

SMIN (immediate)

Signed Minimum (immediate) determines the signed minimum of the source register value and immediate, and writes the result to the destination register.

Integer (FEAT_CSSC)

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
sf	0	0	1	0	0	0	1	1	1	0	0	1	0	imm8								Rn				Rd					

32-bit (sf == 0)

SMIN <Wd>, <Wn>, #<sim>

64-bit (sf == 1)

SMIN <Xd>, <Xn>, #<sim>

```
if !IsFeatureImplemented(FEAT_CSSC) then UNDEFINED;
constant integer datasize = 32 << UInt(sf);
integer n = UInt(Rn);
integer d = UInt(Rd);
integer imm = SInt(imm8);
```

Assembler Symbols

<Wd>	Is the 32-bit name of the general-purpose destination register, encoded in the "Rd" field.
<Wn>	Is the 32-bit name of the general-purpose source register, encoded in the "Rn" field.
<Xd>	Is the 64-bit name of the general-purpose destination register, encoded in the "Rd" field.
<Xn>	Is the 64-bit name of the general-purpose source register, encoded in the "Rn" field.
<sim>	Is a signed immediate, in the range -128 to 127, encoded in the "imm8" field.

Operation

```
bits(datasize) operand1 = X[n, datasize];
integer result = Min(SInt(operand1), imm);
X[d, datasize] = result<datasize-1:0>;
```

Operational information

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.

[Base
Instructions](#)

[SIMD&FP
Instructions](#)

[SVE
Instructions](#)

[SME
Instructions](#)

[Index by
Encoding](#)

[Sh
Pseu](#)

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

Copyright Â© 2010-2023 Arm Limited or its affiliates. All rights reserved. This
document is Non-Confidential.