<u>Base</u>	SIMD&FP	<u>SVE</u>	SME	Index by
<u>Instructions</u>	Instructions	<u>Instructions</u>	Instructions	Encoding

Pseu

NGC

Negate with Carry negates the sum of a register value and the value of NOT (Carry flag), and writes the result to the destination register.

This is an alias of SBC. This means:

- The encodings in this description are named to match the encodings of <u>SBC</u>.
- The description of <u>SBC</u> 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
sf 1 0 1 1	0 1	0 0	0 0	Rm	0	0	0	0	0	0	1	1	1	1	1			Rd		
op S													Rn							

32-bit (sf == 0)

```
NGC <Wd>, <Wm>
is equivalent to

SBC <Wd>, WZR, <Wm>
```

and is always the preferred disassembly.

64-bit (sf == 1)

```
NGC <Xd>, <Xm>
is equivalent to

SBC <Xd>, XZR, <Xm>
```

and is always the preferred disassembly.

Assembler Symbols

<wd></wd>	Is the 32-bit name of the general-purpose destination register, encoded in the "Rd" field.
<wm></wm>	Is the 32-bit name of the general-purpose source register, encoded in the "Rm" field.
<xd></xd>	Is the 64-bit name of the general-purpose destination register, encoded in the "Rd" field.
<xm></xm>	Is the 64-bit name of the general-purpose source register, encoded in the "Rm" field.

Operation

The description of \underline{SBC} gives the operational pseudocode for this instruction.

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.

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