8_t value, size_t
    vl);
vint8m4_t vslide1up_vx_i8m4 (vint8m4_t src, int8_t value, size_t
    vl);
vint8m8_t vslide1up_vx_i8m8 (vint8m8_t src, int8_t value, size_t
    vl);
vint16mf4_t vslide1up_vx_i16mf4 (vint16mf4_t src, int16_t value,
    size_t vl);
vint16mf2_t vslide1up_vx_i16mf2 (vint16mf2_t src, int16_t value,
    size_t vl);
vint16m1_t vslide1up_vx_i16m1 (vint16m1_t src, int16_t value,
    size_t vl);
vint16m2_t vslide1up_vx_i16m2 (vint16m2_t src, int16_t value,
    size_t vl);
vint16m4_t vslide1up_vx_i16m4 (vint16m4_t src, int16_t value,
    size_t vl);
vint16m8_t vslide1up_vx_i16m8 (vint16m8_t src, int16_t value,
    size_t vl);
vint32mf2_t vslide1up_vx_i32mf2 (vint32mf2_t src, int32_t value,
    size_t vl);
vint32m1_t vslide1up_vx_i32m1 (vint32m1_t src, int32_t value,
    size_t vl);
vint32m2_t vslide1up_vx_i32m2 (vint32m2_t src, int32_t value,
    size_t vl);
vint32m4_t vslide1up_vx_i32m4 (vint32m4_t src, int32_t value,
    size_t vl);
vint32m8_t vslide1up_vx_i32m8 (vint32m8_t src, int32_t value,
    size_t vl);
vint64m1_t vslide1up_vx_i64m1 (vint64m1_t src, int64_t value,
    size_t vl);
vint64m2_t vslide1up_vx_i64m2 (vint64m2_t src, int64_t value,
    size_t vl);
vint64m4_t vslide1up_vx_i64m4 (vint64m4_t src, int64_t value,
    size_t vl);
vint64m8_t vslide1up_vx_i64m8 (vint64m8_t src, int64_t value,
    size_t vl);
vuint8mf8_t vslide1up_vx_u8mf8 (vuint8mf8_t src, uint8_t value,
    size_t vl);
vuint8mf4_t vslide1up_vx_u8mf4 (vuint8mf4_t src, uint8_t value,
    size_t vl);
vuint8mf2_t vslide1up_vx_u8mf2 (vuint8mf2_t src, uint8_t value,
    size_t vl);
vuint8m1_t vslide1up_vx_u8m1 (vuint8m1_t src, uint8_t value,
    size_t vl);
vuint8m2_t vslide1up_vx_u8m2 (vuint8m2_t src, uint8_t value,
    size_t vl);
```

```
vuint8m4_t vslide1up_vx_u8m4 (vuint8m4_t src, uint8_t value,
    size_t vl);
vuint8m8_t vslide1up_vx_u8m8 (vuint8m8_t src, uint8_t value,
    size_t vl);
vuint16mf4_t vslide1up_vx_u16mf4 (vuint16mf4_t src, uint16_t
    value, size_t vl);
vuint16mf2_t vslide1up_vx_u16mf2 (vuint16mf2_t src, uint16_t
    value, size_t vl);
vuint16m1_t vslide1up_vx_u16m1 (vuint16m1_t src, uint16_t value,
    size_t vl);
vuint16m2_t vslide1up_vx_u16m2 (vuint16m2_t src, uint16_t value,
    size_t vl);
vuint16m4_t vslide1up_vx_u16m4 (vuint16m4_t src, uint16_t value,
    size_t vl);
vuint16m8_t vslide1up_vx_u16m8 (vuint16m8_t src, uint16_t value,
    size_t vl);
vuint32mf2_t vslide1up_vx_u32mf2 (vuint32mf2_t src, uint32_t
    value, size_t vl);
vuint32m1_t vslide1up_vx_u32m1 (vuint32m1_t src, uint32_t value,
    size_t vl);
vuint32m2_t vslide1up_vx_u32m2 (vuint32m2_t src, uint32_t value,
    size_t vl);
vuint32m4_t vslide1up_vx_u32m4 (vuint32m4_t src, uint32_t value,
    size_t vl);
vuint32m8_t vslide1up_vx_u32m8 (vuint32m8_t src, uint32_t value,
    size_t vl);
vuint64m1_t vslide1up_vx_u64m1 (vuint64m1_t src, uint64_t value,
    size_t vl);
vuint64m2_t vslide1up_vx_u64m2 (vuint64m2_t src, uint64_t value,
    size_t vl);
vuint64m4_t vslide1up_vx_u64m4 (vuint64m4_t src, uint64_t value,
    size_t vl);
vuint64m8_t vslide1up_vx_u64m8 (vuint64m8_t src, uint64_t value,
    size_t vl);
vfloat16mf4_t vfslide1up_vf_f16mf4 (vfloat16mf4_t src, float16_t
    value, size_t vl);
vfloat16mf2_t vfslide1up_vf_f16mf2 (vfloat16mf2_t src, float16_t
    value, size_t vl);
vfloat16m1_t vfslide1up_vf_f16m1 (vfloat16m1_t src, float16_t
    value, size_t vl);
vfloat16m2_t vfslide1up_vf_f16m2 (vfloat16m2_t src, float16_t
    value, size_t vl);
vfloat16m4_t vfslide1up_vf_f16m4 (vfloat16m4_t src, float16_t
    value, size_t vl);
vfloat16m8_t vfslide1up_vf_f16m8 (vfloat16m8_t src, float16_t
    value, size_t vl);
```

911

```
vfloat32mf2_t vfslide1up_vf_f32mf2 (vfloat32mf2_t src, float32_t
    value, size_t vl);
vfloat32m1_t vfslide1up_vf_f32m1 (vfloat32m1_t src, float32_t
    value, size_t vl);
vfloat32m2_t vfslide1up_vf_f32m2 (vfloat32m2_t src, float32_t
    value, size_t vl);
vfloat32m4_t vfslide1up_vf_f32m4 (vfloat32m4_t src, float32_t
    value, size_t vl);
vfloat32m8_t vfslide1up_vf_f32m8 (vfloat32m8_t src, float32_t
    value, size_t vl);
vfloat64m1_t vfslide1up_vf_f64m1 (vfloat64m1_t src, float64_t
    value, size_t vl);
vfloat64m2_t vfslide1up_vf_f64m2 (vfloat64m2_t src, float64_t
    value, size_t vl);
vfloat64m4_t vfslide1up_vf_f64m4 (vfloat64m4_t src, float64_t
    value, size_t vl);
vfloat64m8_t vfslide1up_vf_f64m8 (vfloat64m8_t src, float64_t
    value, size_t vl);
vint8mf8_t vslide1down_vx_i8mf8 (vint8mf8_t src, int8_t value,
    size_t vl);
vint8mf4_t vslide1down_vx_i8mf4 (vint8mf4_t src, int8_t value,
    size_t vl);
vint8mf2_t vslide1down_vx_i8mf2 (vint8mf2_t src, int8_t value,
    size_t vl);
vint8m1_t vslide1down_vx_i8m1 (vint8m1_t src, int8_t value,
    size_t vl);
vint8m2_t vslide1down_vx_i8m2 (vint8m2_t src, int8_t value,
    size_t vl);
vint8m4_t vslide1down_vx_i8m4 (vint8m4_t src, int8_t value,
    size_t vl);
vint8m8_t vslide1down_vx_i8m8 (vint8m8_t src, int8_t value,
    size_t vl);
vint16mf4_t vslide1down_vx_i16mf4 (vint16mf4_t src, int16_t
    value, size_t vl);
vint16mf2_t vslide1down_vx_i16mf2 (vint16mf2_t src, int16_t
    value, size_t vl);
vint16m1_t vslide1down_vx_i16m1 (vint16m1_t src, int16_t value,
    size_t vl);
vint16m2_t vslide1down_vx_i16m2 (vint16m2_t src, int16_t value,
    size_t vl);
vint16m4_t vslide1down_vx_i16m4 (vint16m4_t src, int16_t value,
    size_t vl);
vint16m8_t vslide1down_vx_i16m8 (vint16m8_t src, int16_t value,
    size_t vl);
vint32mf2_t vslide1down_vx_i32mf2 (vint32mf2_t src, int32_t
    value, size_t vl);
```

```
vint32m1_t vslide1down_vx_i32m1 (vint32m1_t src, int32_t value,
    size_t vl);
vint32m2_t vslide1down_vx_i32m2 (vint32m2_t src, int32_t value,
    size_t vl);
vint32m4_t vslide1down_vx_i32m4 (vint32m4_t src, int32_t value,
    size_t vl);
vint32m8_t vslide1down_vx_i32m8 (vint32m8_t src, int32_t value,
    size_t vl);
vint64m1_t vslide1down_vx_i64m1 (vint64m1_t src, int64_t value,
    size_t vl);
vint64m2_t vslide1down_vx_i64m2 (vint64m2_t src, int64_t value,
    size_t vl);
vint64m4_t vslide1down_vx_i64m4 (vint64m4_t src, int64_t value,
    size_t vl);
vint64m8_t vslide1down_vx_i64m8 (vint64m8_t src, int64_t value,
    size_t vl);
vuint8mf8_t vslide1down_vx_u8mf8 (vuint8mf8_t src, uint8_t
    value, size_t vl);
vuint8mf4_t vslide1down_vx_u8mf4 (vuint8mf4_t src, uint8_t
    value, size_t vl);
vuint8mf2_t vslide1down_vx_u8mf2 (vuint8mf2_t src, uint8_t
    value, size_t vl);
vuint8m1_t vslide1down_vx_u8m1 (vuint8m1_t src, uint8_t value,
    size_t vl);
vuint8m2_t vslide1down_vx_u8m2 (vuint8m2_t src, uint8_t value,
    size_t vl);
vuint8m4_t vslide1down_vx_u8m4 (vuint8m4_t src, uint8_t value,
    size_t vl);
vuint8m8_t vslide1down_vx_u8m8 (vuint8m8_t src, uint8_t value,
    size_t vl);
vuint16mf4_t vslide1down_vx_u16mf4 (vuint16mf4_t src, uint16_t
    value, size_t vl);
vuint16mf2_t vslide1down_vx_u16mf2 (vuint16mf2_t src, uint16_t
    value, size_t vl);
vuint16m1_t vslide1down_vx_u16m1 (vuint16m1_t src, uint16_t
    value, size_t vl);
vuint16m2_t vslide1down_vx_u16m2 (vuint16m2_t src, uint16_t
    value, size_t vl);
vuint16m4_t vslide1down_vx_u16m4 (vuint16m4_t src, uint16_t
    value, size_t vl);
vuint16m8_t vslide1down_vx_u16m8 (vuint16m8_t src, uint16_t
    value, size_t vl);
vuint32mf2_t vslide1down_vx_u32mf2 (vuint32mf2_t src, uint32_t
    value, size_t vl);
vuint32m1_t vslide1down_vx_u32m1 (vuint32m1_t src, uint32_t
    value, size_t vl);
```

```
vuint32m2_t vslide1down_vx_u32m2 (vuint32m2_t src, uint32_t
    value, size_t vl);
vuint32m4_t vslide1down_vx_u32m4 (vuint32m4_t src, uint32_t
    value, size_t vl);
vuint32m8_t vslide1down_vx_u32m8 (vuint32m8_t src, uint32_t
    value, size_t vl);
vuint64m1_t vslide1down_vx_u64m1 (vuint64m1_t src, uint64_t
    value, size_t vl);
vuint64m2_t vslide1down_vx_u64m2 (vuint64m2_t src, uint64_t
    value, size_t vl);
vuint64m4_t vslide1down_vx_u64m4 (vuint64m4_t src, uint64_t
    value, size_t vl);
vuint64m8_t vslide1down_vx_u64m8 (vuint64m8_t src, uint64_t
    value, size_t vl);
vfloat16mf4_t vfslide1down_vf_f16mf4 (vfloat16mf4_t src,
    float16_t value, size_t vl);
vfloat16mf2_t vfslide1down_vf_f16mf2 (vfloat16mf2_t src,
    float16_t value, size_t vl);
vfloat16m1_t vfslide1down_vf_f16m1 (vfloat16m1_t src, float16_t
    value, size_t vl);
vfloat16m2_t vfslide1down_vf_f16m2 (vfloat16m2_t src, float16_t
    value, size_t vl);
vfloat16m4_t vfslide1down_vf_f16m4 (vfloat16m4_t src, float16_t
    value, size_t vl);
vfloat16m8_t vfslide1down_vf_f16m8 (vfloat16m8_t src, float16_t
    value, size_t vl);
vfloat32mf2_t vfslide1down_vf_f32mf2 (vfloat32mf2_t src,
    float32_t value, size_t vl);
vfloat32m1_t vfslide1down_vf_f32m1 (vfloat32m1_t src, float32_t
    value, size_t vl);
vfloat32m2_t vfslide1down_vf_f32m2 (vfloat32m2_t src, float32_t
    value, size_t vl);
vfloat32m4_t vfslide1down_vf_f32m4 (vfloat32m4_t src, float32_t
    value, size_t vl);
vfloat32m8_t vfslide1down_vf_f32m8 (vfloat32m8_t src, float32_t
    value, size_t vl);
vfloat64m1_t vfslide1down_vf_f64m1 (vfloat64m1_t src, float64_t
    value, size_t vl);
vfloat64m2_t vfslide1down_vf_f64m2 (vfloat64m2_t src, float64_t
    value, size_t vl);
vfloat64m4_t vfslide1down_vf_f64m4 (vfloat64m4_t src, float64_t
    value, size_t vl);
vfloat64m8_t vfslide1down_vf_f64m8 (vfloat64m8_t src, float64_t
    value, size_t vl);
// masked functions
```

```
vint8mf8_t vslide1up_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t src, int8_t value, size_t vl);
vint8mf4_t vslide1up_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t src, int8_t value, size_t vl);
vint8mf2_t vslide1up_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t src, int8_t value, size_t vl);
vint8m1_t vslide1up_vx_i8m1_m (vbool8_t mask, vint8m1_t
    maskedoff, vint8m1_t src, int8_t value, size_t vl);
vint8m2_t vslide1up_vx_i8m2_m (vbool4_t mask, vint8m2_t
    maskedoff, vint8m2_t src, int8_t value, size_t vl);
vint8m4_t vslide1up_vx_i8m4_m (vbool2_t mask, vint8m4_t
    maskedoff, vint8m4_t src, int8_t value, size_t vl);
vint8m8_t vslide1up_vx_i8m8_m (vbool1_t mask, vint8m8_t
    maskedoff, vint8m8_t src, int8_t value, size_t vl);
vint16mf4_t vslide1up_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t src, int16_t value, size_t vl);
vint16mf2_t vslide1up_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t src, int16_t value, size_t vl);
vint16m1_t vslide1up_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t src, int16_t value, size_t vl);
vint16m2_t vslide1up_vx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t src, int16_t value, size_t vl);
vint16m4_t vslide1up_vx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t src, int16_t value, size_t vl);
vint16m8_t vslide1up_vx_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t src, int16_t value, size_t vl);
vint32mf2_t vslide1up_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t src, int32_t value, size_t vl);
vint32m1_t vslide1up_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t src, int32_t value, size_t vl);
vint32m2_t vslide1up_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t src, int32_t value, size_t vl);
vint32m4_t vslide1up_vx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t src, int32_t value, size_t vl);
vint32m8_t vslide1up_vx_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t src, int32_t value, size_t vl);
vint64m1_t vslide1up_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t src, int64_t value, size_t vl);
vint64m2_t vslide1up_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t src, int64_t value, size_t vl);
vint64m4_t vslide1up_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t src, int64_t value, size_t vl);
vint64m8_t vslide1up_vx_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t src, int64_t value, size_t vl);
vuint8mf8_t vslide1up_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t src, uint8_t value, size_t vl);
```

```
vuint8mf4_t vslide1up_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t src, uint8_t value, size_t vl);
vuint8mf2_t vslide1up_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t src, uint8_t value, size_t vl);
vuint8m1_t vslide1up_vx_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint8m1_t src, uint8_t value, size_t vl);
vuint8m2_t vslide1up_vx_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint8m2_t src, uint8_t value, size_t vl);
vuint8m4_t vslide1up_vx_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint8m4_t src, uint8_t value, size_t vl);
vuint8m8_t vslide1up_vx_u8m8_m (vbool1_t mask, vuint8m8_t
    maskedoff, vuint8m8_t src, uint8_t value, size_t vl);
vuint16mf4_t vslide1up_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t src, uint16_t value, size_t vl);
vuint16mf2_t vslide1up_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t src, uint16_t value, size_t vl);
vuint16m1_t vslide1up_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t src, uint16_t value, size_t vl);
vuint16m2_t vslide1up_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t src, uint16_t value, size_t vl);
vuint16m4_t vslide1up_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t src, uint16_t value, size_t vl);
vuint16m8_t vslide1up_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t src, uint16_t value, size_t vl);
vuint32mf2_t vslide1up_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t src, uint32_t value, size_t vl);
vuint32m1_t vslide1up_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t src, uint32_t value, size_t vl);
vuint32m2_t vslide1up_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t src, uint32_t value, size_t vl);
vuint32m4_t vslide1up_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t src, uint32_t value, size_t vl);
vuint32m8_t vslide1up_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t src, uint32_t value, size_t vl);
vuint64m1_t vslide1up_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t src, uint64_t value, size_t vl);
vuint64m2_t vslide1up_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t src, uint64_t value, size_t vl);
vuint64m4_t vslide1up_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t src, uint64_t value, size_t vl);
vuint64m8_t vslide1up_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t src, uint64_t value, size_t vl);
vfloat16mf4_t vfslide1up_vf_f16mf4_m (vbool64_t mask,
    vfloat16mf4_t maskedoff, vfloat16mf4_t src, float16_t value,
    size_t vl);
```

```
vfloat16mf2_t vfslide1up_vf_f16mf2_m (vbool32_t mask,
    vfloat16mf2_t maskedoff, vfloat16mf2_t src, float16_t value,
    size_t vl);
vfloat16m1_t vfslide1up_vf_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t src, float16_t value, size_t vl);
vfloat16m2_t vfslide1up_vf_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t src, float16_t value, size_t vl);
vfloat16m4_t vfslide1up_vf_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t src, float16_t value, size_t vl);
vfloat16m8_t vfslide1up_vf_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t src, float16_t value, size_t vl);
vfloat32mf2_t vfslide1up_vf_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t maskedoff, vfloat32mf2_t src, float32_t value,
    size_t vl);
vfloat32m1_t vfslide1up_vf_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t src, float32_t value, size_t vl);
vfloat32m2_t vfslide1up_vf_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t src, float32_t value, size_t vl);
vfloat32m4_t vfslide1up_vf_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t src, float32_t value, size_t vl);
vfloat32m8_t vfslide1up_vf_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t src, float32_t value, size_t vl);
vfloat64m1_t vfslide1up_vf_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t src, float64_t value, size_t vl);
vfloat64m2_t vfslide1up_vf_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t src, float64_t value, size_t vl);
vfloat64m4_t vfslide1up_vf_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t src, float64_t value, size_t vl);
vfloat64m8_t vfslide1up_vf_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t src, float64_t value, size_t vl);
vint8mf8_t vslide1down_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t src, int8_t value, size_t vl);
vint8mf4_t vslide1down_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t src, int8_t value, size_t vl);
vint8mf2_t vslide1down_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t src, int8_t value, size_t vl);
vint8m1_t vslide1down_vx_i8m1_m (vbool8_t mask, vint8m1_t
    maskedoff, vint8m1_t src, int8_t value, size_t vl);
vint8m2_t vslide1down_vx_i8m2_m (vbool4_t mask, vint8m2_t
    maskedoff, vint8m2_t src, int8_t value, size_t vl);
vint8m4_t vslide1down_vx_i8m4_m (vbool2_t mask, vint8m4_t
    maskedoff, vint8m4_t src, int8_t value, size_t vl);
vint8m8_t vslide1down_vx_i8m8_m (vbool1_t mask, vint8m8_t
    maskedoff, vint8m8_t src, int8_t value, size_t vl);
vint16mf4_t vslide1down_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t src, int16_t value, size_t vl);
```

```
vint16mf2_t vslide1down_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t src, int16_t value, size_t vl);
vint16m1_t vslide1down_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t src, int16_t value, size_t vl);
vint16m2_t vslide1down_vx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t src, int16_t value, size_t vl);
vint16m4_t vslide1down_vx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t src, int16_t value, size_t vl);
vint16m8_t vslide1down_vx_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t src, int16_t value, size_t vl);
vint32mf2_t vslide1down_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t src, int32_t value, size_t vl);
vint32m1_t vslide1down_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t src, int32_t value, size_t vl);
vint32m2_t vslide1down_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t src, int32_t value, size_t vl);
vint32m4_t vslide1down_vx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t src, int32_t value, size_t vl);
vint32m8_t vslide1down_vx_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t src, int32_t value, size_t vl);
vint64m1_t vslide1down_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t src, int64_t value, size_t vl);
vint64m2_t vslide1down_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t src, int64_t value, size_t vl);
vint64m4_t vslide1down_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t src, int64_t value, size_t vl);
vint64m8_t vslide1down_vx_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t src, int64_t value, size_t vl);
vuint8mf8_t vslide1down_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t src, uint8_t value, size_t vl);
vuint8mf4_t vslide1down_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t src, uint8_t value, size_t vl);
vuint8mf2_t vslide1down_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t src, uint8_t value, size_t vl);
vuint8m1_t vslide1down_vx_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint8m1_t src, uint8_t value, size_t vl);
vuint8m2_t vslide1down_vx_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint8m2_t src, uint8_t value, size_t vl);
vuint8m4_t vslide1down_vx_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint8m4_t src, uint8_t value, size_t vl);
vuint8m8_t vslide1down_vx_u8m8_m (vbool1_t mask, vuint8m8_t
    maskedoff, vuint8m8_t src, uint8_t value, size_t vl);
vuint16mf4_t vslide1down_vx_u16mf4_m (vbool64_t mask,
    vuint16mf4_t maskedoff, vuint16mf4_t src, uint16_t value,
    size_t vl);
```

```
vuint16mf2_t vslide1down_vx_u16mf2_m (vbool32_t mask,
    vuint16mf2_t maskedoff, vuint16mf2_t src, uint16_t value,
    size_t vl);
vuint16m1_t vslide1down_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t src, uint16_t value, size_t vl);
vuint16m2_t vslide1down_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t src, uint16_t value, size_t vl);
vuint16m4_t vslide1down_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t src, uint16_t value, size_t vl);
vuint16m8_t vslide1down_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t src, uint16_t value, size_t vl);
vuint32mf2_t vslide1down_vx_u32mf2_m (vbool64_t mask,
    vuint32mf2_t maskedoff, vuint32mf2_t src, uint32_t value,
    size_t vl);
vuint32m1_t vslide1down_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t src, uint32_t value, size_t vl);
vuint32m2_t vslide1down_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t src, uint32_t value, size_t vl);
vuint32m4_t vslide1down_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t src, uint32_t value, size_t vl);
vuint32m8_t vslide1down_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t src, uint32_t value, size_t vl);
vuint64m1_t vslide1down_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t src, uint64_t value, size_t vl);
vuint64m2_t vslide1down_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t src, uint64_t value, size_t vl);
vuint64m4_t vslide1down_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t src, uint64_t value, size_t vl);
vuint64m8_t vslide1down_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t src, uint64_t value, size_t vl);
vfloat16mf4_t vfslide1down_vf_f16mf4_m (vbool64_t mask,
    vfloat16mf4_t maskedoff, vfloat16mf4_t src, float16_t value,
    size_t vl);
vfloat16mf2_t vfslide1down_vf_f16mf2_m (vbool32_t mask,
    vfloat16mf2_t maskedoff, vfloat16mf2_t src, float16_t value,
    size_t vl);
vfloat16m1_t vfslide1down_vf_f16m1_m (vbool16_t mask,
    vfloat16m1_t maskedoff, vfloat16m1_t src, float16_t value,
    size_t vl);
vfloat16m2_t vfslide1down_vf_f16m2_m (vbool8_t mask,
    vfloat16m2_t maskedoff, vfloat16m2_t src, float16_t value,
    size_t vl);
vfloat16m4_t vfslide1down_vf_f16m4_m (vbool4_t mask,
    vfloat16m4_t maskedoff, vfloat16m4_t src, float16_t value,
    size_t vl);
```

```
vfloat16m8_t vfslide1down_vf_f16m8_m (vbool2_t mask,
    vfloat16m8_t maskedoff, vfloat16m8_t src, float16_t value,
    size_t vl);
vfloat32mf2_t vfslide1down_vf_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t maskedoff, vfloat32mf2_t src, float32_t value,
    size_t vl);
vfloat32m1_t vfslide1down_vf_f32m1_m (vbool32_t mask,
    vfloat32m1_t maskedoff, vfloat32m1_t src, float32_t value,
    size_t vl);
vfloat32m2_t vfslide1down_vf_f32m2_m (vbool16_t mask,
    vfloat32m2_t maskedoff, vfloat32m2_t src, float32_t value,
    size_t vl);
vfloat32m4_t vfslide1down_vf_f32m4_m (vbool8_t mask,
    vfloat32m4_t maskedoff, vfloat32m4_t src, float32_t value,
    size_t vl);
vfloat32m8_t vfslide1down_vf_f32m8_m (vbool4_t mask,
    vfloat32m8_t maskedoff, vfloat32m8_t src, float32_t value,
    size_t vl);
vfloat64m1_t vfslide1down_vf_f64m1_m (vbool64_t mask,
    vfloat64m1_t maskedoff, vfloat64m1_t src, float64_t value,
    size_t vl);
vfloat64m2_t vfslide1down_vf_f64m2_m (vbool32_t mask,
    vfloat64m2_t maskedoff, vfloat64m2_t src, float64_t value,
    size_t vl);
vfloat64m4_t vfslide1down_vf_f64m4_m (vbool16_t mask,
    vfloat64m4_t maskedoff, vfloat64m4_t src, float64_t value,
    size_t vl);
vfloat64m8_t vfslide1down_vf_f64m8_m (vbool8_t mask,
    vfloat64m8_t maskedoff, vfloat64m8_t src, float64_t value,
    size_t vl);
```

Vector Register Gather Functions:

Prototypes:

```
vint8mf8_t vrgather_vv_i8mf8 (vint8mf8_t op1, vuint8mf8_t index,
    size_t vl);
vint8mf8_t vrgather_vx_i8mf8 (vint8mf8_t op1, size_t index,
    size_t vl);
vint8mf4_t vrgather_vv_i8mf4 (vint8mf4_t op1, vuint8mf4_t index,
    size_t vl);
vint8mf4_t vrgather_vx_i8mf4 (vint8mf4_t op1, size_t index,
    size_t vl);
vint8mf2_t vrgather_vv_i8mf2 (vint8mf2_t op1, vuint8mf2_t index,
    size_t vl);
```

```
vint8mf2_t vrgather_vx_i8mf2 (vint8mf2_t op1, size_t index,
    size_t vl);
vint8m1_t vrgather_vv_i8m1 (vint8m1_t op1, vuint8m1_t index,
    size_t vl);
vint8m1_t vrgather_vx_i8m1 (vint8m1_t op1, size_t index, size_t
    vl);
vint8m2_t vrgather_vv_i8m2 (vint8m2_t op1, vuint8m2_t index,
    size_t vl);
vint8m2_t vrgather_vx_i8m2 (vint8m2_t op1, size_t index, size_t
    vl);
vint8m4_t vrgather_vv_i8m4 (vint8m4_t op1, vuint8m4_t index,
    size_t vl);
vint8m4_t vrgather_vx_i8m4 (vint8m4_t op1, size_t index, size_t
    vl);
vint8m8_t vrgather_vv_i8m8 (vint8m8_t op1, vuint8m8_t index,
    size_t vl);
vint8m8_t vrgather_vx_i8m8 (vint8m8_t op1, size_t index, size_t
    vl);
vint16mf4_t vrgather_vv_i16mf4 (vint16mf4_t op1, vuint16mf4_t
    index, size_t vl);
vint16mf4_t vrgather_vx_i16mf4 (vint16mf4_t op1, size_t index,
    size_t vl);
vint16mf2_t vrgather_vv_i16mf2 (vint16mf2_t op1, vuint16mf2_t
    index, size_t vl);
vint16mf2_t vrgather_vx_i16mf2 (vint16mf2_t op1, size_t index,
    size_t vl);
vint16m1_t vrgather_vv_i16m1 (vint16m1_t op1, vuint16m1_t index,
    size_t vl);
vint16m1_t vrgather_vx_i16m1 (vint16m1_t op1, size_t index,
    size_t vl);
vint16m2_t vrgather_vv_i16m2 (vint16m2_t op1, vuint16m2_t index,
    size_t vl);
vint16m2_t vrgather_vx_i16m2 (vint16m2_t op1, size_t index,
    size_t vl);
vint16m4_t vrgather_vv_i16m4 (vint16m4_t op1, vuint16m4_t index,
    size_t vl);
vint16m4_t vrgather_vx_i16m4 (vint16m4_t op1, size_t index,
    size_t vl);
vint16m8_t vrgather_vv_i16m8 (vint16m8_t op1, vuint16m8_t index,
    size_t vl);
vint16m8_t vrgather_vx_i16m8 (vint16m8_t op1, size_t index,
    size_t vl);
vint32mf2_t vrgather_vv_i32mf2 (vint32mf2_t op1, vuint32mf2_t
    index, size_t vl);
vint32mf2_t vrgather_vx_i32mf2 (vint32mf2_t op1, size_t index,
    size_t vl);
```

921

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vint32m1_t vrgather_vv_i32m1 (vint32m1_t op1, vuint32m1_t index,
    size_t vl);
vint32m1_t vrgather_vx_i32m1 (vint32m1_t op1, size_t index,
    size_t vl);
vint32m2_t vrgather_vv_i32m2 (vint32m2_t op1, vuint32m2_t index,
    size_t vl);
vint32m2_t vrgather_vx_i32m2 (vint32m2_t op1, size_t index,
    size_t vl);
vint32m4_t vrgather_vv_i32m4 (vint32m4_t op1, vuint32m4_t index,
    size_t vl);
vint32m4_t vrgather_vx_i32m4 (vint32m4_t op1, size_t index,
    size_t vl);
vint32m8_t vrgather_vv_i32m8 (vint32m8_t op1, vuint32m8_t index,
    size_t vl);
vint32m8_t vrgather_vx_i32m8 (vint32m8_t op1, size_t index,
    size_t vl);
vint64m1_t vrgather_vv_i64m1 (vint64m1_t op1, vuint64m1_t index,
    size_t vl);
vint64m1_t vrgather_vx_i64m1 (vint64m1_t op1, size_t index,
    size_t vl);
vint64m2_t vrgather_vv_i64m2 (vint64m2_t op1, vuint64m2_t index,
    size_t vl);
vint64m2_t vrgather_vx_i64m2 (vint64m2_t op1, size_t index,
    size_t vl);
vint64m4_t vrgather_vv_i64m4 (vint64m4_t op1, vuint64m4_t index,
    size_t vl);
vint64m4_t vrgather_vx_i64m4 (vint64m4_t op1, size_t index,
    size_t vl);
vint64m8_t vrgather_vv_i64m8 (vint64m8_t op1, vuint64m8_t index,
    size_t vl);
vint64m8_t vrgather_vx_i64m8 (vint64m8_t op1, size_t index,
    size_t vl);
vuint8mf8_t vrgather_vv_u8mf8 (vuint8mf8_t op1, vuint8mf8_t
    index, size_t vl);
vuint8mf8_t vrgather_vx_u8mf8 (vuint8mf8_t op1, size_t index,
    size_t vl);
vuint8mf4_t vrgather_vv_u8mf4 (vuint8mf4_t op1, vuint8mf4_t
    index, size_t vl);
vuint8mf4_t vrgather_vx_u8mf4 (vuint8mf4_t op1, size_t index,
    size_t vl);
vuint8mf2_t vrgather_vv_u8mf2 (vuint8mf2_t op1, vuint8mf2_t
    index, size_t vl);
vuint8mf2_t vrgather_vx_u8mf2 (vuint8mf2_t op1, size_t index,
    size_t vl);
vuint8m1_t vrgather_vv_u8m1 (vuint8m1_t op1, vuint8m1_t index,
    size_t vl);
```

```
vuint8m1_t vrgather_vx_u8m1 (vuint8m1_t op1, size_t index,
    size_t vl);
vuint8m2_t vrgather_vv_u8m2 (vuint8m2_t op1, vuint8m2_t index,
    size_t vl);
vuint8m2_t vrgather_vx_u8m2 (vuint8m2_t op1, size_t index,
    size_t vl);
vuint8m4_t vrgather_vv_u8m4 (vuint8m4_t op1, vuint8m4_t index,
    size_t vl);
vuint8m4_t vrgather_vx_u8m4 (vuint8m4_t op1, size_t index,
    size_t vl);
vuint8m8_t vrgather_vv_u8m8 (vuint8m8_t op1, vuint8m8_t index,
    size_t vl);
vuint8m8_t vrgather_vx_u8m8 (vuint8m8_t op1, size_t index,
    size_t vl);
vuint16mf4_t vrgather_vv_u16mf4 (vuint16mf4_t op1, vuint16mf4_t
    index, size_t vl);
vuint16mf4_t vrgather_vx_u16mf4 (vuint16mf4_t op1, size_t index,
    size_t vl);
vuint16mf2_t vrgather_vv_u16mf2 (vuint16mf2_t op1, vuint16mf2_t
    index, size_t vl);
vuint16mf2_t vrgather_vx_u16mf2 (vuint16mf2_t op1, size_t index,
    size_t vl);
vuint16m1_t vrgather_vv_u16m1 (vuint16m1_t op1, vuint16m1_t
    index, size_t vl);
vuint16m1_t vrgather_vx_u16m1 (vuint16m1_t op1, size_t index,
    size_t vl);
vuint16m2_t vrgather_vv_u16m2 (vuint16m2_t op1, vuint16m2_t
    index, size_t vl);
vuint16m2_t vrgather_vx_u16m2 (vuint16m2_t op1, size_t index,
    size_t vl);
vuint16m4_t vrgather_vv_u16m4 (vuint16m4_t op1, vuint16m4_t
    index, size_t vl);
vuint16m4_t vrgather_vx_u16m4 (vuint16m4_t op1, size_t index,
    size_t vl);
vuint16m8_t vrgather_vv_u16m8 (vuint16m8_t op1, vuint16m8_t
    index, size_t vl);
vuint16m8_t vrgather_vx_u16m8 (vuint16m8_t op1, size_t index,
    size_t vl);
vuint32mf2_t vrgather_vv_u32mf2 (vuint32mf2_t op1, vuint32mf2_t
    index, size_t vl);
vuint32mf2_t vrgather_vx_u32mf2 (vuint32mf2_t op1, size_t index,
    size_t vl);
vuint32m1_t vrgather_vv_u32m1 (vuint32m1_t op1, vuint32m1_t
    index, size_t vl);
vuint32m1_t vrgather_vx_u32m1 (vuint32m1_t op1, size_t index,
    size_t vl);
```

```
vuint32m2_t vrgather_vv_u32m2 (vuint32m2_t op1, vuint32m2_t
    index, size_t vl);
vuint32m2_t vrgather_vx_u32m2 (vuint32m2_t op1, size_t index,
    size_t vl);
vuint32m4_t vrgather_vv_u32m4 (vuint32m4_t op1, vuint32m4_t
    index, size_t vl);
vuint32m4_t vrgather_vx_u32m4 (vuint32m4_t op1, size_t index,
    size_t vl);
vuint32m8_t vrgather_vv_u32m8 (vuint32m8_t op1, vuint32m8_t
    index, size_t vl);
vuint32m8_t vrgather_vx_u32m8 (vuint32m8_t op1, size_t index,
    size_t vl);
vuint64m1_t vrgather_vv_u64m1 (vuint64m1_t op1, vuint64m1_t
    index, size_t vl);
vuint64m1_t vrgather_vx_u64m1 (vuint64m1_t op1, size_t index,
    size_t vl);
vuint64m2_t vrgather_vv_u64m2 (vuint64m2_t op1, vuint64m2_t
    index, size_t vl);
vuint64m2_t vrgather_vx_u64m2 (vuint64m2_t op1, size_t index,
    size_t vl);
vuint64m4_t vrgather_vv_u64m4 (vuint64m4_t op1, vuint64m4_t
    index, size_t vl);
vuint64m4_t vrgather_vx_u64m4 (vuint64m4_t op1, size_t index,
    size_t vl);
vuint64m8_t vrgather_vv_u64m8 (vuint64m8_t op1, vuint64m8_t
    index, size_t vl);
vuint64m8_t vrgather_vx_u64m8 (vuint64m8_t op1, size_t index,
    size_t vl);
vfloat16mf4_t vrgather_vv_f16mf4 (vfloat16mf4_t op1,
    vuint16mf4_t index, size_t vl);
vfloat16mf4_t vrgather_vx_f16mf4 (vfloat16mf4_t op1, size_t
    index, size_t vl);
vfloat16mf2_t vrgather_vv_f16mf2 (vfloat16mf2_t op1,
    vuint16mf2_t index, size_t vl);
vfloat16mf2_t vrgather_vx_f16mf2 (vfloat16mf2_t op1, size_t
    index, size_t vl);
vfloat16m1_t vrgather_vv_f16m1 (vfloat16m1_t op1, vuint16m1_t
    index, size_t vl);
vfloat16m1_t vrgather_vx_f16m1 (vfloat16m1_t op1, size_t index,
    size_t vl);
vfloat16m2_t vrgather_vv_f16m2 (vfloat16m2_t op1, vuint16m2_t
    index, size_t vl);
vfloat16m2_t vrgather_vx_f16m2 (vfloat16m2_t op1, size_t index,
    size_t vl);
vfloat16m4_t vrgather_vv_f16m4 (vfloat16m4_t op1, vuint16m4_t
    index, size_t vl);
```

```
vfloat16m4_t vrgather_vx_f16m4 (vfloat16m4_t op1, size_t index,
    size_t vl);
vfloat16m8_t vrgather_vv_f16m8 (vfloat16m8_t op1, vuint16m8_t
    index, size_t vl);
vfloat16m8_t vrgather_vx_f16m8 (vfloat16m8_t op1, size_t index,
    size_t vl);
vfloat32mf2_t vrgather_vv_f32mf2 (vfloat32mf2_t op1,
    vuint32mf2_t index, size_t vl);
vfloat32mf2_t vrgather_vx_f32mf2 (vfloat32mf2_t op1, size_t
    index, size_t vl);
vfloat32m1_t vrgather_vv_f32m1 (vfloat32m1_t op1, vuint32m1_t
    index, size_t vl);
vfloat32m1_t vrgather_vx_f32m1 (vfloat32m1_t op1, size_t index,
    size_t vl);
vfloat32m2_t vrgather_vv_f32m2 (vfloat32m2_t op1, vuint32m2_t
    index, size_t vl);
vfloat32m2_t vrgather_vx_f32m2 (vfloat32m2_t op1, size_t index,
    size_t vl);
vfloat32m4_t vrgather_vv_f32m4 (vfloat32m4_t op1, vuint32m4_t
    index, size_t vl);
vfloat32m4_t vrgather_vx_f32m4 (vfloat32m4_t op1, size_t index,
    size_t vl);
vfloat32m8_t vrgather_vv_f32m8 (vfloat32m8_t op1, vuint32m8_t
    index, size_t vl);
vfloat32m8_t vrgather_vx_f32m8 (vfloat32m8_t op1, size_t index,
    size_t vl);
vfloat64m1_t vrgather_vv_f64m1 (vfloat64m1_t op1, vuint64m1_t
    index, size_t vl);
vfloat64m1_t vrgather_vx_f64m1 (vfloat64m1_t op1, size_t index,
    size_t vl);
vfloat64m2_t vrgather_vv_f64m2 (vfloat64m2_t op1, vuint64m2_t
    index, size_t vl);
vfloat64m2_t vrgather_vx_f64m2 (vfloat64m2_t op1, size_t index,
    size_t vl);
vfloat64m4_t vrgather_vv_f64m4 (vfloat64m4_t op1, vuint64m4_t
    index, size_t vl);
vfloat64m4_t vrgather_vx_f64m4 (vfloat64m4_t op1, size_t index,
    size_t vl);
vfloat64m8_t vrgather_vv_f64m8 (vfloat64m8_t op1, vuint64m8_t
    index, size_t vl);
vfloat64m8_t vrgather_vx_f64m8 (vfloat64m8_t op1, size_t index,
    size_t vl);
vint8mf8_t vrgatherei16_vv_i8mf8 (vint8mf8_t op1, vuint16mf4_t
    op2, size_t vl);
vint8mf4_t vrgatherei16_vv_i8mf4 (vint8mf4_t op1, vuint16mf2_t
    op2, size_t vl);
```

```
vint8mf2_t vrgatherei16_vv_i8mf2 (vint8mf2_t op1, vuint16m1_t
    op2, size_t vl);
vint8m1_t vrgatherei16_vv_i8m1 (vint8m1_t op1, vuint16m2_t op2,
    size_t vl);
vint8m2_t vrgatherei16_vv_i8m2 (vint8m2_t op1, vuint16m4_t op2,
    size_t vl);
vint8m4_t vrgatherei16_vv_i8m4 (vint8m4_t op1, vuint16m8_t op2,
    size_t vl);
vint16mf4_t vrgatherei16_vv_i16mf4 (vint16mf4_t op1,
    vuint16mf4_t op2, size_t vl);
vint16mf2_t vrgatherei16_vv_i16mf2 (vint16mf2_t op1,
    vuint16mf2_t op2, size_t vl);
vint16m1_t vrgatherei16_vv_i16m1 (vint16m1_t op1, vuint16m1_t
    op2, size_t vl);
vint16m2_t vrgatherei16_vv_i16m2 (vint16m2_t op1, vuint16m2_t
    op2, size_t vl);
vint16m4_t vrgatherei16_vv_i16m4 (vint16m4_t op1, vuint16m4_t
    op2, size_t vl);
vint16m8_t vrgatherei16_vv_i16m8 (vint16m8_t op1, vuint16m8_t
    op2, size_t vl);
vint32mf2_t vrgatherei16_vv_i32mf2 (vint32mf2_t op1,
    vuint16mf4_t op2, size_t vl);
vint32m1_t vrgatherei16_vv_i32m1 (vint32m1_t op1, vuint16mf2_t
    op2, size_t vl);
vint32m2_t vrgatherei16_vv_i32m2 (vint32m2_t op1, vuint16m1_t
    op2, size_t vl);
vint32m4_t vrgatherei16_vv_i32m4 (vint32m4_t op1, vuint16m2_t
    op2, size_t vl);
vint32m8_t vrgatherei16_vv_i32m8 (vint32m8_t op1, vuint16m4_t
    op2, size_t vl);
vint64m1_t vrgatherei16_vv_i64m1 (vint64m1_t op1, vuint16mf4_t
    op2, size_t vl);
vint64m2_t vrgatherei16_vv_i64m2 (vint64m2_t op1, vuint16mf2_t
    op2, size_t vl);
vint64m4_t vrgatherei16_vv_i64m4 (vint64m4_t op1, vuint16m1_t
    op2, size_t vl);
vint64m8_t vrgatherei16_vv_i64m8 (vint64m8_t op1, vuint16m2_t
    op2, size_t vl);
vuint8mf8_t vrgatherei16_vv_u8mf8 (vuint8mf8_t op1, vuint16mf4_t
    op2, size_t vl);
vuint8mf4_t vrgatherei16_vv_u8mf4 (vuint8mf4_t op1, vuint16mf2_t
    op2, size_t vl);
vuint8mf2_t vrgatherei16_vv_u8mf2 (vuint8mf2_t op1, vuint16m1_t
    op2, size_t vl);
vuint8m1_t vrgatherei16_vv_u8m1 (vuint8m1_t op1, vuint16m2_t
    op2, size_t vl);
```

```
vuint8m2_t vrgatherei16_vv_u8m2 (vuint8m2_t op1, vuint16m4_t
    op2, size_t vl);
vuint8m4_t vrgatherei16_vv_u8m4 (vuint8m4_t op1, vuint16m8_t
    op2, size_t vl);
vuint16mf4_t vrgatherei16_vv_u16mf4 (vuint16mf4_t op1,
    vuint16mf4_t op2, size_t vl);
vuint16mf2_t vrgatherei16_vv_u16mf2 (vuint16mf2_t op1,
    vuint16mf2_t op2, size_t vl);
vuint16m1_t vrgatherei16_vv_u16m1 (vuint16m1_t op1, vuint16m1_t
    op2, size_t vl);
vuint16m2_t vrgatherei16_vv_u16m2 (vuint16m2_t op1, vuint16m2_t
    op2, size_t vl);
vuint16m4_t vrgatherei16_vv_u16m4 (vuint16m4_t op1, vuint16m4_t
    op2, size_t vl);
vuint16m8_t vrgatherei16_vv_u16m8 (vuint16m8_t op1, vuint16m8_t
    op2, size_t vl);
vuint32mf2_t vrgatherei16_vv_u32mf2 (vuint32mf2_t op1,
    vuint16mf4_t op2, size_t vl);
vuint32m1_t vrgatherei16_vv_u32m1 (vuint32m1_t op1, vuint16mf2_t
    op2, size_t vl);
vuint32m2_t vrgatherei16_vv_u32m2 (vuint32m2_t op1, vuint16m1_t
    op2, size_t vl);
vuint32m4_t vrgatherei16_vv_u32m4 (vuint32m4_t op1, vuint16m2_t
    op2, size_t vl);
vuint32m8_t vrgatherei16_vv_u32m8 (vuint32m8_t op1, vuint16m4_t
    op2, size_t vl);
vuint64m1_t vrgatherei16_vv_u64m1 (vuint64m1_t op1, vuint16mf4_t
    op2, size_t vl);
vuint64m2_t vrgatherei16_vv_u64m2 (vuint64m2_t op1, vuint16mf2_t
    op2, size_t vl);
vuint64m4_t vrgatherei16_vv_u64m4 (vuint64m4_t op1, vuint16m1_t
    op2, size_t vl);
vuint64m8_t vrgatherei16_vv_u64m8 (vuint64m8_t op1, vuint16m2_t
    op2, size_t vl);
vfloat16mf4_t vrgatherei16_vv_f16mf4 (vfloat16mf4_t op1,
    vuint16mf4_t op2, size_t vl);
vfloat16mf2_t vrgatherei16_vv_f16mf2 (vfloat16mf2_t op1,
    vuint16mf2_t op2, size_t vl);
vfloat16m1_t vrgatherei16_vv_f16m1 (vfloat16m1_t op1,
    vuint16m1_t op2, size_t vl);
vfloat16m2_t vrgatherei16_vv_f16m2 (vfloat16m2_t op1,
    vuint16m2_t op2, size_t vl);
vfloat16m4_t vrgatherei16_vv_f16m4 (vfloat16m4_t op1,
    vuint16m4_t op2, size_t vl);
vfloat16m8_t vrgatherei16_vv_f16m8 (vfloat16m8_t op1,
    vuint16m8_t op2, size_t vl);
```

```
vfloat32mf2_t vrgatherei16_vv_f32mf2 (vfloat32mf2_t op1,
    vuint16mf4_t op2, size_t vl);
vfloat32m1_t vrgatherei16_vv_f32m1 (vfloat32m1_t op1,
    vuint16mf2_t op2, size_t vl);
vfloat32m2_t vrgatherei16_vv_f32m2 (vfloat32m2_t op1,
    vuint16m1_t op2, size_t vl);
vfloat32m4_t vrgatherei16_vv_f32m4 (vfloat32m4_t op1,
    vuint16m2_t op2, size_t vl);
vfloat32m8_t vrgatherei16_vv_f32m8 (vfloat32m8_t op1,
    vuint16m4_t op2, size_t vl);
vfloat64m1_t vrgatherei16_vv_f64m1 (vfloat64m1_t op1,
    vuint16mf4_t op2, size_t vl);
vfloat64m2_t vrgatherei16_vv_f64m2 (vfloat64m2_t op1,
    vuint16mf2_t op2, size_t vl);
vfloat64m4_t vrgatherei16_vv_f64m4 (vfloat64m4_t op1,
    vuint16m1_t op2, size_t vl);
vfloat64m8_t vrgatherei16_vv_f64m8 (vfloat64m8_t op1,
    vuint16m2_t op2, size_t vl);
// masked functions
vint8mf8_t vrgather_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vuint8mf8_t index, size_t vl);
vint8mf8_t vrgather_vx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, size_t index, size_t vl);
vint8mf4_t vrgather_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vuint8mf4_t index, size_t vl);
vint8mf4_t vrgather_vx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, size_t index, size_t vl);
vint8mf2_t vrgather_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vuint8mf2_t index, size_t vl);
vint8mf2_t vrgather_vx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, size_t index, size_t vl);
vint8m1_t vrgather_vv_i8m1_m (vbool8_t mask, vint8m1_t
    maskedoff, vint8m1_t op1, vuint8m1_t index, size_t vl);
vint8m1_t vrgather_vx_i8m1_m (vbool8_t mask, vint8m1_t
    maskedoff, vint8m1_t op1, size_t index, size_t vl);
vint8m2_t vrgather_vv_i8m2_m (vbool4_t mask, vint8m2_t
    maskedoff, vint8m2_t op1, vuint8m2_t index, size_t vl);
vint8m2_t vrgather_vx_i8m2_m (vbool4_t mask, vint8m2_t
    maskedoff, vint8m2_t op1, size_t index, size_t vl);
vint8m4_t vrgather_vv_i8m4_m (vbool2_t mask, vint8m4_t
    maskedoff, vint8m4_t op1, vuint8m4_t index, size_t vl);
vint8m4_t vrgather_vx_i8m4_m (vbool2_t mask, vint8m4_t
    maskedoff, vint8m4_t op1, size_t index, size_t vl);
vint8m8_t vrgather_vv_i8m8_m (vbool1_t mask, vint8m8_t
    maskedoff, vint8m8_t op1, vuint8m8_t index, size_t vl);
```

```
vint8m8_t vrgather_vx_i8m8_m (vbool1_t mask, vint8m8_t
    maskedoff, vint8m8_t op1, size_t index, size_t vl);
vint16mf4_t vrgather_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, vuint16mf4_t index, size_t vl);
vint16mf4_t vrgather_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint16mf4_t op1, size_t index, size_t vl);
vint16mf2_t vrgather_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, vuint16mf2_t index, size_t vl);
vint16mf2_t vrgather_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint16mf2_t op1, size_t index, size_t vl);
vint16m1_t vrgather_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vuint16m1_t index, size_t vl);
vint16m1_t vrgather_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, size_t index, size_t vl);
vint16m2_t vrgather_vv_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, vuint16m2_t index, size_t vl);
vint16m2_t vrgather_vx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, size_t index, size_t vl);
vint16m4_t vrgather_vv_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, vuint16m4_t index, size_t vl);
vint16m4_t vrgather_vx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, size_t index, size_t vl);
vint16m8_t vrgather_vv_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, vuint16m8_t index, size_t vl);
vint16m8_t vrgather_vx_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, size_t index, size_t vl);
vint32mf2_t vrgather_vv_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, vuint32mf2_t index, size_t vl);
vint32mf2_t vrgather_vx_i32mf2_m (vbool64_t mask, vint32mf2_t
    maskedoff, vint32mf2_t op1, size_t index, size_t vl);
vint32m1_t vrgather_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vuint32m1_t index, size_t vl);
vint32m1_t vrgather_vx_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, size_t index, size_t vl);
vint32m2_t vrgather_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vuint32m2_t index, size_t vl);
vint32m2_t vrgather_vx_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, size_t index, size_t vl);
vint32m4_t vrgather_vv_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, vuint32m4_t index, size_t vl);
vint32m4_t vrgather_vx_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, size_t index, size_t vl);
vint32m8_t vrgather_vv_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, vuint32m8_t index, size_t vl);
vint32m8_t vrgather_vx_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, size_t index, size_t vl);
```

```
vint64m1_t vrgather_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vuint64m1_t index, size_t vl);
vint64m1_t vrgather_vx_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, size_t index, size_t vl);
vint64m2_t vrgather_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vuint64m2_t index, size_t vl);
vint64m2_t vrgather_vx_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, size_t index, size_t vl);
vint64m4_t vrgather_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vuint64m4_t index, size_t vl);
vint64m4_t vrgather_vx_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, size_t index, size_t vl);
vint64m8_t vrgather_vv_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, vuint64m8_t index, size_t vl);
vint64m8_t vrgather_vx_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, size_t index, size_t vl);
vuint8mf8_t vrgather_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t index, size_t vl);
vuint8mf8_t vrgather_vx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, size_t index, size_t vl);
vuint8mf4_t vrgather_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t index, size_t vl);
vuint8mf4_t vrgather_vx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, size_t index, size_t vl);
vuint8mf2_t vrgather_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t index, size_t vl);
vuint8mf2_t vrgather_vx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, size_t index, size_t vl);
vuint8m1_t vrgather_vv_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint8m1_t op1, vuint8m1_t index, size_t vl);
vuint8m1_t vrgather_vx_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint8m1_t op1, size_t index, size_t vl);
vuint8m2_t vrgather_vv_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint8m2_t op1, vuint8m2_t index, size_t vl);
vuint8m2_t vrgather_vx_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint8m2_t op1, size_t index, size_t vl);
vuint8m4_t vrgather_vv_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint8m4_t op1, vuint8m4_t index, size_t vl);
vuint8m4_t vrgather_vx_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint8m4_t op1, size_t index, size_t vl);
vuint8m8_t vrgather_vv_u8m8_m (vbool1_t mask, vuint8m8_t
    maskedoff, vuint8m8_t op1, vuint8m8_t index, size_t vl);
vuint8m8_t vrgather_vx_u8m8_m (vbool1_t mask, vuint8m8_t
    maskedoff, vuint8m8_t op1, size_t index, size_t vl);
vuint16mf4_t vrgather_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, vuint16mf4_t index, size_t vl);
```

```
vuint16mf4_t vrgather_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint16mf4_t op1, size_t index, size_t vl);
vuint16mf2_t vrgather_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, vuint16mf2_t index, size_t vl);
vuint16mf2_t vrgather_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint16mf2_t op1, size_t index, size_t vl);
vuint16m1_t vrgather_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t index, size_t vl);
vuint16m1_t vrgather_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, size_t index, size_t vl);
vuint16m2_t vrgather_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t index, size_t vl);
vuint16m2_t vrgather_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, size_t index, size_t vl);
vuint16m4_t vrgather_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t index, size_t vl);
vuint16m4_t vrgather_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, size_t index, size_t vl);
vuint16m8_t vrgather_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t index, size_t vl);
vuint16m8_t vrgather_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, size_t index, size_t vl);
vuint32mf2_t vrgather_vv_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, vuint32mf2_t index, size_t vl);
vuint32mf2_t vrgather_vx_u32mf2_m (vbool64_t mask, vuint32mf2_t
    maskedoff, vuint32mf2_t op1, size_t index, size_t vl);
vuint32m1_t vrgather_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint32m1_t index, size_t vl);
vuint32m1_t vrgather_vx_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, size_t index, size_t vl);
vuint32m2_t vrgather_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint32m2_t index, size_t vl);
vuint32m2_t vrgather_vx_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, size_t index, size_t vl);
vuint32m4_t vrgather_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint32m4_t index, size_t vl);
vuint32m4_t vrgather_vx_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, size_t index, size_t vl);
vuint32m8_t vrgather_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint32m8_t index, size_t vl);
vuint32m8_t vrgather_vx_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, size_t index, size_t vl);
vuint64m1_t vrgather_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint64m1_t index, size_t vl);
vuint64m1_t vrgather_vx_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, size_t index, size_t vl);
```

```
vuint64m2_t vrgather_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint64m2_t index, size_t vl);
vuint64m2_t vrgather_vx_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, size_t index, size_t vl);
vuint64m4_t vrgather_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint64m4_t index, size_t vl);
vuint64m4_t vrgather_vx_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, size_t index, size_t vl);
vuint64m8_t vrgather_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint64m8_t index, size_t vl);
vuint64m8_t vrgather_vx_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, size_t index, size_t vl);
vfloat16mf4_t vrgather_vv_f16mf4_m (vbool64_t mask,
    vfloat16mf4_t maskedoff, vfloat16mf4_t op1, vuint16mf4_t
    index, size_t vl);
vfloat16mf4_t vrgather_vx_f16mf4_m (vbool64_t mask,
    vfloat16mf4_t maskedoff, vfloat16mf4_t op1, size_t index,
    size_t vl);
vfloat16mf2_t vrgather_vv_f16mf2_m (vbool32_t mask,
    vfloat16mf2_t maskedoff, vfloat16mf2_t op1, vuint16mf2_t
    index, size_t vl);
vfloat16mf2_t vrgather_vx_f16mf2_m (vbool32_t mask,
    vfloat16mf2_t maskedoff, vfloat16mf2_t op1, size_t index,
    size_t vl);
vfloat16m1_t vrgather_vv_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, vuint16m1_t index, size_t vl);
vfloat16m1_t vrgather_vx_f16m1_m (vbool16_t mask, vfloat16m1_t
    maskedoff, vfloat16m1_t op1, size_t index, size_t vl);
vfloat16m2_t vrgather_vv_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, vuint16m2_t index, size_t vl);
vfloat16m2_t vrgather_vx_f16m2_m (vbool8_t mask, vfloat16m2_t
    maskedoff, vfloat16m2_t op1, size_t index, size_t vl);
vfloat16m4_t vrgather_vv_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, vuint16m4_t index, size_t vl);
vfloat16m4_t vrgather_vx_f16m4_m (vbool4_t mask, vfloat16m4_t
    maskedoff, vfloat16m4_t op1, size_t index, size_t vl);
vfloat16m8_t vrgather_vv_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, vuint16m8_t index, size_t vl);
vfloat16m8_t vrgather_vx_f16m8_m (vbool2_t mask, vfloat16m8_t
    maskedoff, vfloat16m8_t op1, size_t index, size_t vl);
vfloat32mf2_t vrgather_vv_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t maskedoff, vfloat32mf2_t op1, vuint32mf2_t
    index, size_t vl);
vfloat32mf2_t vrgather_vx_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t maskedoff, vfloat32mf2_t op1, size_t index,
    size_t vl);
```

```
vfloat32m1_t vrgather_vv_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, vuint32m1_t index, size_t vl);
vfloat32m1_t vrgather_vx_f32m1_m (vbool32_t mask, vfloat32m1_t
    maskedoff, vfloat32m1_t op1, size_t index, size_t vl);
vfloat32m2_t vrgather_vv_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, vuint32m2_t index, size_t vl);
vfloat32m2_t vrgather_vx_f32m2_m (vbool16_t mask, vfloat32m2_t
    maskedoff, vfloat32m2_t op1, size_t index, size_t vl);
vfloat32m4_t vrgather_vv_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, vuint32m4_t index, size_t vl);
vfloat32m4_t vrgather_vx_f32m4_m (vbool8_t mask, vfloat32m4_t
    maskedoff, vfloat32m4_t op1, size_t index, size_t vl);
vfloat32m8_t vrgather_vv_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, vuint32m8_t index, size_t vl);
vfloat32m8_t vrgather_vx_f32m8_m (vbool4_t mask, vfloat32m8_t
    maskedoff, vfloat32m8_t op1, size_t index, size_t vl);
vfloat64m1_t vrgather_vv_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, vuint64m1_t index, size_t vl);
vfloat64m1_t vrgather_vx_f64m1_m (vbool64_t mask, vfloat64m1_t
    maskedoff, vfloat64m1_t op1, size_t index, size_t vl);
vfloat64m2_t vrgather_vv_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, vuint64m2_t index, size_t vl);
vfloat64m2_t vrgather_vx_f64m2_m (vbool32_t mask, vfloat64m2_t
    maskedoff, vfloat64m2_t op1, size_t index, size_t vl);
vfloat64m4_t vrgather_vv_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, vuint64m4_t index, size_t vl);
vfloat64m4_t vrgather_vx_f64m4_m (vbool16_t mask, vfloat64m4_t
    maskedoff, vfloat64m4_t op1, size_t index, size_t vl);
vfloat64m8_t vrgather_vv_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, vuint64m8_t index, size_t vl);
vfloat64m8_t vrgather_vx_f64m8_m (vbool8_t mask, vfloat64m8_t
    maskedoff, vfloat64m8_t op1, size_t index, size_t vl);
vint8mf8_t vrgatherei16_vv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint8mf8_t op1, vuint16mf4_t op2, size_t vl);
vint8mf4_t vrgatherei16_vv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint8mf4_t op1, vuint16mf2_t op2, size_t vl);
vint8mf2_t vrgatherei16_vv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint8mf2_t op1, vuint16m1_t op2, size_t vl);
vint8m1_t vrgatherei16_vv_i8m1_m (vbool8_t mask, vint8m1_t
    maskedoff, vint8m1_t op1, vuint16m2_t op2, size_t vl);
vint8m2_t vrgatherei16_vv_i8m2_m (vbool4_t mask, vint8m2_t
    maskedoff, vint8m2_t op1, vuint16m4_t op2, size_t vl);
vint8m4_t vrgatherei16_vv_i8m4_m (vbool2_t mask, vint8m4_t
    maskedoff, vint8m4_t op1, vuint16m8_t op2, size_t vl);
vint16mf4_t vrgatherei16_vv_i16mf4_m (vbool64_t mask,
    vint16mf4_t maskedoff, vint16mf4_t op1, vuint16mf4_t op2,
```

```
        size_t vl);
vint16mf2_t vrgatherei16_vv_i16mf2_m (vbool32_t mask,
    vint16mf2_t maskedoff, vint16mf2_t op1, vuint16mf2_t op2,
    size_t vl);
vint16m1_t vrgatherei16_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint16m1_t op1, vuint16m1_t op2, size_t vl);
vint16m2_t vrgatherei16_vv_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint16m2_t op1, vuint16m2_t op2, size_t vl);
vint16m4_t vrgatherei16_vv_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint16m4_t op1, vuint16m4_t op2, size_t vl);
vint16m8_t vrgatherei16_vv_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint16m8_t op1, vuint16m8_t op2, size_t vl);
vint32mf2_t vrgatherei16_vv_i32mf2_m (vbool64_t mask,
    vint32mf2_t maskedoff, vint32mf2_t op1, vuint16mf4_t op2,
    size_t vl);
vint32m1_t vrgatherei16_vv_i32m1_m (vbool32_t mask, vint32m1_t
    maskedoff, vint32m1_t op1, vuint16mf2_t op2, size_t vl);
vint32m2_t vrgatherei16_vv_i32m2_m (vbool16_t mask, vint32m2_t
    maskedoff, vint32m2_t op1, vuint16m1_t op2, size_t vl);
vint32m4_t vrgatherei16_vv_i32m4_m (vbool8_t mask, vint32m4_t
    maskedoff, vint32m4_t op1, vuint16m2_t op2, size_t vl);
vint32m8_t vrgatherei16_vv_i32m8_m (vbool4_t mask, vint32m8_t
    maskedoff, vint32m8_t op1, vuint16m4_t op2, size_t vl);
vint64m1_t vrgatherei16_vv_i64m1_m (vbool64_t mask, vint64m1_t
    maskedoff, vint64m1_t op1, vuint16mf4_t op2, size_t vl);
vint64m2_t vrgatherei16_vv_i64m2_m (vbool32_t mask, vint64m2_t
    maskedoff, vint64m2_t op1, vuint16mf2_t op2, size_t vl);
vint64m4_t vrgatherei16_vv_i64m4_m (vbool16_t mask, vint64m4_t
    maskedoff, vint64m4_t op1, vuint16m1_t op2, size_t vl);
vint64m8_t vrgatherei16_vv_i64m8_m (vbool8_t mask, vint64m8_t
    maskedoff, vint64m8_t op1, vuint16m2_t op2, size_t vl);
vuint8mf8_t vrgatherei16_vv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint8mf8_t op1, vuint16mf4_t op2, size_t vl);
vuint8mf4_t vrgatherei16_vv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint8mf4_t op1, vuint16mf2_t op2, size_t vl);
vuint8mf2_t vrgatherei16_vv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint8mf2_t op1, vuint16m1_t op2, size_t vl);
vuint8m1_t vrgatherei16_vv_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint8m1_t op1, vuint16m2_t op2, size_t vl);
vuint8m2_t vrgatherei16_vv_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint8m2_t op1, vuint16m4_t op2, size_t vl);
vuint8m4_t vrgatherei16_vv_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint8m4_t op1, vuint16m8_t op2, size_t vl);
vuint16mf4_t vrgatherei16_vv_u16mf4_m (vbool64_t mask,
    vuint16mf4_t maskedoff, vuint16mf4_t op1, vuint16mf4_t op2,
    size_t vl);
```

```
vuint16mf2_t vrgatherei16_vv_u16mf2_m (vbool32_t mask,
    vuint16mf2_t maskedoff, vuint16mf2_t op1, vuint16mf2_t op2,
    size_t vl);
vuint16m1_t vrgatherei16_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint16m1_t op1, vuint16m1_t op2, size_t vl);
vuint16m2_t vrgatherei16_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint16m2_t op1, vuint16m2_t op2, size_t vl);
vuint16m4_t vrgatherei16_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint16m4_t op1, vuint16m4_t op2, size_t vl);
vuint16m8_t vrgatherei16_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint16m8_t op1, vuint16m8_t op2, size_t vl);
vuint32mf2_t vrgatherei16_vv_u32mf2_m (vbool64_t mask,
    vuint32mf2_t maskedoff, vuint32mf2_t op1, vuint16mf4_t op2,
    size_t vl);
vuint32m1_t vrgatherei16_vv_u32m1_m (vbool32_t mask, vuint32m1_t
    maskedoff, vuint32m1_t op1, vuint16mf2_t op2, size_t vl);
vuint32m2_t vrgatherei16_vv_u32m2_m (vbool16_t mask, vuint32m2_t
    maskedoff, vuint32m2_t op1, vuint16m1_t op2, size_t vl);
vuint32m4_t vrgatherei16_vv_u32m4_m (vbool8_t mask, vuint32m4_t
    maskedoff, vuint32m4_t op1, vuint16m2_t op2, size_t vl);
vuint32m8_t vrgatherei16_vv_u32m8_m (vbool4_t mask, vuint32m8_t
    maskedoff, vuint32m8_t op1, vuint16m4_t op2, size_t vl);
vuint64m1_t vrgatherei16_vv_u64m1_m (vbool64_t mask, vuint64m1_t
    maskedoff, vuint64m1_t op1, vuint16mf4_t op2, size_t vl);
vuint64m2_t vrgatherei16_vv_u64m2_m (vbool32_t mask, vuint64m2_t
    maskedoff, vuint64m2_t op1, vuint16mf2_t op2, size_t vl);
vuint64m4_t vrgatherei16_vv_u64m4_m (vbool16_t mask, vuint64m4_t
    maskedoff, vuint64m4_t op1, vuint16m1_t op2, size_t vl);
vuint64m8_t vrgatherei16_vv_u64m8_m (vbool8_t mask, vuint64m8_t
    maskedoff, vuint64m8_t op1, vuint16m2_t op2, size_t vl);
vfloat16mf4_t vrgatherei16_vv_f16mf4_m (vbool64_t mask,
    vfloat16mf4_t maskedoff, vfloat16mf4_t op1, vuint16mf4_t
    op2, size_t vl);
vfloat16mf2_t vrgatherei16_vv_f16mf2_m (vbool32_t mask,
    vfloat16mf2_t maskedoff, vfloat16mf2_t op1, vuint16mf2_t
    op2, size_t vl);
vfloat16m1_t vrgatherei16_vv_f16m1_m (vbool16_t mask,
    vfloat16m1_t maskedoff, vfloat16m1_t op1, vuint16m1_t op2,
    size_t vl);
vfloat16m2_t vrgatherei16_vv_f16m2_m (vbool8_t mask,
    vfloat16m2_t maskedoff, vfloat16m2_t op1, vuint16m2_t op2,
    size_t vl);
vfloat16m4_t vrgatherei16_vv_f16m4_m (vbool4_t mask,
    vfloat16m4_t maskedoff, vfloat16m4_t op1, vuint16m4_t op2,
    size_t vl);
```

```
vfloat16m8_t vrgatherei16_vv_f16m8_m (vbool2_t mask,
    vfloat16m8_t maskedoff, vfloat16m8_t op1, vuint16m8_t op2,
    size_t vl);
vfloat32mf2_t vrgatherei16_vv_f32mf2_m (vbool64_t mask,
    vfloat32mf2_t maskedoff, vfloat32mf2_t op1, vuint16mf4_t
    op2, size_t vl);
vfloat32m1_t vrgatherei16_vv_f32m1_m (vbool32_t mask,
    vfloat32m1_t maskedoff, vfloat32m1_t op1, vuint16mf2_t op2,
    size_t vl);
vfloat32m2_t vrgatherei16_vv_f32m2_m (vbool16_t mask,
    vfloat32m2_t maskedoff, vfloat32m2_t op1, vuint16m1_t op2,
    size_t vl);
vfloat32m4_t vrgatherei16_vv_f32m4_m (vbool8_t mask,
    vfloat32m4_t maskedoff, vfloat32m4_t op1, vuint16m2_t op2,
    size_t vl);
vfloat32m8_t vrgatherei16_vv_f32m8_m (vbool4_t mask,
    vfloat32m8_t maskedoff, vfloat32m8_t op1, vuint16m4_t op2,
    size_t vl);
vfloat64m1_t vrgatherei16_vv_f64m1_m (vbool64_t mask,
    vfloat64m1_t maskedoff, vfloat64m1_t op1, vuint16mf4_t op2,
    size_t vl);
vfloat64m2_t vrgatherei16_vv_f64m2_m (vbool32_t mask,
    vfloat64m2_t maskedoff, vfloat64m2_t op1, vuint16mf2_t op2,
    size_t vl);
vfloat64m4_t vrgatherei16_vv_f64m4_m (vbool16_t mask,
    vfloat64m4_t maskedoff, vfloat64m4_t op1, vuint16m1_t op2,
    size_t vl);
vfloat64m8_t vrgatherei16_vv_f64m8_m (vbool8_t mask,
    vfloat64m8_t maskedoff, vfloat64m8_t op1, vuint16m2_t op2,
    size_t vl);
```

Vector Compress Functions:

Prototypes:

```
vint8mf8_t vcompress_vm_i8mf8 (vbool64_t mask, vint8mf8_t dest,
    vint8mf8_t src, size_t vl);
vint8mf4_t vcompress_vm_i8mf4 (vbool32_t mask, vint8mf4_t dest,
    vint8mf4_t src, size_t vl);
vint8mf2_t vcompress_vm_i8mf2 (vbool16_t mask, vint8mf2_t dest,
    vint8mf2_t src, size_t vl);
vint8m1_t vcompress_vm_i8m1 (vbool8_t mask, vint8m1_t dest,
    vint8m1_t src, size_t vl);
vint8m2_t vcompress_vm_i8m2 (vbool4_t mask, vint8m2_t dest,
    vint8m2_t src, size_t vl);
```

```
vint8m4_t vcompress_vm_i8m4 (vbool2_t mask, vint8m4_t dest,
    vint8m4_t src, size_t vl);
vint8m8_t vcompress_vm_i8m8 (vbool1_t mask, vint8m8_t dest,
    vint8m8_t src, size_t vl);
vint16mf4_t vcompress_vm_i16mf4 (vbool64_t mask, vint16mf4_t
    dest, vint16mf4_t src, size_t vl);
vint16mf2_t vcompress_vm_i16mf2 (vbool32_t mask, vint16mf2_t
    dest, vint16mf2_t src, size_t vl);
vint16m1_t vcompress_vm_i16m1 (vbool16_t mask, vint16m1_t dest,
    vint16m1_t src, size_t vl);
vint16m2_t vcompress_vm_i16m2 (vbool8_t mask, vint16m2_t dest,
    vint16m2_t src, size_t vl);
vint16m4_t vcompress_vm_i16m4 (vbool4_t mask, vint16m4_t dest,
    vint16m4_t src, size_t vl);
vint16m8_t vcompress_vm_i16m8 (vbool2_t mask, vint16m8_t dest,
    vint16m8_t src, size_t vl);
vint32mf2_t vcompress_vm_i32mf2 (vbool64_t mask, vint32mf2_t
    dest, vint32mf2_t src, size_t vl);
vint32m1_t vcompress_vm_i32m1 (vbool32_t mask, vint32m1_t dest,
    vint32m1_t src, size_t vl);
vint32m2_t vcompress_vm_i32m2 (vbool16_t mask, vint32m2_t dest,
    vint32m2_t src, size_t vl);
vint32m4_t vcompress_vm_i32m4 (vbool8_t mask, vint32m4_t dest,
    vint32m4_t src, size_t vl);
vint32m8_t vcompress_vm_i32m8 (vbool4_t mask, vint32m8_t dest,
    vint32m8_t src, size_t vl);
vint64m1_t vcompress_vm_i64m1 (vbool64_t mask, vint64m1_t dest,
    vint64m1_t src, size_t vl);
vint64m2_t vcompress_vm_i64m2 (vbool32_t mask, vint64m2_t dest,
    vint64m2_t src, size_t vl);
vint64m4_t vcompress_vm_i64m4 (vbool16_t mask, vint64m4_t dest,
    vint64m4_t src, size_t vl);
vint64m8_t vcompress_vm_i64m8 (vbool8_t mask, vint64m8_t dest,
    vint64m8_t src, size_t vl);
vuint8mf8_t vcompress_vm_u8mf8 (vbool64_t mask, vuint8mf8_t
    dest, vuint8mf8_t src, size_t vl);
vuint8mf4_t vcompress_vm_u8mf4 (vbool32_t mask, vuint8mf4_t
    dest, vuint8mf4_t src, size_t vl);
vuint8mf2_t vcompress_vm_u8mf2 (vbool16_t mask, vuint8mf2_t
    dest, vuint8mf2_t src, size_t vl);
vuint8m1_t vcompress_vm_u8m1 (vbool8_t mask, vuint8m1_t dest,
    vuint8m1_t src, size_t vl);
vuint8m2_t vcompress_vm_u8m2 (vbool4_t mask, vuint8m2_t dest,
    vuint8m2_t src, size_t vl);
vuint8m4_t vcompress_vm_u8m4 (vbool2_t mask, vuint8m4_t dest,
    vuint8m4_t src, size_t vl);
```

```
vuint8m8_t vcompress_vm_u8m8 (vbool1_t mask, vuint8m8_t dest,
    vuint8m8_t src, size_t vl);
vuint16mf4_t vcompress_vm_u16mf4 (vbool64_t mask, vuint16mf4_t
    dest, vuint16mf4_t src, size_t vl);
vuint16mf2_t vcompress_vm_u16mf2 (vbool32_t mask, vuint16mf2_t
    dest, vuint16mf2_t src, size_t vl);
vuint16m1_t vcompress_vm_u16m1 (vbool16_t mask, vuint16m1_t
    dest, vuint16m1_t src, size_t vl);
vuint16m2_t vcompress_vm_u16m2 (vbool8_t mask, vuint16m2_t dest,
    vuint16m2_t src, size_t vl);
vuint16m4_t vcompress_vm_u16m4 (vbool4_t mask, vuint16m4_t dest,
    vuint16m4_t src, size_t vl);
vuint16m8_t vcompress_vm_u16m8 (vbool2_t mask, vuint16m8_t dest,
    vuint16m8_t src, size_t vl);
vuint32mf2_t vcompress_vm_u32mf2 (vbool64_t mask, vuint32mf2_t
    dest, vuint32mf2_t src, size_t vl);
vuint32m1_t vcompress_vm_u32m1 (vbool32_t mask, vuint32m1_t
    dest, vuint32m1_t src, size_t vl);
vuint32m2_t vcompress_vm_u32m2 (vbool16_t mask, vuint32m2_t
    dest, vuint32m2_t src, size_t vl);
vuint32m4_t vcompress_vm_u32m4 (vbool8_t mask, vuint32m4_t dest,
    vuint32m4_t src, size_t vl);
vuint32m8_t vcompress_vm_u32m8 (vbool4_t mask, vuint32m8_t dest,
    vuint32m8_t src, size_t vl);
vuint64m1_t vcompress_vm_u64m1 (vbool64_t mask, vuint64m1_t
    dest, vuint64m1_t src, size_t vl);
vuint64m2_t vcompress_vm_u64m2 (vbool32_t mask, vuint64m2_t
    dest, vuint64m2_t src, size_t vl);
vuint64m4_t vcompress_vm_u64m4 (vbool16_t mask, vuint64m4_t
    dest, vuint64m4_t src, size_t vl);
vuint64m8_t vcompress_vm_u64m8 (vbool8_t mask, vuint64m8_t dest,
    vuint64m8_t src, size_t vl);
vfloat16mf4_t vcompress_vm_f16mf4 (vbool64_t mask, vfloat16mf4_t
    dest, vfloat16mf4_t src, size_t vl);
vfloat16mf2_t vcompress_vm_f16mf2 (vbool32_t mask, vfloat16mf2_t
    dest, vfloat16mf2_t src, size_t vl);
vfloat16m1_t vcompress_vm_f16m1 (vbool16_t mask, vfloat16m1_t
    dest, vfloat16m1_t src, size_t vl);
vfloat16m2_t vcompress_vm_f16m2 (vbool8_t mask, vfloat16m2_t
    dest, vfloat16m2_t src, size_t vl);
vfloat16m4_t vcompress_vm_f16m4 (vbool4_t mask, vfloat16m4_t
    dest, vfloat16m4_t src, size_t vl);
vfloat16m8_t vcompress_vm_f16m8 (vbool2_t mask, vfloat16m8_t
    dest, vfloat16m8_t src, size_t vl);
vfloat32mf2_t vcompress_vm_f32mf2 (vbool64_t mask, vfloat32mf2_t
    dest, vfloat32mf2_t src, size_t vl);
```

```
vfloat32m1_t vcompress_vm_f32m1 (vbool32_t mask, vfloat32m1_t
    dest, vfloat32m1_t src, size_t vl);
vfloat32m2_t vcompress_vm_f32m2 (vbool16_t mask, vfloat32m2_t
    dest, vfloat32m2_t src, size_t vl);
vfloat32m4_t vcompress_vm_f32m4 (vbool8_t mask, vfloat32m4_t
    dest, vfloat32m4_t src, size_t vl);
vfloat32m8_t vcompress_vm_f32m8 (vbool4_t mask, vfloat32m8_t
    dest, vfloat32m8_t src, size_t vl);
vfloat64m1_t vcompress_vm_f64m1 (vbool64_t mask, vfloat64m1_t
    dest, vfloat64m1_t src, size_t vl);
vfloat64m2_t vcompress_vm_f64m2 (vbool32_t mask, vfloat64m2_t
    dest, vfloat64m2_t src, size_t vl);
vfloat64m4_t vcompress_vm_f64m4 (vbool16_t mask, vfloat64m4_t
    dest, vfloat64m4_t src, size_t vl);
vfloat64m8_t vcompress_vm_f64m8 (vbool8_t mask, vfloat64m8_t
    dest, vfloat64m8_t src, size_t vl);
```

Miscellaneous Vector Functions:

Reinterpret Cast Conversion Functions:

Prototypes:

```
// Reinterpret between different type under the same SEW/LMUL
vuint8mf8_t vreinterpret_v_i8mf8_u8mf8 (vint8mf8_t src);
vuint8mf4_t vreinterpret_v_i8mf4_u8mf4 (vint8mf4_t src);
vuint8mf2_t vreinterpret_v_i8mf2_u8mf2 (vint8mf2_t src);
vuint8m1_t vreinterpret_v_i8m1_u8m1 (vint8m1_t src);
vuint8m2_t vreinterpret_v_i8m2_u8m2 (vint8m2_t src);
vuint8m4_t vreinterpret_v_i8m4_u8m4 (vint8m4_t src);
vuint8m8_t vreinterpret_v_i8m8_u8m8 (vint8m8_t src);
vint8mf8_t vreinterpret_v_u8mf8_i8mf8 (vuint8mf8_t src);
vint8mf4_t vreinterpret_v_u8mf4_i8mf4 (vuint8mf4_t src);
vint8mf2_t vreinterpret_v_u8mf2_i8mf2 (vuint8mf2_t src);
vint8m1_t vreinterpret_v_u8m1_i8m1 (vuint8m1_t src);
vint8m2_t vreinterpret_v_u8m2_i8m2 (vuint8m2_t src);
vint8m4_t vreinterpret_v_u8m4_i8m4 (vuint8m4_t src);
vint8m8_t vreinterpret_v_u8m8_i8m8 (vuint8m8_t src);
vuint16mf4_t vreinterpret_v_i16mf4_u16mf4 (vint16mf4_t src);
vuint16mf2_t vreinterpret_v_i16mf2_u16mf2 (vint16mf2_t src);
vuint16m1_t vreinterpret_v_i16m1_u16m1 (vint16m1_t src);
vuint16m2_t vreinterpret_v_i16m2_u16m2 (vint16m2_t src);
vuint16m4_t vreinterpret_v_i16m4_u16m4 (vint16m4_t src);
vuint16m8_t vreinterpret_v_i16m8_u16m8 (vint16m8_t src);
vint16mf4_t vreinterpret_v_u16mf4_i16mf4 (vuint16mf4_t src);
vint16mf2_t vreinterpret_v_u16mf2_i16mf2 (vuint16mf2_t src);
```

```
vint16m1_t vreinterpret_v_u16m1_i16m1 (vuint16m1_t src);
vint16m2_t vreinterpret_v_u16m2_i16m2 (vuint16m2_t src);
vint16m4_t vreinterpret_v_u16m4_i16m4 (vuint16m4_t src);
vint16m8_t vreinterpret_v_u16m8_i16m8 (vuint16m8_t src);
vint16mf4_t vreinterpret_v_f16mf4_i16mf4 (vfloat16mf4_t src);
vint16mf2_t vreinterpret_v_f16mf2_i16mf2 (vfloat16mf2_t src);
vint16m1_t vreinterpret_v_f16m1_i16m1 (vfloat16m1_t src);
vint16m2_t vreinterpret_v_f16m2_i16m2 (vfloat16m2_t src);
vint16m4_t vreinterpret_v_f16m4_i16m4 (vfloat16m4_t src);
vint16m8_t vreinterpret_v_f16m8_i16m8 (vfloat16m8_t src);
vuint16mf4_t vreinterpret_v_f16mf4_u16mf4 (vfloat16mf4_t src);
vuint16mf2_t vreinterpret_v_f16mf2_u16mf2 (vfloat16mf2_t src);
vuint16m1_t vreinterpret_v_f16m1_u16m1 (vfloat16m1_t src);
vuint16m2_t vreinterpret_v_f16m2_u16m2 (vfloat16m2_t src);
vuint16m4_t vreinterpret_v_f16m4_u16m4 (vfloat16m4_t src);
vuint16m8_t vreinterpret_v_f16m8_u16m8 (vfloat16m8_t src);
vfloat16mf4_t vreinterpret_v_i16mf4_f16mf4 (vint16mf4_t src);
vfloat16mf2_t vreinterpret_v_i16mf2_f16mf2 (vint16mf2_t src);
vfloat16m1_t vreinterpret_v_i16m1_f16m1 (vint16m1_t src);
vfloat16m2_t vreinterpret_v_i16m2_f16m2 (vint16m2_t src);
vfloat16m4_t vreinterpret_v_i16m4_f16m4 (vint16m4_t src);
vfloat16m8_t vreinterpret_v_i16m8_f16m8 (vint16m8_t src);
vfloat16mf4_t vreinterpret_v_u16mf4_f16mf4 (vuint16mf4_t src);
vfloat16mf2_t vreinterpret_v_u16mf2_f16mf2 (vuint16mf2_t src);
vfloat16m1_t vreinterpret_v_u16m1_f16m1 (vuint16m1_t src);
vfloat16m2_t vreinterpret_v_u16m2_f16m2 (vuint16m2_t src);
vfloat16m4_t vreinterpret_v_u16m4_f16m4 (vuint16m4_t src);
vfloat16m8_t vreinterpret_v_u16m8_f16m8 (vuint16m8_t src);
vuint32mf2_t vreinterpret_v_i32mf2_u32mf2 (vint32mf2_t src);
vuint32m1_t vreinterpret_v_i32m1_u32m1 (vint32m1_t src);
vuint32m2_t vreinterpret_v_i32m2_u32m2 (vint32m2_t src);
vuint32m4_t vreinterpret_v_i32m4_u32m4 (vint32m4_t src);
vuint32m8_t vreinterpret_v_i32m8_u32m8 (vint32m8_t src);
vint32mf2_t vreinterpret_v_u32mf2_i32mf2 (vuint32mf2_t src);
vint32m1_t vreinterpret_v_u32m1_i32m1 (vuint32m1_t src);
vint32m2_t vreinterpret_v_u32m2_i32m2 (vuint32m2_t src);
vint32m4_t vreinterpret_v_u32m4_i32m4 (vuint32m4_t src);
vint32m8_t vreinterpret_v_u32m8_i32m8 (vuint32m8_t src);
vint32mf2_t vreinterpret_v_f32mf2_i32mf2 (vfloat32mf2_t src);
vint32m1_t vreinterpret_v_f32m1_i32m1 (vfloat32m1_t src);
vint32m2_t vreinterpret_v_f32m2_i32m2 (vfloat32m2_t src);
vint32m4_t vreinterpret_v_f32m4_i32m4 (vfloat32m4_t src);
vint32m8_t vreinterpret_v_f32m8_i32m8 (vfloat32m8_t src);
vuint32mf2_t vreinterpret_v_f32mf2_u32mf2 (vfloat32mf2_t src);
vuint32m1_t vreinterpret_v_f32m1_u32m1 (vfloat32m1_t src);
vuint32m2_t vreinterpret_v_f32m2_u32m2 (vfloat32m2_t src);
```

```
vuint32m4_t vreinterpret_v_f32m4_u32m4 (vfloat32m4_t src);
vuint32m8_t vreinterpret_v_f32m8_u32m8 (vfloat32m8_t src);
vfloat32mf2_t vreinterpret_v_i32mf2_f32mf2 (vint32mf2_t src);
vfloat32m1_t vreinterpret_v_i32m1_f32m1 (vint32m1_t src);
vfloat32m2_t vreinterpret_v_i32m2_f32m2 (vint32m2_t src);
vfloat32m4_t vreinterpret_v_i32m4_f32m4 (vint32m4_t src);
vfloat32m8_t vreinterpret_v_i32m8_f32m8 (vint32m8_t src);
vfloat32mf2_t vreinterpret_v_u32mf2_f32mf2 (vuint32mf2_t src);
vfloat32m1_t vreinterpret_v_u32m1_f32m1 (vuint32m1_t src);
vfloat32m2_t vreinterpret_v_u32m2_f32m2 (vuint32m2_t src);
vfloat32m4_t vreinterpret_v_u32m4_f32m4 (vuint32m4_t src);
vfloat32m8_t vreinterpret_v_u32m8_f32m8 (vuint32m8_t src);
vuint64m1_t vreinterpret_v_i64m1_u64m1 (vint64m1_t src);
vuint64m2_t vreinterpret_v_i64m2_u64m2 (vint64m2_t src);
vuint64m4_t vreinterpret_v_i64m4_u64m4 (vint64m4_t src);
vuint64m8_t vreinterpret_v_i64m8_u64m8 (vint64m8_t src);
vint64m1_t vreinterpret_v_u64m1_i64m1 (vuint64m1_t src);
vint64m2_t vreinterpret_v_u64m2_i64m2 (vuint64m2_t src);
vint64m4_t vreinterpret_v_u64m4_i64m4 (vuint64m4_t src);
vint64m8_t vreinterpret_v_u64m8_i64m8 (vuint64m8_t src);
vint64m1_t vreinterpret_v_f64m1_i64m1 (vfloat64m1_t src);
vint64m2_t vreinterpret_v_f64m2_i64m2 (vfloat64m2_t src);
vint64m4_t vreinterpret_v_f64m4_i64m4 (vfloat64m4_t src);
vint64m8_t vreinterpret_v_f64m8_i64m8 (vfloat64m8_t src);
vuint64m1_t vreinterpret_v_f64m1_u64m1 (vfloat64m1_t src);
vuint64m2_t vreinterpret_v_f64m2_u64m2 (vfloat64m2_t src);
vuint64m4_t vreinterpret_v_f64m4_u64m4 (vfloat64m4_t src);
vuint64m8_t vreinterpret_v_f64m8_u64m8 (vfloat64m8_t src);
vfloat64m1_t vreinterpret_v_i64m1_f64m1 (vint64m1_t src);
vfloat64m2_t vreinterpret_v_i64m2_f64m2 (vint64m2_t src);
vfloat64m4_t vreinterpret_v_i64m4_f64m4 (vint64m4_t src);
vfloat64m8_t vreinterpret_v_i64m8_f64m8 (vint64m8_t src);
vfloat64m1_t vreinterpret_v_u64m1_f64m1 (vuint64m1_t src);
vfloat64m2_t vreinterpret_v_u64m2_f64m2 (vuint64m2_t src);
vfloat64m4_t vreinterpret_v_u64m4_f64m4 (vuint64m4_t src);
vfloat64m8_t vreinterpret_v_u64m8_f64m8 (vuint64m8_t src);
// Reinterpret between different SEW under the same LMUL
vint16mf4_t vreinterpret_v_i8mf4_i16mf4 (vint8mf4_t src);
vint16mf2_t vreinterpret_v_i8mf2_i16mf2 (vint8mf2_t src);
vint16m1_t vreinterpret_v_i8m1_i16m1 (vint8m1_t src);
vint16m2_t vreinterpret_v_i8m2_i16m2 (vint8m2_t src);
vint16m4_t vreinterpret_v_i8m4_i16m4 (vint8m4_t src);
vint16m8_t vreinterpret_v_i8m8_i16m8 (vint8m8_t src);
vuint16mf4_t vreinterpret_v_u8mf4_u16mf4 (vuint8mf4_t src);
vuint16mf2_t vreinterpret_v_u8mf2_u16mf2 (vuint8mf2_t src);
vuint16m1_t vreinterpret_v_u8m1_u16m1 (vuint8m1_t src);
```

```
vuint16m2_t vreinterpret_v_u8m2_u16m2 (vuint8m2_t src);
vuint16m4_t vreinterpret_v_u8m4_u16m4 (vuint8m4_t src);
vuint16m8_t vreinterpret_v_u8m8_u16m8 (vuint8m8_t src);
vint32mf2_t vreinterpret_v_i8mf2_i32mf2 (vint8mf2_t src);
vint32m1_t vreinterpret_v_i8m1_i32m1 (vint8m1_t src);
vint32m2_t vreinterpret_v_i8m2_i32m2 (vint8m2_t src);
vint32m4_t vreinterpret_v_i8m4_i32m4 (vint8m4_t src);
vint32m8_t vreinterpret_v_i8m8_i32m8 (vint8m8_t src);
vuint32mf2_t vreinterpret_v_u8mf2_u32mf2 (vuint8mf2_t src);
vuint32m1_t vreinterpret_v_u8m1_u32m1 (vuint8m1_t src);
vuint32m2_t vreinterpret_v_u8m2_u32m2 (vuint8m2_t src);
vuint32m4_t vreinterpret_v_u8m4_u32m4 (vuint8m4_t src);
vuint32m8_t vreinterpret_v_u8m8_u32m8 (vuint8m8_t src);
vint64m1_t vreinterpret_v_i8m1_i64m1 (vint8m1_t src);
vint64m2_t vreinterpret_v_i8m2_i64m2 (vint8m2_t src);
vint64m4_t vreinterpret_v_i8m4_i64m4 (vint8m4_t src);
vint64m8_t vreinterpret_v_i8m8_i64m8 (vint8m8_t src);
vuint64m1_t vreinterpret_v_u8m1_u64m1 (vuint8m1_t src);
vuint64m2_t vreinterpret_v_u8m2_u64m2 (vuint8m2_t src);
vuint64m4_t vreinterpret_v_u8m4_u64m4 (vuint8m4_t src);
vuint64m8_t vreinterpret_v_u8m8_u64m8 (vuint8m8_t src);
vint8mf4_t vreinterpret_v_i16mf4_i8mf4 (vint16mf4_t src);
vint8mf2_t vreinterpret_v_i16mf2_i8mf2 (vint16mf2_t src);
vint8m1_t vreinterpret_v_i16m1_i8m1 (vint16m1_t src);
vint8m2_t vreinterpret_v_i16m2_i8m2 (vint16m2_t src);
vint8m4_t vreinterpret_v_i16m4_i8m4 (vint16m4_t src);
vint8m8_t vreinterpret_v_i16m8_i8m8 (vint16m8_t src);
vuint8mf4_t vreinterpret_v_u16mf4_u8mf4 (vuint16mf4_t src);
vuint8mf2_t vreinterpret_v_u16mf2_u8mf2 (vuint16mf2_t src);
vuint8m1_t vreinterpret_v_u16m1_u8m1 (vuint16m1_t src);
vuint8m2_t vreinterpret_v_u16m2_u8m2 (vuint16m2_t src);
vuint8m4_t vreinterpret_v_u16m4_u8m4 (vuint16m4_t src);
vuint8m8_t vreinterpret_v_u16m8_u8m8 (vuint16m8_t src);
vint32mf2_t vreinterpret_v_i16mf2_i32mf2 (vint16mf2_t src);
vint32m1_t vreinterpret_v_i16m1_i32m1 (vint16m1_t src);
vint32m2_t vreinterpret_v_i16m2_i32m2 (vint16m2_t src);
vint32m4_t vreinterpret_v_i16m4_i32m4 (vint16m4_t src);
vint32m8_t vreinterpret_v_i16m8_i32m8 (vint16m8_t src);
vuint32mf2_t vreinterpret_v_u16mf2_u32mf2 (vuint16mf2_t src);
vuint32m1_t vreinterpret_v_u16m1_u32m1 (vuint16m1_t src);
vuint32m2_t vreinterpret_v_u16m2_u32m2 (vuint16m2_t src);
vuint32m4_t vreinterpret_v_u16m4_u32m4 (vuint16m4_t src);
vuint32m8_t vreinterpret_v_u16m8_u32m8 (vuint16m8_t src);
vint64m1_t vreinterpret_v_i16m1_i64m1 (vint16m1_t src);
vint64m2_t vreinterpret_v_i16m2_i64m2 (vint16m2_t src);
vint64m4_t vreinterpret_v_i16m4_i64m4 (vint16m4_t src);
```

```
vint64m8_t vreinterpret_v_i16m8_i64m8 (vint16m8_t src);
vuint64m1_t vreinterpret_v_u16m1_u64m1 (vuint16m1_t src);
vuint64m2_t vreinterpret_v_u16m2_u64m2 (vuint16m2_t src);
vuint64m4_t vreinterpret_v_u16m4_u64m4 (vuint16m4_t src);
vuint64m8_t vreinterpret_v_u16m8_u64m8 (vuint16m8_t src);
vint8mf2_t vreinterpret_v_i32mf2_i8mf2 (vint32mf2_t src);
vint8m1_t vreinterpret_v_i32m1_i8m1 (vint32m1_t src);
vint8m2_t vreinterpret_v_i32m2_i8m2 (vint32m2_t src);
vint8m4_t vreinterpret_v_i32m4_i8m4 (vint32m4_t src);
vint8m8_t vreinterpret_v_i32m8_i8m8 (vint32m8_t src);
vuint8mf2_t vreinterpret_v_u32mf2_u8mf2 (vuint32mf2_t src);
vuint8m1_t vreinterpret_v_u32m1_u8m1 (vuint32m1_t src);
vuint8m2_t vreinterpret_v_u32m2_u8m2 (vuint32m2_t src);
vuint8m4_t vreinterpret_v_u32m4_u8m4 (vuint32m4_t src);
vuint8m8_t vreinterpret_v_u32m8_u8m8 (vuint32m8_t src);
vint16mf2_t vreinterpret_v_i32mf2_i16mf2 (vint32mf2_t src);
vint16m1_t vreinterpret_v_i32m1_i16m1 (vint32m1_t src);
vint16m2_t vreinterpret_v_i32m2_i16m2 (vint32m2_t src);
vint16m4_t vreinterpret_v_i32m4_i16m4 (vint32m4_t src);
vint16m8_t vreinterpret_v_i32m8_i16m8 (vint32m8_t src);
vuint16mf2_t vreinterpret_v_u32mf2_u16mf2 (vuint32mf2_t src);
vuint16m1_t vreinterpret_v_u32m1_u16m1 (vuint32m1_t src);
vuint16m2_t vreinterpret_v_u32m2_u16m2 (vuint32m2_t src);
vuint16m4_t vreinterpret_v_u32m4_u16m4 (vuint32m4_t src);
vuint16m8_t vreinterpret_v_u32m8_u16m8 (vuint32m8_t src);
vint64m1_t vreinterpret_v_i32m1_i64m1 (vint32m1_t src);
vint64m2_t vreinterpret_v_i32m2_i64m2 (vint32m2_t src);
vint64m4_t vreinterpret_v_i32m4_i64m4 (vint32m4_t src);
vint64m8_t vreinterpret_v_i32m8_i64m8 (vint32m8_t src);
vuint64m1_t vreinterpret_v_u32m1_u64m1 (vuint32m1_t src);
vuint64m2_t vreinterpret_v_u32m2_u64m2 (vuint32m2_t src);
vuint64m4_t vreinterpret_v_u32m4_u64m4 (vuint32m4_t src);
vuint64m8_t vreinterpret_v_u32m8_u64m8 (vuint32m8_t src);
vint8m1_t vreinterpret_v_i64m1_i8m1 (vint64m1_t src);
vint8m2_t vreinterpret_v_i64m2_i8m2 (vint64m2_t src);
vint8m4_t vreinterpret_v_i64m4_i8m4 (vint64m4_t src);
vint8m8_t vreinterpret_v_i64m8_i8m8 (vint64m8_t src);
vuint8m1_t vreinterpret_v_u64m1_u8m1 (vuint64m1_t src);
vuint8m2_t vreinterpret_v_u64m2_u8m2 (vuint64m2_t src);
vuint8m4_t vreinterpret_v_u64m4_u8m4 (vuint64m4_t src);
vuint8m8_t vreinterpret_v_u64m8_u8m8 (vuint64m8_t src);
vint16m1_t vreinterpret_v_i64m1_i16m1 (vint64m1_t src);
vint16m2_t vreinterpret_v_i64m2_i16m2 (vint64m2_t src);
vint16m4_t vreinterpret_v_i64m4_i16m4 (vint64m4_t src);
vint16m8_t vreinterpret_v_i64m8_i16m8 (vint64m8_t src);
vuint16m1_t vreinterpret_v_u64m1_u16m1 (vuint64m1_t src);
```

```
vuint16m2_t vreinterpret_v_u64m2_u16m2 (vuint64m2_t src);
vuint16m4_t vreinterpret_v_u64m4_u16m4 (vuint64m4_t src);
vuint16m8_t vreinterpret_v_u64m8_u16m8 (vuint64m8_t src);
vint32m1_t vreinterpret_v_i64m1_i32m1 (vint64m1_t src);
vint32m2_t vreinterpret_v_i64m2_i32m2 (vint64m2_t src);
vint32m4_t vreinterpret_v_i64m4_i32m4 (vint64m4_t src);
vint32m8_t vreinterpret_v_i64m8_i32m8 (vint64m8_t src);
vuint32m1_t vreinterpret_v_u64m1_u32m1 (vuint64m1_t src);
vuint32m2_t vreinterpret_v_u64m2_u32m2 (vuint64m2_t src);
vuint32m4_t vreinterpret_v_u64m4_u32m4 (vuint64m4_t src);
vuint32m8_t vreinterpret_v_u64m8_u32m8 (vuint64m8_t src);
```

Vector Initialization Functions:

Prototypes:

```
vint8mf8_t vundefined_i8mf8 ();
vint8mf4_t vundefined_i8mf4 ();
vint8mf2_t vundefined_i8mf2 ();
vint8m1_t vundefined_i8m1 ();
vint8m2_t vundefined_i8m2 ();
vint8m4_t vundefined_i8m4 ();
vint8m8_t vundefined_i8m8 ();
vint16mf4_t vundefined_i16mf4 ();
vint16mf2_t vundefined_i16mf2 ();
vint16m1_t vundefined_i16m1 ();
vint16m2_t vundefined_i16m2 ();
vint16m4_t vundefined_i16m4 ();
vint16m8_t vundefined_i16m8 ();
vint32mf2_t vundefined_i32mf2 ();
vint32m1_t vundefined_i32m1 ();
vint32m2_t vundefined_i32m2 ();
vint32m4_t vundefined_i32m4 ();
vint32m8_t vundefined_i32m8 ();
vint64m1_t vundefined_i64m1 ();
vint64m2_t vundefined_i64m2 ();
vint64m4_t vundefined_i64m4 ();
vint64m8_t vundefined_i64m8 ();
vuint8mf8_t vundefined_u8mf8 ();
vuint8mf4_t vundefined_u8mf4 ();
vuint8mf2_t vundefined_u8mf2 ();
vuint8m1_t vundefined_u8m1 ();
vuint8m2_t vundefined_u8m2 ();
vuint8m4_t vundefined_u8m4 ();
vuint8m8_t vundefined_u8m8 ();
vuint16mf4_t vundefined_u16mf4 ();
```

```
vuint16mf2_t vundefined_u16mf2 ();
vuint16m1_t vundefined_u16m1 ();
vuint16m2_t vundefined_u16m2 ();
vuint16m4_t vundefined_u16m4 ();
vuint16m8_t vundefined_u16m8 ();
vuint32mf2_t vundefined_u32mf2 ();
vuint32m1_t vundefined_u32m1 ();
vuint32m2_t vundefined_u32m2 ();
vuint32m4_t vundefined_u32m4 ();
vuint32m8_t vundefined_u32m8 ();
vuint64m1_t vundefined_u64m1 ();
vuint64m2_t vundefined_u64m2 ();
vuint64m4_t vundefined_u64m4 ();
vuint64m8_t vundefined_u64m8 ();
vfloat16mf4_t vundefined_f16mf4 ();
vfloat16mf2_t vundefined_f16mf2 ();
vfloat16m1_t vundefined_f16m1 ();
vfloat16m2_t vundefined_f16m2 ();
vfloat16m4_t vundefined_f16m4 ();
vfloat16m8_t vundefined_f16m8 ();
vfloat32mf2_t vundefined_f32mf2 ();
vfloat32m1_t vundefined_f32m1 ();
vfloat32m2_t vundefined_f32m2 ();
vfloat32m4_t vundefined_f32m4 ();
vfloat32m8_t vundefined_f32m8 ();
vfloat64m1_t vundefined_f64m1 ();
vfloat64m2_t vundefined_f64m2 ();
vfloat64m4_t vundefined_f64m4 ();
vfloat64m8_t vundefined_f64m8 ();
```

Vector Insertion Functions:

Prototypes:

```
vint8m2_t vset_v_i8m1_i8m2 (vint8m2_t dest, const size_t index,
    vint8m1_t val);
vint8m4_t vset_v_i8m1_i8m4 (vint8m4_t dest, const size_t index,
    vint8m1_t val);
vint8m4_t vset_v_i8m2_i8m4 (vint8m4_t dest, const size_t index,
    vint8m2_t val);
vint8m8_t vset_v_i8m1_i8m8 (vint8m8_t dest, const size_t index,
    vint8m1_t val);
vint8m8_t vset_v_i8m2_i8m8 (vint8m8_t dest, const size_t index,
    vint8m2_t val);
vint8m8_t vset_v_i8m4_i8m8 (vint8m8_t dest, const size_t index,
    vint8m4_t val);
```

```
vuint8m2_t vset_v_u8m1_u8m2 (vuint8m2_t dest, const size_t
    index, vuint8m1_t val);
vuint8m4_t vset_v_u8m1_u8m4 (vuint8m4_t dest, const size_t
    index, vuint8m1_t val);
vuint8m4_t vset_v_u8m2_u8m4 (vuint8m4_t dest, const size_t
    index, vuint8m2_t val);
vuint8m8_t vset_v_u8m1_u8m8 (vuint8m8_t dest, const size_t
    index, vuint8m1_t val);
vuint8m8_t vset_v_u8m2_u8m8 (vuint8m8_t dest, const size_t
    index, vuint8m2_t val);
vuint8m8_t vset_v_u8m4_u8m8 (vuint8m8_t dest, const size_t
    index, vuint8m4_t val);
vint16m2_t vset_v_i16m1_i16m2 (vint16m2_t dest, const size_t
    index, vint16m1_t val);
vint16m4_t vset_v_i16m1_i16m4 (vint16m4_t dest, const size_t
    index, vint16m1_t val);
vint16m4_t vset_v_i16m2_i16m4 (vint16m4_t dest, const size_t
    index, vint16m2_t val);
vint16m8_t vset_v_i16m1_i16m8 (vint16m8_t dest, const size_t
    index, vint16m1_t val);
vint16m8_t vset_v_i16m2_i16m8 (vint16m8_t dest, const size_t
    index, vint16m2_t val);
vint16m8_t vset_v_i16m4_i16m8 (vint16m8_t dest, const size_t
    index, vint16m4_t val);
vuint16m2_t vset_v_u16m1_u16m2 (vuint16m2_t dest, const size_t
    index, vuint16m1_t val);
vuint16m4_t vset_v_u16m1_u16m4 (vuint16m4_t dest, const size_t
    index, vuint16m1_t val);
vuint16m4_t vset_v_u16m2_u16m4 (vuint16m4_t dest, const size_t
    index, vuint16m2_t val);
vuint16m8_t vset_v_u16m1_u16m8 (vuint16m8_t dest, const size_t
    index, vuint16m1_t val);
vuint16m8_t vset_v_u16m2_u16m8 (vuint16m8_t dest, const size_t
    index, vuint16m2_t val);
vuint16m8_t vset_v_u16m4_u16m8 (vuint16m8_t dest, const size_t
    index, vuint16m4_t val);
vfloat16m2_t vset_v_f16m1_f16m2 (vfloat16m2_t dest, const size_t
    index, vfloat16m1_t val);
vfloat16m4_t vset_v_f16m1_f16m4 (vfloat16m4_t dest, const size_t
    index, vfloat16m1_t val);
vfloat16m4_t vset_v_f16m2_f16m4 (vfloat16m4_t dest, const size_t
    index, vfloat16m2_t val);
vfloat16m8_t vset_v_f16m1_f16m8 (vfloat16m8_t dest, const size_t
    index, vfloat16m1_t val);
vfloat16m8_t vset_v_f16m2_f16m8 (vfloat16m8_t dest, const size_t
    index, vfloat16m2_t val);
```

```
vfloat16m8_t vset_v_f16m4_f16m8 (vfloat16m8_t dest, const size_t
    index, vfloat16m4_t val);
vint32m2_t vset_v_i32m1_i32m2 (vint32m2_t dest, const size_t
    index, vint32m1_t val);
vint32m4_t vset_v_i32m1_i32m4 (vint32m4_t dest, const size_t
    index, vint32m1_t val);
vint32m4_t vset_v_i32m2_i32m4 (vint32m4_t dest, const size_t
    index, vint32m2_t val);
vint32m8_t vset_v_i32m1_i32m8 (vint32m8_t dest, const size_t
    index, vint32m1_t val);
vint32m8_t vset_v_i32m2_i32m8 (vint32m8_t dest, const size_t
    index, vint32m2_t val);
vint32m8_t vset_v_i32m4_i32m8 (vint32m8_t dest, const size_t
    index, vint32m4_t val);
vuint32m2_t vset_v_u32m1_u32m2 (vuint32m2_t dest, const size_t
    index, vuint32m1_t val);
vuint32m4_t vset_v_u32m1_u32m4 (vuint32m4_t dest, const size_t
    index, vuint32m1_t val);
vuint32m4_t vset_v_u32m2_u32m4 (vuint32m4_t dest, const size_t
    index, vuint32m2_t val);
vuint32m8_t vset_v_u32m1_u32m8 (vuint32m8_t dest, const size_t
    index, vuint32m1_t val);
vuint32m8_t vset_v_u32m2_u32m8 (vuint32m8_t dest, const size_t
    index, vuint32m2_t val);
vuint32m8_t vset_v_u32m4_u32m8 (vuint32m8_t dest, const size_t
    index, vuint32m4_t val);
vfloat32m2_t vset_v_f32m1_f32m2 (vfloat32m2_t dest, const size_t
    index, vfloat32m1_t val);
vfloat32m4_t vset_v_f32m1_f32m4 (vfloat32m4_t dest, const size_t
    index, vfloat32m1_t val);
vfloat32m4_t vset_v_f32m2_f32m4 (vfloat32m4_t dest, const size_t
    index, vfloat32m2_t val);
vfloat32m8_t vset_v_f32m1_f32m8 (vfloat32m8_t dest, const size_t
    index, vfloat32m1_t val);
vfloat32m8_t vset_v_f32m2_f32m8 (vfloat32m8_t dest, const size_t
    index, vfloat32m2_t val);
vfloat32m8_t vset_v_f32m4_f32m8 (vfloat32m8_t dest, const size_t
    index, vfloat32m4_t val);
vint64m2_t vset_v_i64m1_i64m2 (vint64m2_t dest, const size_t
    index, vint64m1_t val);
vint64m4_t vset_v_i64m1_i64m4 (vint64m4_t dest, const size_t
    index, vint64m1_t val);
vint64m4_t vset_v_i64m2_i64m4 (vint64m4_t dest, const size_t
    index, vint64m2_t val);
vint64m8_t vset_v_i64m1_i64m8 (vint64m8_t dest, const size_t
    index, vint64m1_t val);
```

```
vint64m8_t vset_v_i64m2_i64m8 (vint64m8_t dest, const size_t
    index, vint64m2_t val);
vint64m8_t vset_v_i64m4_i64m8 (vint64m8_t dest, const size_t
    index, vint64m4_t val);
vuint64m2_t vset_v_u64m1_u64m2 (vuint64m2_t dest, const size_t
    index, vuint64m1_t val);
vuint64m4_t vset_v_u64m1_u64m4 (vuint64m4_t dest, const size_t
    index, vuint64m1_t val);
vuint64m4_t vset_v_u64m2_u64m4 (vuint64m4_t dest, const size_t
    index, vuint64m2_t val);
vuint64m8_t vset_v_u64m1_u64m8 (vuint64m8_t dest, const size_t
    index, vuint64m1_t val);
vuint64m8_t vset_v_u64m2_u64m8 (vuint64m8_t dest, const size_t
    index, vuint64m2_t val);
vuint64m8_t vset_v_u64m4_u64m8 (vuint64m8_t dest, const size_t
    index, vuint64m4_t val);
vfloat64m2_t vset_v_f64m1_f64m2 (vfloat64m2_t dest, const size_t
    index, vfloat64m1_t val);
vfloat64m4_t vset_v_f64m1_f64m4 (vfloat64m4_t dest, const size_t
    index, vfloat64m1_t val);
vfloat64m4_t vset_v_f64m2_f64m4 (vfloat64m4_t dest, const size_t
    index, vfloat64m2_t val);
vfloat64m8_t vset_v_f64m1_f64m8 (vfloat64m8_t dest, const size_t
    index, vfloat64m1_t val);
vfloat64m8_t vset_v_f64m2_f64m8 (vfloat64m8_t dest, const size_t
    index, vfloat64m2_t val);
vfloat64m8_t vset_v_f64m4_f64m8 (vfloat64m8_t dest, const size_t
    index, vfloat64m4_t val);
```

Vector Extraction Functions:

Prototypes:

```
vint8m1_t vget_v_i8m2_i8m1 (vint8m2_t src, const size_t index);
vint8m1_t vget_v_i8m4_i8m1 (vint8m4_t src, const size_t index);
vint8m1_t vget_v_i8m8_i8m1 (vint8m8_t src, const size_t index);
vint8m2_t vget_v_i8m4_i8m2 (vint8m4_t src, const size_t index);
vint8m2_t vget_v_i8m8_i8m2 (vint8m8_t src, const size_t index);
vint8m4_t vget_v_i8m8_i8m4 (vint8m8_t src, const size_t index);
vuint8m1_t vget_v_u8m2_u8m1 (vuint8m2_t src, const size_t index);
vuint8m1_t vget_v_u8m4_u8m1 (vuint8m4_t src, const size_t index);
vuint8m1_t vget_v_u8m8_u8m1 (vuint8m8_t src, const size_t index);
vuint8m2_t vget_v_u8m4_u8m2 (vuint8m4_t src, const size_t index);
vuint8m2_t vget_v_u8m8_u8m2 (vuint8m8_t src, const size_t index);
vuint8m4_t vget_v_u8m8_u8m4 (vuint8m8_t src, const size_t index);
```

```
vint16m1_t vget_v_i16m2_i16m1 (vint16m2_t src, const size_t
    index);
vint16m1_t vget_v_i16m4_i16m1 (vint16m4_t src, const size_t
    index);
vint16m1_t vget_v_i16m8_i16m1 (vint16m8_t src, const size_t
    index);
vint16m2_t vget_v_i16m4_i16m2 (vint16m4_t src, const size_t
    index);
vint16m2_t vget_v_i16m8_i16m2 (vint16m8_t src, const size_t
    index);
vint16m4_t vget_v_i16m8_i16m4 (vint16m8_t src, const size_t
    index);
vuint16m1_t vget_v_u16m2_u16m1 (vuint16m2_t src, const size_t
    index);
vuint16m1_t vget_v_u16m4_u16m1 (vuint16m4_t src, const size_t
    index);
vuint16m1_t vget_v_u16m8_u16m1 (vuint16m8_t src, const size_t
    index);
vuint16m2_t vget_v_u16m4_u16m2 (vuint16m4_t src, const size_t
    index);
vuint16m2_t vget_v_u16m8_u16m2 (vuint16m8_t src, const size_t
    index);
vuint16m4_t vget_v_u16m8_u16m4 (vuint16m8_t src, const size_t
    index);
vfloat16m1_t vget_v_f16m2_f16m1 (vfloat16m2_t src, const size_t
    index);
vfloat16m1_t vget_v_f16m4_f16m1 (vfloat16m4_t src, const size_t
    index);
vfloat16m1_t vget_v_f16m8_f16m1 (vfloat16m8_t src, const size_t
    index);
vfloat16m2_t vget_v_f16m4_f16m2 (vfloat16m4_t src, const size_t
    index);
vfloat16m2_t vget_v_f16m8_f16m2 (vfloat16m8_t src, const size_t
    index);
vfloat16m4_t vget_v_f16m8_f16m4 (vfloat16m8_t src, const size_t
    index);
vint32m1_t vget_v_i32m2_i32m1 (vint32m2_t src, const size_t
    index);
vint32m1_t vget_v_i32m4_i32m1 (vint32m4_t src, const size_t
    index);
vint32m1_t vget_v_i32m8_i32m1 (vint32m8_t src, const size_t
    index);
vint32m2_t vget_v_i32m4_i32m2 (vint32m4_t src, const size_t
    index);
vint32m2_t vget_v_i32m8_i32m2 (vint32m8_t src, const size_t
    index);
```

```
vint32m4_t vget_v_i32m8_i32m4 (vint32m8_t src, const size_t
    index);
vuint32m1_t vget_v_u32m2_u32m1 (vuint32m2_t src, const size_t
    index);
vuint32m1_t vget_v_u32m4_u32m1 (vuint32m4_t src, const size_t
    index);
vuint32m1_t vget_v_u32m8_u32m1 (vuint32m8_t src, const size_t
    index);
vuint32m2_t vget_v_u32m4_u32m2 (vuint32m4_t src, const size_t
    index);
vuint32m2_t vget_v_u32m8_u32m2 (vuint32m8_t src, const size_t
    index);
vuint32m4_t vget_v_u32m8_u32m4 (vuint32m8_t src, const size_t
    index);
vfloat32m1_t vget_v_f32m2_f32m1 (vfloat32m2_t src, const size_t
    index);
vfloat32m1_t vget_v_f32m4_f32m1 (vfloat32m4_t src, const size_t
    index);
vfloat32m1_t vget_v_f32m8_f32m1 (vfloat32m8_t src, const size_t
    index);
vfloat32m2_t vget_v_f32m4_f32m2 (vfloat32m4_t src, const size_t
    index);
vfloat32m2_t vget_v_f32m8_f32m2 (vfloat32m8_t src, const size_t
    index);
vfloat32m4_t vget_v_f32m8_f32m4 (vfloat32m8_t src, const size_t
    index);
vint64m1_t vget_v_i64m2_i64m1 (vint64m2_t src, const size_t
    index);
vint64m1_t vget_v_i64m4_i64m1 (vint64m4_t src, const size_t
    index);
vint64m1_t vget_v_i64m8_i64m1 (vint64m8_t src, const size_t
    index);
vint64m2_t vget_v_i64m4_i64m2 (vint64m4_t src, const size_t
    index);
vint64m2_t vget_v_i64m8_i64m2 (vint64m8_t src, const size_t
    index);
vint64m4_t vget_v_i64m8_i64m4 (vint64m8_t src, const size_t
    index);
vuint64m1_t vget_v_u64m2_u64m1 (vuint64m2_t src, const size_t
    index);
vuint64m1_t vget_v_u64m4_u64m1 (vuint64m4_t src, const size_t
    index);
vuint64m1_t vget_v_u64m8_u64m1 (vuint64m8_t src, const size_t
    index);
vuint64m2_t vget_v_u64m4_u64m2 (vuint64m4_t src, const size_t
    index);
```

```
vuint64m2_t vget_v_u64m8_u64m2 (vuint64m8_t src, const size_t
    index);
vuint64m4_t vget_v_u64m8_u64m4 (vuint64m8_t src, const size_t
    index);
vfloat64m1_t vget_v_f64m2_f64m1 (vfloat64m2_t src, const size_t
    index);
vfloat64m1_t vget_v_f64m4_f64m1 (vfloat64m4_t src, const size_t
    index);
vfloat64m1_t vget_v_f64m8_f64m1 (vfloat64m8_t src, const size_t
    index);
vfloat64m2_t vget_v_f64m4_f64m2 (vfloat64m4_t src, const size_t
    index);
vfloat64m2_t vget_v_f64m8_f64m2 (vfloat64m8_t src, const size_t
    index);
vfloat64m4_t vget_v_f64m8_f64m4 (vfloat64m8_t src, const size_t
    index);
```

T-HEAD DOT Functions:

Vector Packed-Narrowing Fixed-Point Clip Functions:

Prototypes:

```
vint8m1_t vpnclip_wv_i8m1 (vint16m2_t op1, vuint8m1_t shift,
    size_t vl);
vint8m2_t vpnclip_wv_i8m2 (vint16m4_t op1, vuint8m2_t shift,
    size_t vl);
vint8m4_t vpnclip_wv_i8m4 (vint16m8_t op1, vuint8m4_t shift,
    size_t vl);
vint8mf2_t vpnclip_wv_i8mf2 (vint16m1_t op1, vuint8mf2_t shift,
    size_t vl);
vint8mf4_t vpnclip_wv_i8mf4 (vint16mf2_t op1, vuint8mf4_t shift,
    size_t vl);
vint8mf8_t vpnclip_wv_i8mf8 (vint16mf4_t op1, vuint8mf8_t shift,
    size_t vl);
vint8m1_t vpnclip_wx_i8m1 (vint16m2_t op1, size_t shift, size_t
    vl);
vint8m2_t vpnclip_wx_i8m2 (vint16m4_t op1, size_t shift, size_t
    vl);
vint8m4_t vpnclip_wx_i8m4 (vint16m8_t op1, size_t shift, size_t
    vl);
vint8mf2_t vpnclip_wx_i8mf2 (vint16m1_t op1, size_t shift,
    size_t vl);
vint8mf4_t vpnclip_wx_i8mf4 (vint16mf2_t op1, size_t shift,
    size_t vl);
```

```
vint8mf8_t vpnclip_wx_i8mf8 (vint16mf4_t op1, size_t shift,
    size_t vl);
vuint8m1_t vpnclipu_wv_u8m1 (vuint16m2_t op1, vuint8m1_t shift,
    size_t vl);
vuint8m2_t vpnclipu_wv_u8m2 (vuint16m4_t op1, vuint8m2_t shift,
    size_t vl);
vuint8m4_t vpnclipu_wv_u8m4 (vuint16m8_t op1, vuint8m4_t shift,
    size_t vl);
vuint8mf2_t vpnclipu_wv_u8mf2 (vuint16m1_t op1, vuint8mf2_t
    shift, size_t vl);
vuint8mf4_t vpnclipu_wv_u8mf4 (vuint16mf2_t op1, vuint8mf4_t
    shift, size_t vl);
vuint8mf8_t vpnclipu_wv_u8mf8 (vuint16mf4_t op1, vuint8mf8_t
    shift, size_t vl);
vuint8m1_t vpnclipu_wx_u8m1 (vuint16m2_t op1, size_t shift,
    size_t vl);
vuint8m2_t vpnclipu_wx_u8m2 (vuint16m4_t op1, size_t shift,
    size_t vl);
vuint8m4_t vpnclipu_wx_u8m4 (vuint16m8_t op1, size_t shift,
    size_t vl);
vuint8mf2_t vpnclipu_wx_u8mf2 (vuint16m1_t op1, size_t shift,
    size_t vl);
vuint8mf4_t vpnclipu_wx_u8mf4 (vuint16mf2_t op1, size_t shift,
    size_t vl);
vuint8mf8_t vpnclipu_wx_u8mf8 (vuint16mf4_t op1, size_t shift,
    size_t vl);
// masked functions
vint8m1_t vpnclip_wv_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint16m2_t op1, vuint8m1_t shift, size_t vl);
vint8m2_t vpnclip_wv_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint16m4_t op1, vuint8m2_t shift, size_t vl);
vint8m4_t vpnclip_wv_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint16m8_t op1, vuint8m4_t shift, size_t vl);
vint8mf2_t vpnclip_wv_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint16m1_t op1, vuint8mf2_t shift, size_t vl);
vint8mf4_t vpnclip_wv_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint16mf2_t op1, vuint8mf4_t shift, size_t vl);
vint8mf8_t vpnclip_wv_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint16mf4_t op1, vuint8mf8_t shift, size_t vl);
vint8m1_t vpnclip_wx_i8m1_m (vbool8_t mask, vint8m1_t maskedoff,
    vint16m2_t op1, size_t shift, size_t vl);
vint8m2_t vpnclip_wx_i8m2_m (vbool4_t mask, vint8m2_t maskedoff,
    vint16m4_t op1, size_t shift, size_t vl);
vint8m4_t vpnclip_wx_i8m4_m (vbool2_t mask, vint8m4_t maskedoff,
    vint16m8_t op1, size_t shift, size_t vl);
```

```
vint8mf2_t vpnclip_wx_i8mf2_m (vbool16_t mask, vint8mf2_t
    maskedoff, vint16m1_t op1, size_t shift, size_t vl);
vint8mf4_t vpnclip_wx_i8mf4_m (vbool32_t mask, vint8mf4_t
    maskedoff, vint16mf2_t op1, size_t shift, size_t vl);
vint8mf8_t vpnclip_wx_i8mf8_m (vbool64_t mask, vint8mf8_t
    maskedoff, vint16mf4_t op1, size_t shift, size_t vl);
vuint8m1_t vpnclipu_wv_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint16m2_t op1, vuint8m1_t shift, size_t vl);
vuint8m2_t vpnclipu_wv_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint16m4_t op1, vuint8m2_t shift, size_t vl);
vuint8m4_t vpnclipu_wv_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint16m8_t op1, vuint8m4_t shift, size_t vl);
vuint8mf2_t vpnclipu_wv_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint16m1_t op1, vuint8mf2_t shift, size_t vl);
vuint8mf4_t vpnclipu_wv_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint16mf2_t op1, vuint8mf4_t shift, size_t vl);
vuint8mf8_t vpnclipu_wv_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint16mf4_t op1, vuint8mf8_t shift, size_t vl);
vuint8m1_t vpnclipu_wx_u8m1_m (vbool8_t mask, vuint8m1_t
    maskedoff, vuint16m2_t op1, size_t shift, size_t vl);
vuint8m2_t vpnclipu_wx_u8m2_m (vbool4_t mask, vuint8m2_t
    maskedoff, vuint16m4_t op1, size_t shift, size_t vl);
vuint8m4_t vpnclipu_wx_u8m4_m (vbool2_t mask, vuint8m4_t
    maskedoff, vuint16m8_t op1, size_t shift, size_t vl);
vuint8mf2_t vpnclipu_wx_u8mf2_m (vbool16_t mask, vuint8mf2_t
    maskedoff, vuint16m1_t op1, size_t shift, size_t vl);
vuint8mf4_t vpnclipu_wx_u8mf4_m (vbool32_t mask, vuint8mf4_t
    maskedoff, vuint16mf2_t op1, size_t shift, size_t vl);
vuint8mf8_t vpnclipu_wx_u8mf8_m (vbool64_t mask, vuint8mf8_t
    maskedoff, vuint16mf4_t op1, size_t shift, size_t vl);
```

Vector Packed-Widening Integer Add Functions:

Prototypes:

```
vint16m1_t vpwadd_vv_i16m1 (vint8mf2_t op1, vint8mf2_t op2,
    size_t vl);
vint16m2_t vpwadd_vv_i16m2 (vint8m1_t op1, vint8m1_t op2, size_t
    vl);
vint16m4_t vpwadd_vv_i16m4 (vint8m2_t op1, vint8m2_t op2, size_t
    vl);
vint16m8_t vpwadd_vv_i16m8 (vint8m4_t op1, vint8m4_t op2, size_t
    vl);
vint16mf2_t vpwadd_vv_i16mf2 (vint8mf4_t op1, vint8mf4_t op2,
    size_t vl);
```

```
vint16mf4_t vpwadd_vv_i16mf4 (vint8mf8_t op1, vint8mf8_t op2,
    size_t vl);
vint16m1_t vpwadd_vx_i16m1 (vint8mf2_t op1, int8_t op2, size_t
    vl);
vint16m2_t vpwadd_vx_i16m2 (vint8m1_t op1, int8_t op2, size_t
    vl);
vint16m4_t vpwadd_vx_i16m4 (vint8m2_t op1, int8_t op2, size_t
    vl);
vint16m8_t vpwadd_vx_i16m8 (vint8m4_t op1, int8_t op2, size_t
    vl);
vint16mf2_t vpwadd_vx_i16mf2 (vint8mf4_t op1, int8_t op2, size_t
    vl);
vint16mf4_t vpwadd_vx_i16mf4 (vint8mf8_t op1, int8_t op2, size_t
    vl);
vuint16m1_t vpwaddu_vv_u16m1 (vuint8mf2_t op1, vuint8mf2_t op2,
    size_t vl);
vuint16m2_t vpwaddu_vv_u16m2 (vuint8m1_t op1, vuint8m1_t op2,
    size_t vl);
vuint16m4_t vpwaddu_vv_u16m4 (vuint8m2_t op1, vuint8m2_t op2,
    size_t vl);
vuint16m8_t vpwaddu_vv_u16m8 (vuint8m4_t op1, vuint8m4_t op2,
    size_t vl);
vuint16mf2_t vpwaddu_vv_u16mf2 (vuint8mf4_t op1, vuint8mf4_t
    op2, size_t vl);
vuint16mf4_t vpwaddu_vv_u16mf4 (vuint8mf8_t op1, vuint8mf8_t
    op2, size_t vl);
vuint16m1_t vpwaddu_vx_u16m1 (vuint8mf2_t op1, uint8_t op2,
    size_t vl);
vuint16m2_t vpwaddu_vx_u16m2 (vuint8m1_t op1, uint8_t op2,
    size_t vl);
vuint16m4_t vpwaddu_vx_u16m4 (vuint8m2_t op1, uint8_t op2,
    size_t vl);
vuint16m8_t vpwaddu_vx_u16m8 (vuint8m4_t op1, uint8_t op2,
    size_t vl);
vuint16mf2_t vpwaddu_vx_u16mf2 (vuint8mf4_t op1, uint8_t op2,
    size_t vl);
vuint16mf4_t vpwaddu_vx_u16mf4 (vuint8mf8_t op1, uint8_t op2,
    size_t vl);
// masked functions
vint16m1_t vpwadd_vv_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint8mf2_t op1, vint8mf2_t op2, size_t vl);
vint16m2_t vpwadd_vv_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint8m1_t op1, vint8m1_t op2, size_t vl);
vint16m4_t vpwadd_vv_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint8m2_t op1, vint8m2_t op2, size_t vl);
```

```
vint16m8_t vpwadd_vv_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint8m4_t op1, vint8m4_t op2, size_t vl);
vint16mf2_t vpwadd_vv_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint8mf4_t op1, vint8mf4_t op2, size_t vl);
vint16mf4_t vpwadd_vv_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint8mf8_t op1, vint8mf8_t op2, size_t vl);
vint16m1_t vpwadd_vx_i16m1_m (vbool16_t mask, vint16m1_t
    maskedoff, vint8mf2_t op1, int8_t op2, size_t vl);
vint16m2_t vpwadd_vx_i16m2_m (vbool8_t mask, vint16m2_t
    maskedoff, vint8m1_t op1, int8_t op2, size_t vl);
vint16m4_t vpwadd_vx_i16m4_m (vbool4_t mask, vint16m4_t
    maskedoff, vint8m2_t op1, int8_t op2, size_t vl);
vint16m8_t vpwadd_vx_i16m8_m (vbool2_t mask, vint16m8_t
    maskedoff, vint8m4_t op1, int8_t op2, size_t vl);
vint16mf2_t vpwadd_vx_i16mf2_m (vbool32_t mask, vint16mf2_t
    maskedoff, vint8mf4_t op1, int8_t op2, size_t vl);
vint16mf4_t vpwadd_vx_i16mf4_m (vbool64_t mask, vint16mf4_t
    maskedoff, vint8mf8_t op1, int8_t op2, size_t vl);
vuint16m1_t vpwaddu_vv_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint8mf2_t op1, vuint8mf2_t op2, size_t vl);
vuint16m2_t vpwaddu_vv_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint8m1_t op1, vuint8m1_t op2, size_t vl);
vuint16m4_t vpwaddu_vv_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint8m2_t op1, vuint8m2_t op2, size_t vl);
vuint16m8_t vpwaddu_vv_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint8m4_t op1, vuint8m4_t op2, size_t vl);
vuint16mf2_t vpwaddu_vv_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint8mf4_t op1, vuint8mf4_t op2, size_t vl);
vuint16mf4_t vpwaddu_vv_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint8mf8_t op1, vuint8mf8_t op2, size_t vl);
vuint16m1_t vpwaddu_vx_u16m1_m (vbool16_t mask, vuint16m1_t
    maskedoff, vuint8mf2_t op1, uint8_t op2, size_t vl);
vuint16m2_t vpwaddu_vx_u16m2_m (vbool8_t mask, vuint16m2_t
    maskedoff, vuint8m1_t op1, uint8_t op2, size_t vl);
vuint16m4_t vpwaddu_vx_u16m4_m (vbool4_t mask, vuint16m4_t
    maskedoff, vuint8m2_t op1, uint8_t op2, size_t vl);
vuint16m8_t vpwaddu_vx_u16m8_m (vbool2_t mask, vuint16m8_t
    maskedoff, vuint8m4_t op1, uint8_t op2, size_t vl);
vuint16mf2_t vpwaddu_vx_u16mf2_m (vbool32_t mask, vuint16mf2_t
    maskedoff, vuint8mf4_t op1, uint8_t op2, size_t vl);
vuint16mf4_t vpwaddu_vx_u16mf4_m (vbool64_t mask, vuint16mf4_t
    maskedoff, vuint8mf8_t op1, uint8_t op2, size_t vl);
```

Vector Quad-widening Integer Multiply-Add Queue-Add Functions:

Prototypes:

```
vint32m1_t vmaqa_vv_i32m1 (vint32m1_t vd, vint8m1_t vs1,
    vint8m1_t vs2, size_t vl);
vint32m2_t vmaqa_vv_i32m2 (vint32m2_t vd, vint8m2_t vs1,
    vint8m2_t vs2, size_t vl);
vint32m4_t vmaqa_vv_i32m4 (vint32m4_t vd, vint8m4_t vs1,
    vint8m4_t vs2, size_t vl);
vint32m8_t vmaqa_vv_i32m8 (vint32m8_t vd, vint8m8_t vs1,
    vint8m8_t vs2, size_t vl);
vint32mf2_t vmaqa_vv_i32mf2 (vint32mf2_t vd, vint8mf2_t vs1,
    vint8mf2_t vs2, size_t vl);
vint32m1_t vmaqa_vx_i32m1 (vint32m1_t vd, int8_t rs1, vint8m1_t
    vs2, size_t vl);
vint32m2_t vmaqa_vx_i32m2 (vint32m2_t vd, int8_t rs1, vint8m2_t
    vs2, size_t vl);
vint32m4_t vmaqa_vx_i32m4 (vint32m4_t vd, int8_t rs1, vint8m4_t
    vs2, size_t vl);
vint32m8_t vmaqa_vx_i32m8 (vint32m8_t vd, int8_t rs1, vint8m8_t
    vs2, size_t vl);
vint32mf2_t vmaqa_vx_i32mf2 (vint32mf2_t vd, int8_t rs1,
    vint8mf2_t vs2, size_t vl);
vint32m1_t vmaqasu_vv_i32m1 (vint32m1_t vd, vint8m1_t vs1,
    vuint8m1_t vs2, size_t vl);
vint32m2_t vmaqasu_vv_i32m2 (vint32m2_t vd, vint8m2_t vs1,
    vuint8m2_t vs2, size_t vl);
vint32m4_t vmaqasu_vv_i32m4 (vint32m4_t vd, vint8m4_t vs1,
    vuint8m4_t vs2, size_t vl);
vint32m8_t vmaqasu_vv_i32m8 (vint32m8_t vd, vint8m8_t vs1,
    vuint8m8_t vs2, size_t vl);
vint32mf2_t vmaqasu_vv_i32mf2 (vint32mf2_t vd, vint8mf2_t vs1,
    vuint8mf2_t vs2, size_t vl);
vint32m1_t vmaqasu_vx_i32m1 (vint32m1_t vd, int8_t rs1,
    vuint8m1_t vs2, size_t vl);
vint32m2_t vmaqasu_vx_i32m2 (vint32m2_t vd, int8_t rs1,
    vuint8m2_t vs2, size_t vl);
vint32m4_t vmaqasu_vx_i32m4 (vint32m4_t vd, int8_t rs1,
    vuint8m4_t vs2, size_t vl);
vint32m8_t vmaqasu_vx_i32m8 (vint32m8_t vd, int8_t rs1,
    vuint8m8_t vs2, size_t vl);
vint32mf2_t vmaqasu_vx_i32mf2 (vint32mf2_t vd, int8_t rs1,
    vuint8mf2_t vs2, size_t vl);
vuint32m1_t vmaqau_vv_u32m1 (vuint32m1_t vd, vuint8m1_t vs1,
    vuint8m1_t vs2, size_t vl);
vuint32m2_t vmaqau_vv_u32m2 (vuint32m2_t vd, vuint8m2_t vs1,
    vuint8m2_t vs2, size_t vl);
vuint32m4_t vmaqau_vv_u32m4 (vuint32m4_t vd, vuint8m4_t vs1,
    vuint8m4_t vs2, size_t vl);
```

```
vuint32m8_t vmaqau_vv_u32m8 (vuint32m8_t vd, vuint8m8_t vs1,
    vuint8m8_t vs2, size_t vl);
vuint32mf2_t vmaqau_vv_u32mf2 (vuint32mf2_t vd, vuint8mf2_t vs1,
    vuint8mf2_t vs2, size_t vl);
vuint32m1_t vmaqau_vx_u32m1 (vuint32m1_t vd, uint8_t rs1,
    vuint8m1_t vs2, size_t vl);
vuint32m2_t vmaqau_vx_u32m2 (vuint32m2_t vd, uint8_t rs1,
    vuint8m2_t vs2, size_t vl);
vuint32m4_t vmaqau_vx_u32m4 (vuint32m4_t vd, uint8_t rs1,
    vuint8m4_t vs2, size_t vl);
vuint32m8_t vmaqau_vx_u32m8 (vuint32m8_t vd, uint8_t rs1,
    vuint8m8_t vs2, size_t vl);
vuint32mf2_t vmaqau_vx_u32mf2 (vuint32mf2_t vd, uint8_t rs1,
    vuint8mf2_t vs2, size_t vl);
vint32m1_t vmaqaus_vx_i32m1 (vint32m1_t vd, uint8_t rs1,
    vint8m1_t vs2, size_t vl);
vint32m2_t vmaqaus_vx_i32m2 (vint32m2_t vd, uint8_t rs1,
    vint8m2_t vs2, size_t vl);
vint32m4_t vmaqaus_vx_i32m4 (vint32m4_t vd, uint8_t rs1,
    vint8m4_t vs2, size_t vl);
vint32m8_t vmaqaus_vx_i32m8 (vint32m8_t vd, uint8_t rs1,
    vint8m8_t vs2, size_t vl);
vint32mf2_t vmaqaus_vx_i32mf2 (vint32mf2_t vd, uint8_t rs1,
    vint8mf2_t vs2, size_t vl);
vint32m1_t vpmaqa_vv_i32m1 (vint32m1_t vd, vint8m1_t vs1,
    vint8m1_t vs2, size_t vl);
vint32m2_t vpmaqa_vv_i32m2 (vint32m2_t vd, vint8m2_t vs1,
    vint8m2_t vs2, size_t vl);
vint32m4_t vpmaqa_vv_i32m4 (vint32m4_t vd, vint8m4_t vs1,
    vint8m4_t vs2, size_t vl);
vint32m8_t vpmaqa_vv_i32m8 (vint32m8_t vd, vint8m8_t vs1,
    vint8m8_t vs2, size_t vl);
vint32mf2_t vpmaqa_vv_i32mf2 (vint32mf2_t vd, vint8mf2_t vs1,
    vint8mf2_t vs2, size_t vl);
vint32m1_t vpmaqa_vx_i32m1 (vint32m1_t vd, int8_t rs1, vint8m1_t
    vs2, size_t vl);
vint32m2_t vpmaqa_vx_i32m2 (vint32m2_t vd, int8_t rs1, vint8m2_t
    vs2, size_t vl);
vint32m4_t vpmaqa_vx_i32m4 (vint32m4_t vd, int8_t rs1, vint8m4_t
    vs2, size_t vl);
vint32m8_t vpmaqa_vx_i32m8 (vint32m8_t vd, int8_t rs1, vint8m8_t
    vs2, size_t vl);
vint32mf2_t vpmaqa_vx_i32mf2 (vint32mf2_t vd, int8_t rs1,
    vint8mf2_t vs2, size_t vl);
vint32m1_t vpmaqasu_vv_i32m1 (vint32m1_t vd, vint8m1_t vs1,
    vuint8m1_t vs2, size_t vl);
```

```
vint32m2_t vpmaqasu_vv_i32m2 (vint32m2_t vd, vint8m2_t vs1,
    vuint8m2_t vs2, size_t vl);
vint32m4_t vpmaqasu_vv_i32m4 (vint32m4_t vd, vint8m4_t vs1,
    vuint8m4_t vs2, size_t vl);
vint32m8_t vpmaqasu_vv_i32m8 (vint32m8_t vd, vint8m8_t vs1,
    vuint8m8_t vs2, size_t vl);
vint32mf2_t vpmaqasu_vv_i32mf2 (vint32mf2_t vd, vint8mf2_t vs1,
    vuint8mf2_t vs2, size_t vl);
vint32m1_t vpmaqasu_vx_i32m1 (vint32m1_t vd, int8_t rs1,
    vuint8m1_t vs2, size_t vl);
vint32m2_t vpmaqasu_vx_i32m2 (vint32m2_t vd, int8_t rs1,
    vuint8m2_t vs2, size_t vl);
vint32m4_t vpmaqasu_vx_i32m4 (vint32m4_t vd, int8_t rs1,
    vuint8m4_t vs2, size_t vl);
vint32m8_t vpmaqasu_vx_i32m8 (vint32m8_t vd, int8_t rs1,
    vuint8m8_t vs2, size_t vl);
vint32mf2_t vpmaqasu_vx_i32mf2 (vint32mf2_t vd, int8_t rs1,
    vuint8mf2_t vs2, size_t vl);
vuint32m1_t vpmaqau_vv_u32m1 (vuint32m1_t vd, vuint8m1_t vs1,
    vuint8m1_t vs2, size_t vl);
vuint32m2_t vpmaqau_vv_u32m2 (vuint32m2_t vd, vuint8m2_t vs1,
    vuint8m2_t vs2, size_t vl);
vuint32m4_t vpmaqau_vv_u32m4 (vuint32m4_t vd, vuint8m4_t vs1,
    vuint8m4_t vs2, size_t vl);
vuint32m8_t vpmaqau_vv_u32m8 (vuint32m8_t vd, vuint8m8_t vs1,
    vuint8m8_t vs2, size_t vl);
vuint32mf2_t vpmaqau_vv_u32mf2 (vuint32mf2_t vd, vuint8mf2_t
    vs1, vuint8mf2_t vs2, size_t vl);
vuint32m1_t vpmaqau_vx_u32m1 (vuint32m1_t vd, uint8_t rs1,
    vuint8m1_t vs2, size_t vl);
vuint32m2_t vpmaqau_vx_u32m2 (vuint32m2_t vd, uint8_t rs1,
    vuint8m2_t vs2, size_t vl);
vuint32m4_t vpmaqau_vx_u32m4 (vuint32m4_t vd, uint8_t rs1,
    vuint8m4_t vs2, size_t vl);
vuint32m8_t vpmaqau_vx_u32m8 (vuint32m8_t vd, uint8_t rs1,
    vuint8m8_t vs2, size_t vl);
vuint32mf2_t vpmaqau_vx_u32mf2 (vuint32mf2_t vd, uint8_t rs1,
    vuint8mf2_t vs2, size_t vl);
vint32m1_t vpmaqaus_vx_i32m1 (vint32m1_t vd, uint8_t rs1,
    vint8m1_t vs2, size_t vl);
vint32m2_t vpmaqaus_vx_i32m2 (vint32m2_t vd, uint8_t rs1,
    vint8m2_t vs2, size_t vl);
vint32m4_t vpmaqaus_vx_i32m4 (vint32m4_t vd, uint8_t rs1,
    vint8m4_t vs2, size_t vl);
vint32m8_t vpmaqaus_vx_i32m8 (vint32m8_t vd, uint8_t rs1,
    vint8m8_t vs2, size_t vl);
```

```
vint32mf2_t vpmaqaus_vx_i32mf2 (vint32mf2_t vd, uint8_t rs1,
    vint8mf2_t vs2, size_t vl);
```
// masked functions
```
vint32m1_t vmaqa_vv_i32m1_m (vbool8_t mask, vint32m1_t vd,
    vint8m1_t vs1, vint8m1_t vs2, size_t vl);
vint32m2_t vmaqa_vv_i32m2_m (vbool4_t mask, vint32m2_t vd,
    vint8m2_t vs1, vint8m2_t vs2, size_t vl);
vint32m4_t vmaqa_vv_i32m4_m (vbool2_t mask, vint32m4_t vd,
    vint8m4_t vs1, vint8m4_t vs2, size_t vl);
vint32m8_t vmaqa_vv_i32m8_m (vbool1_t mask, vint32m8_t vd,
    vint8m8_t vs1, vint8m8_t vs2, size_t vl);
vint32mf2_t vmaqa_vv_i32mf2_m (vbool16_t mask, vint32mf2_t vd,
    vint8mf2_t vs1, vint8mf2_t vs2, size_t vl);
vint32m1_t vmaqa_vx_i32m1_m (vbool8_t mask, vint32m1_t vd,
    int8_t rs1, vint8m1_t vs2, size_t vl);
vint32m2_t vmaqa_vx_i32m2_m (vbool4_t mask, vint32m2_t vd,
    int8_t rs1, vint8m2_t vs2, size_t vl);
vint32m4_t vmaqa_vx_i32m4_m (vbool2_t mask, vint32m4_t vd,
    int8_t rs1, vint8m4_t vs2, size_t vl);
vint32m8_t vmaqa_vx_i32m8_m (vbool1_t mask, vint32m8_t vd,
    int8_t rs1, vint8m8_t vs2, size_t vl);
vint32mf2_t vmaqa_vx_i32mf2_m (vbool16_t mask, vint32mf2_t vd,
    int8_t rs1, vint8mf2_t vs2, size_t vl);
vint32m1_t vmaqasu_vv_i32m1_m (vbool8_t mask, vint32m1_t vd,
    vint8m1_t vs1, vuint8m1_t vs2, size_t vl);
vint32m2_t vmaqasu_vv_i32m2_m (vbool4_t mask, vint32m2_t vd,
    vint8m2_t vs1, vuint8m2_t vs2, size_t vl);
vint32m4_t vmaqasu_vv_i32m4_m (vbool2_t mask, vint32m4_t vd,
    vint8m4_t vs1, vuint8m4_t vs2, size_t vl);
vint32m8_t vmaqasu_vv_i32m8_m (vbool1_t mask, vint32m8_t vd,
    vint8m8_t vs1, vuint8m8_t vs2, size_t vl);
vint32mf2_t vmaqasu_vv_i32mf2_m (vbool16_t mask, vint32mf2_t vd,
    vint8mf2_t vs1, vuint8mf2_t vs2, size_t vl);
vint32m1_t vmaqasu_vx_i32m1_m (vbool8_t mask, vint32m1_t vd,
    int8_t rs1, vuint8m1_t vs2, size_t vl);
vint32m2_t vmaqasu_vx_i32m2_m (vbool4_t mask, vint32m2_t vd,
    int8_t rs1, vuint8m2_t vs2, size_t vl);
vint32m4_t vmaqasu_vx_i32m4_m (vbool2_t mask, vint32m4_t vd,
    int8_t rs1, vuint8m4_t vs2, size_t vl);
vint32m8_t vmaqasu_vx_i32m8_m (vbool1_t mask, vint32m8_t vd,
    int8_t rs1, vuint8m8_t vs2, size_t vl);
vint32mf2_t vmaqasu_vx_i32mf2_m (vbool16_t mask, vint32mf2_t vd,
    int8_t rs1, vuint8mf2_t vs2, size_t vl);
vuint32m1_t vmaqau_vv_u32m1_m (vbool8_t mask, vuint32m1_t vd,
    vuint8m1_t vs1, vuint8m1_t vs2, size_t vl);
```

```
vuint32m2_t vmaqau_vv_u32m2_m (vbool4_t mask, vuint32m2_t vd,
    vuint8m2_t vs1, vuint8m2_t vs2, size_t vl);
vuint32m4_t vmaqau_vv_u32m4_m (vbool2_t mask, vuint32m4_t vd,
    vuint8m4_t vs1, vuint8m4_t vs2, size_t vl);
vuint32m8_t vmaqau_vv_u32m8_m (vbool1_t mask, vuint32m8_t vd,
    vuint8m8_t vs1, vuint8m8_t vs2, size_t vl);
vuint32mf2_t vmaqau_vv_u32mf2_m (vbool16_t mask, vuint32mf2_t
    vd, vuint8mf2_t vs1, vuint8mf2_t vs2, size_t vl);
vuint32m1_t vmaqau_vx_u32m1_m (vbool8_t mask, vuint32m1_t vd,
    uint8_t rs1, vuint8m1_t vs2, size_t vl);
vuint32m2_t vmaqau_vx_u32m2_m (vbool4_t mask, vuint32m2_t vd,
    uint8_t rs1, vuint8m2_t vs2, size_t vl);
vuint32m4_t vmaqau_vx_u32m4_m (vbool2_t mask, vuint32m4_t vd,
    uint8_t rs1, vuint8m4_t vs2, size_t vl);
vuint32m8_t vmaqau_vx_u32m8_m (vbool1_t mask, vuint32m8_t vd,
    uint8_t rs1, vuint8m8_t vs2, size_t vl);
vuint32mf2_t vmaqau_vx_u32mf2_m (vbool16_t mask, vuint32mf2_t
    vd, uint8_t rs1, vuint8mf2_t vs2, size_t vl);
vint32m1_t vmaqaus_vx_i32m1_m (vbool8_t mask, vint32m1_t vd,
    uint8_t rs1, vint8m1_t vs2, size_t vl);
vint32m2_t vmaqaus_vx_i32m2_m (vbool4_t mask, vint32m2_t vd,
    uint8_t rs1, vint8m2_t vs2, size_t vl);
vint32m4_t vmaqaus_vx_i32m4_m (vbool2_t mask, vint32m4_t vd,
    uint8_t rs1, vint8m4_t vs2, size_t vl);
vint32m8_t vmaqaus_vx_i32m8_m (vbool1_t mask, vint32m8_t vd,
    uint8_t rs1, vint8m8_t vs2, size_t vl);
vint32mf2_t vmaqaus_vx_i32mf2_m (vbool16_t mask, vint32mf2_t vd,
    uint8_t rs1, vint8mf2_t vs2, size_t vl);
vint32m1_t vpmaqa_vv_i32m1_m (vbool8_t mask, vint32m1_t vd,
    vint8m1_t vs1, vint8m1_t vs2, size_t vl);
vint32m2_t vpmaqa_vv_i32m2_m (vbool4_t mask, vint32m2_t vd,
    vint8m2_t vs1, vint8m2_t vs2, size_t vl);
vint32m4_t vpmaqa_vv_i32m4_m (vbool2_t mask, vint32m4_t vd,
    vint8m4_t vs1, vint8m4_t vs2, size_t vl);
vint32m8_t vpmaqa_vv_i32m8_m (vbool1_t mask, vint32m8_t vd,
    vint8m8_t vs1, vint8m8_t vs2, size_t vl);
vint32mf2_t vpmaqa_vv_i32mf2_m (vbool16_t mask, vint32mf2_t vd,
    vint8mf2_t vs1, vint8mf2_t vs2, size_t vl);
vint32m1_t vpmaqa_vx_i32m1_m (vbool8_t mask, vint32m1_t vd,
    int8_t rs1, vint8m1_t vs2, size_t vl);
vint32m2_t vpmaqa_vx_i32m2_m (vbool4_t mask, vint32m2_t vd,
    int8_t rs1, vint8m2_t vs2, size_t vl);
vint32m4_t vpmaqa_vx_i32m4_m (vbool2_t mask, vint32m4_t vd,
    int8_t rs1, vint8m4_t vs2, size_t vl);
vint32m8_t vpmaqa_vx_i32m8_m (vbool1_t mask, vint32m8_t vd,
    int8_t rs1, vint8m8_t vs2, size_t vl);
```

```
vint32mf2_t vpmaqa_vx_i32mf2_m (vbool16_t mask, vint32mf2_t vd,
    int8_t rs1, vint8mf2_t vs2, size_t vl);
vint32m1_t vpmaqasu_vv_i32m1_m (vbool8_t mask, vint32m1_t vd,
    vint8m1_t vs1, vuint8m1_t vs2, size_t vl);
vint32m2_t vpmaqasu_vv_i32m2_m (vbool4_t mask, vint32m2_t vd,
    vint8m2_t vs1, vuint8m2_t vs2, size_t vl);
vint32m4_t vpmaqasu_vv_i32m4_m (vbool2_t mask, vint32m4_t vd,
    vint8m4_t vs1, vuint8m4_t vs2, size_t vl);
vint32m8_t vpmaqasu_vv_i32m8_m (vbool1_t mask, vint32m8_t vd,
    vint8m8_t vs1, vuint8m8_t vs2, size_t vl);
vint32mf2_t vpmaqasu_vv_i32mf2_m (vbool16_t mask, vint32mf2_t
    vd, vint8mf2_t vs1, vuint8mf2_t vs2, size_t vl);
vint32m1_t vpmaqasu_vx_i32m1_m (vbool8_t mask, vint32m1_t vd,
    int8_t rs1, vuint8m1_t vs2, size_t vl);
vint32m2_t vpmaqasu_vx_i32m2_m (vbool4_t mask, vint32m2_t vd,
    int8_t rs1, vuint8m2_t vs2, size_t vl);
vint32m4_t vpmaqasu_vx_i32m4_m (vbool2_t mask, vint32m4_t vd,
    int8_t rs1, vuint8m4_t vs2, size_t vl);
vint32m8_t vpmaqasu_vx_i32m8_m (vbool1_t mask, vint32m8_t vd,
    int8_t rs1, vuint8m8_t vs2, size_t vl);
vint32mf2_t vpmaqasu_vx_i32mf2_m (vbool16_t mask, vint32mf2_t
    vd, int8_t rs1, vuint8mf2_t vs2, size_t vl);
vuint32m1_t vpmaqau_vv_u32m1_m (vbool8_t mask, vuint32m1_t vd,
    vuint8m1_t vs1, vuint8m1_t vs2, size_t vl);
vuint32m2_t vpmaqau_vv_u32m2_m (vbool4_t mask, vuint32m2_t vd,
    vuint8m2_t vs1, vuint8m2_t vs2, size_t vl);
vuint32m4_t vpmaqau_vv_u32m4_m (vbool2_t mask, vuint32m4_t vd,
    vuint8m4_t vs1, vuint8m4_t vs2, size_t vl);
vuint32m8_t vpmaqau_vv_u32m8_m (vbool1_t mask, vuint32m8_t vd,
    vuint8m8_t vs1, vuint8m8_t vs2, size_t vl);
vuint32mf2_t vpmaqau_vv_u32mf2_m (vbool16_t mask, vuint32mf2_t
    vd, vuint8mf2_t vs1, vuint8mf2_t vs2, size_t vl);
vuint32m1_t vpmaqau_vx_u32m1_m (vbool8_t mask, vuint32m1_t vd,
    uint8_t rs1, vuint8m1_t vs2, size_t vl);
vuint32m2_t vpmaqau_vx_u32m2_m (vbool4_t mask, vuint32m2_t vd,
    uint8_t rs1, vuint8m2_t vs2, size_t vl);
vuint32m4_t vpmaqau_vx_u32m4_m (vbool2_t mask, vuint32m4_t vd,
    uint8_t rs1, vuint8m4_t vs2, size_t vl);
vuint32m8_t vpmaqau_vx_u32m8_m (vbool1_t mask, vuint32m8_t vd,
    uint8_t rs1, vuint8m8_t vs2, size_t vl);
vuint32mf2_t vpmaqau_vx_u32mf2_m (vbool16_t mask, vuint32mf2_t
    vd, uint8_t rs1, vuint8mf2_t vs2, size_t vl);
vint32m1_t vpmaqaus_vx_i32m1_m (vbool8_t mask, vint32m1_t vd,
    uint8_t rs1, vint8m1_t vs2, size_t vl);
vint32m2_t vpmaqaus_vx_i32m2_m (vbool4_t mask, vint32m2_t vd,
    uint8_t rs1, vint8m2_t vs2, size_t vl);
```

```
vint32m4_t vpmaqaus_vx_i32m4_m (vbool2_t mask, vint32m4_t vd,
    uint8_t rs1, vint8m4_t vs2, size_t vl);
vint32m8_t vpmaqaus_vx_i32m8_m (vbool1_t mask, vint32m8_t vd,
    uint8_t rs1, vint8m8_t vs2, size_t vl);
vint32mf2_t vpmaqaus_vx_i32mf2_m (vbool16_t mask, vint32mf2_t
    vd, uint8_t rs1, vint8mf2_t vs2, size_t vl);
```

RISC-V Vector Intrinsic Examples

rvv_sgemm.c

```c
#include <riscv_vector.h>
#include <stddef.h>
#include <stdio.h>
#include <string.h>
#include <math.h>

#define N 32

#define MAX_BLOCKSIZE 32
#define MLEN 4
#define KLEN 8
#define NLEN 4
#define OUTPUT_LEN 16

float a_array[MAX_BLOCKSIZE] = {-0.4325648115282207,
    -1.6655843782380970,
                                0.1253323064748307,
                                    0.2876764203585489,
                                -1.1464713506814637,
                                    1.1909154656429988,
                                1.1891642016521031,
                                    -0.0376332765933176,
                                0.3272923614086541,
                                    0.1746391428209245,
                                -0.1867085776814394,
                                    0.7257905482933027,
                                -0.5883165430141887,
                                    2.1831858181971011,
                                -0.1363958830865957,
                                    0.1139313135208096,
                                1.0667682113591888,
                                    0.0592814605236053,
                                -0.0956484054836690,
                                    -0.8323494636500225,
```

```
                                        0.2944108163926404,
                                            -1.3361818579378040,
                                        0.7143245518189522,
                                            1.6235620644462707,
                                        -0.6917757017022868,
                                            0.8579966728282626,
                                        1.2540014216025324,
                                            -1.5937295764474768,
                                        -1.4409644319010200,
                                            0.5711476236581780,
                                        -0.3998855777153632, 0.1};

float b_array[MAX_BLOCKSIZE] = {1.7491401329284098,
    0.1325982188803279,
                                        0.3252281811989881,
                                            -0.7938091410349637,
                                        0.3149236145048914,
                                            -0.5272704888029532,
                                        0.9322666565031119,
                                            1.1646643544607362,
                                        -2.0456694357357357,
                                            -0.6443728590041911,
                                        1.7410657940825480,
                                            0.4867684246821860,
                                        1.0488288293660140,
                                            1.4885752747099299,
                                        1.2705014969484090,
                                            -1.8561241921210170,
                                        2.1343209047321410,
                                            1.4358467535865909,
                                        -0.9173023332875400,
                                            -1.1060770780029008,
                                        0.8105708062681296,
                                            0.6985430696369063,
                                        -0.4015827425012831,
                                            1.2687512030669628,
                                        -0.7836083053674872,
                                            0.2132664971465569,
                                        0.7878984786088954,
                                            0.8966819356782295,
                                        -0.1869172943544062,
                                            1.0131816724341454,
                                        0.2484350696132857,   0.1};

float golden_array[OUTPUT_LEN];
float c_array[OUTPUT_LEN];
```

```c
void sgemm_golden() {
  for (size_t i = 0; i < MLEN; ++i)
    for (size_t j = 0; j < NLEN; ++j)
      for (size_t k = 0; k < KLEN; ++k)
        golden_array[i * NLEN + j] += a_array[i * KLEN + k] *
            b_array[j + k * NLEN];
}


// reference
    https://github.com/riscv/riscv-v-spec/blob/master/example/sgemm.S
// c += a*b (alpha=1, no transpose on input matrices)
// matrices stored in C row-major order
void sgemm_vec(size_t size_m, size_t size_n, size_t size_k,
               const float *a, // m * k matrix
               size_t lda,
               const float *b, // k * n matrix
               size_t ldb,
               float *c, // m * n matrix
               size_t ldc) {
  size_t vl;
  for (size_t m = 0; m < size_m; ++m) {
    const float *b_n_ptr = b;
    float *c_n_ptr = c;
    for (size_t c_n_count = size_n; c_n_count; c_n_count -= vl) {
      vl = vsetvl_e32m1(c_n_count );
      const float *a_k_ptr = a;
      const float *b_k_ptr = b_n_ptr;
      vfloat32m1_t acc = vle32_v_f32m1(c_n_ptr, vl);
      for (size_t k = 0; k < size_k; ++k) {
        vfloat32m1_t b_n_data = vle32_v_f32m1(b_k_ptr, vl);
        acc = vfmacc_vf_f32m1(acc, *a_k_ptr, b_n_data, vl);
        b_k_ptr += ldb;
        a_k_ptr++;
      }
      vse32_v_f32m1(c_n_ptr, acc, vl);
      c_n_ptr += vl;
      b_n_ptr += vl;
    }
    a += lda;
    c += ldc;
  }
}

int fp_eq(float reference, float actual, float relErr)
```

```
{
  // if near zero, do absolute error instead.
  float absErr = relErr * ((fabsf(reference) > relErr) ?
      fabsf(reference) : relErr);
  return fabsf(actual - reference) < absErr;
}

int main() {
  // golden
  memcpy(golden_array, b_array, OUTPUT_LEN * sizeof(float));
  sgemm_golden();
  // vector
  memcpy(c_array, b_array, OUTPUT_LEN * sizeof(float));
  sgemm_vec(MLEN, NLEN, KLEN, a_array, KLEN, b_array, NLEN,
      c_array, NLEN);

  int pass = 1;
  for (int i = 0; i < OUTPUT_LEN; i++) {
    if (!fp_eq(golden_array[i], c_array[i], 1e-5)) {
      printf("index %d failed, %f=!%f\n", i, golden_array[i],
          c_array[i]);
      pass = 0;
    }
  }
  if (pass)
    printf("passed\n");
  return (pass == 0);
}
```

rvv_saxpy.c

```
#include <riscv_vector.h>
#include <stddef.h>
#include <stdio.h>
#include <math.h>

#define N 31

float input[N] = {-0.4325648115282207, -1.6655843782380970,
    0.1253323064748307,
                  0.2876764203585489,  -1.1464713506814637,
                      1.1909154656429988,
                  1.1891642016521031,  -0.0376332765933176,
                      0.3272923614086541,
                  0.1746391428209245,  -0.1867085776814394,
                      0.7257905482933027,
```

```
                        -0.5883165430141887, 2.1831858181971011,
                           -0.1363958830865957,
                        0.1139313135208096,  1.0667682113591888,
                           0.0592814605236053,
                        -0.0956484054836690, -0.8323494636500225,
                           0.2944108163926404,
                        -1.3361818579378040, 0.7143245518189522,
                           1.6235620644462707,
                        -0.6917757017022868, 0.8579966728282626,
                           1.2540014216025324,
                        -1.5937295764474768, -1.4409644319010200,
                           0.5711476236581780,
                        -0.3998855777153632};

float output_golden[N] = {
    1.7491401329284098,  0.1325982188803279,  0.3252281811989881,
    -0.7938091410349637, 0.3149236145048914,
        -0.5272704888029532,
    0.9322666565031119,  1.1646643544607362,
        -2.0456694357357357,
    -0.6443728590041911, 1.7410657940825480,  0.4867684246821860,
    1.0488288293660140,  1.4885752747099299,  1.2705014969484090,
    -1.8561241921210170, 2.1343209047321410,  1.4358467535865909,
    -0.9173023332875400, -1.1060770780029008, 0.8105708062681296,
    0.6985430696369063,  -0.4015827425012831, 1.2687512030669628,
    -0.7836083053674872, 0.2132664971465569,  0.7878984786088954,
    0.8966819356782295,  -0.1869172943544062, 1.0131816724341454,
    0.2484350696132857};

float output[N] = {
    1.7491401329284098,  0.1325982188803279,  0.3252281811989881,
    -0.7938091410349637, 0.3149236145048914,
        -0.5272704888029532,
    0.9322666565031119,  1.1646643544607362,
        -2.0456694357357357,
    -0.6443728590041911, 1.7410657940825480,  0.4867684246821860,
    1.0488288293660140,  1.4885752747099299,  1.2705014969484090,
    -1.8561241921210170, 2.1343209047321410,  1.4358467535865909,
    -0.9173023332875400, -1.1060770780029008, 0.8105708062681296,
    0.6985430696369063,  -0.4015827425012831, 1.2687512030669628,
    -0.7836083053674872, 0.2132664971465569,  0.7878984786088954,
    0.8966819356782295,  -0.1869172943544062, 1.0131816724341454,
    0.2484350696132857};

void saxpy_golden(size_t n, const float a, const float *x, float
    *y) {
```

966

```c
  for (size_t i = 0; i < n; ++i) {
    y[i] = a * x[i] + y[i];
  }
}

void saxpy_vec(size_t n, const float a, const float *x, float
    *y) {
  size_t l;

  vfloat32m8_t vx, vy;

  for (; n > 0; n -= l) {
    l = vsetvl_e32m8(n);
    vx = vle32_v_f32m8(x, l);
    x += l;
    vy = vle32_v_f32m8(y, l);
    vy = vfmacc_vf_f32m8(vy, a, vx, l);
    vse32_v_f32m8 (y, vy, l);
    y += l;
  }
}

int fp_eq(float reference, float actual, float relErr)
{
  // if near zero, do absolute error instead.
  float absErr = relErr * ((fabsf(reference) > relErr) ?
      fabsf(reference) : relErr);
  return fabsf(actual - reference) < absErr;
}


int main() {
  saxpy_golden(N, 55.66, input, output_golden);
  saxpy_vec(N, 55.66, input, output);
  int pass = 1;
  for (int i = 0; i < N; i++) {
    if (!fp_eq(output_golden[i], output[i], 1e-6)) {
      printf("failed, %f=!%f\n", output_golden[i], output[i]);
      pass = 0;
    }
  }
  if (pass)
    printf("passed\n");
  return (pass == 0);
}
```