

FRINTN (scalar)

Floating-point Round to Integral, to nearest with ties to even (scalar). This instruction rounds a floating-point value in the SIMD&FP source register to an integral floating-point value of the same size using the Round to Nearest rounding mode, and writes the result to the SIMD&FP destination register.

A zero input gives a zero result with the same sign, an infinite input gives an infinite result with the same sign, and a NaN is propagated as for normal arithmetic.

A floating-point exception can be generated by this instruction. Depending on the settings in [FPCR](#), the exception results in either a flag being set in [FPSR](#), or a synchronous exception being generated. For more information, see [Floating-point exception traps](#).

Depending on the settings in the [CPACR_EL1](#), [CPTR_EL2](#), and [CPTR_EL3](#) registers, and the current Security state and Exception level, an attempt to execute the instruction might be trapped.

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	1	1	1	1	0	ftype	1	0	0	1	0	0	0	1	0	0	0	0											
																								Rn				Rd			

<Dn>	Is the 64-bit name of the SIMD&FP source register, encoded in the "Rn" field.
<Hd>	Is the 16-bit name of the SIMD&FP destination register, encoded in the "Rd" field.
<Hn>	Is the 16-bit name of the SIMD&FP source register, encoded in the "Rn" field.
<Sd>	Is the 32-bit name of the SIMD&FP destination register, encoded in the "Rd" field.
<Sn>	Is the 32-bit name of the SIMD&FP source register, encoded in the "Rn" field.

Operation

```

CheckFPEnabled64() ;

FPCRType fpcr = FPCR[];
boolean merge = IsMerging(fpcr);
bits(128) result = if merge then V[d, 128] else Zeros(128);
bits(esize) operand = V[n, esize];

Elem[result, 0, esize] = FPRoundInt(operand, fpcr, rounding, FALSE);

V[d, 128] = result;

```

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Internal version only: isa v33.64, AdvSIMD v29.12, pseudocode
no_diffs_2023_09_RC2, sve v2023-06_rel ; Build timestamp: 2023-09-18T17:56

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