

RDVL

Read multiple of vector register size to scalar register

Multiply the current vector register size in bytes by an immediate in the range -32 to 31 and place the result in the 64-bit destination general-purpose register.

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	0	1	0	1	1	1	1	1	1	0	1	0	1	0	imm6						Rd				

RDVL <Xd>, #<imm>

```
if !HaveSVE() && !HaveSME() then UNDEFINED;
integer d = UInt(Rd);
integer imm = SInt(imm6);
```

Assembler Symbols

- <Xd> Is the 64-bit name of the destination general-purpose register, encoded in the "Rd" field.
- <imm> Is the signed immediate operand, in the range -32 to 31, encoded in the "imm6" field.

Operation

```
CheckSVEEnabled();
constant integer VL = CurrentVL;
integer len = imm * (VL DIV 8);
X[d, 64] = len<63:0>;
```

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.

