

MOV (SIMD&FP scalar, unpredicated)

Move indexed element or SIMD&FP scalar to vector (unpredicated)

Unconditionally broadcast the SIMD&FP scalar into each element of the destination vector. This instruction is unpredicated.

This is an alias of [DUP \(indexed\)](#). This means:

- The encodings in this description are named to match the encodings of [DUP \(indexed\)](#).
- The description of [DUP \(indexed\)](#) gives the operational pseudocode, any constrained unpredictable behavior, and any operational information for this instruction.

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	imm21					tsz				0	0	1	0	0	0			Zn				Zd		

MOV <Zd>.<T>, <Zn>.<T> [<imm>]

is equivalent to

DUP <Zd>.<T>, <Zn>.<T> [<imm>]

and is the preferred disassembly when `BitCount(imm2:tsz) > 1`.

MOV <Zd>.<T>, <V><n>

is equivalent to

DUP <Zd>.<T>, <Zn>.<T> [0]

and is the preferred disassembly when `BitCount(imm2:tsz) == 1`.

Assembler Symbols

<Zd> Is the name of the destination scalable vector register, encoded in the "Zd" field.

<T>

Is the size specifier, encoded in "tsz":

tsz	<T>
00000	RESERVED
xxxx1	B
xxx10	H
xx100	S
x1000	D
10000	Q

<Zn>

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

<imm>

Is the immediate index, in the range 0 to one less than the number of elements in 512 bits, encoded in "imm2:tsz".

<V>

Is a width specifier, encoded in "tsz":

tsz	<V>
00000	RESERVED
xxxx1	B
xxx10	H
xx100	S
x1000	D
10000	Q

<n>

Is the number [0-31] of the source SIMD&FP register, encoded in the "Zn" field.

Operation

The description of [DUP \(indexed\)](#) gives the operational pseudocode for this instruction.

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.

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