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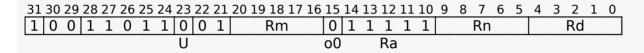
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#### **SMULL**

Signed Multiply Long multiplies two 32-bit register values, and writes the result to the 64-bit destination register.

This is an alias of **SMADDL**. This means:

- The encodings in this description are named to match the encodings of <a href="SMADDL">SMADDL</a>.
- The description of <u>SMADDL</u> gives the operational pseudocode, any constrained unpredictable behavior, and any operational information for this instruction.



# is equivalent to

```
SMADDL <Xd>, <Wn>, <Wm>, XZR
```

and is always the preferred disassembly.

## **Assembler Symbols**

<xd></xd>	Is the 64-bit name of the general-purpose destination register, encoded in the "Rd" field.
<wn></wn>	Is the 32-bit name of the first general-purpose source register holding the multiplicand, encoded in the "Rn" field.
<wm></wm>	Is the 32-bit name of the second general-purpose source register holding the multiplier, encoded in the "Rm" field.

## **Operation**

The description of <u>SMADDL</u> 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.

0	The	values	of the	<b>NZCV</b>	flags.
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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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