

REV (vector)

Reverse all elements in a vector (unpredicated)

Reverse the order of all elements in the source vector and place in the destination vector. This instruction is unpredicated.

31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
0	0	0	0	0	1	0	1	size	1	1	1	0	0	0	0	0	1	1	1	0	Zn					Zd					

REV **<Zd> .<T> , <Zn> .<T>**

```
if !HaveSVE() && !HaveSME() then UNDEFINED;
constant integer esize = 8 << UInt(size);
integer n = UInt(Zn);
integer d = UInt(Zd);
```

Assembler Symbols

<Zd>	Is the name of the destination scalable vector register, encoded in the "Zd" field.
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<T> Is the size specifier, encoded in “size”:

size	$\langle T \rangle$
00	B
01	H
10	S
11	D

<Zn>	Is the name of the source scalable vector register, encoded in the "Zn" field.
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Operation

```

CheckSVEEnabled();
constant integer VL = CurrentVL;
constant integer PL = VL DIV 8;
bits(VL) operand = Z[n, VL];
bits(VL) result = Reverse(operand, esize);
Z[d, VL] = result;

```

Operational information

If FEAT_SVE2 is implemented or FEAT_SME is implemented, then if PSTATE.DIT is 1:

- The execution time of this instruction is independent of:
 - The values of the data supplied in any of its registers.

- The values of the NZCV flags.
- The response of this instruction to asynchronous exceptions does not vary based on:
 - The values of the data supplied in any of its registers.
 - The values of the NZCV flags.

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Internal version only: isa v33.64, AdvSIMD v29.12, pseudocode
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