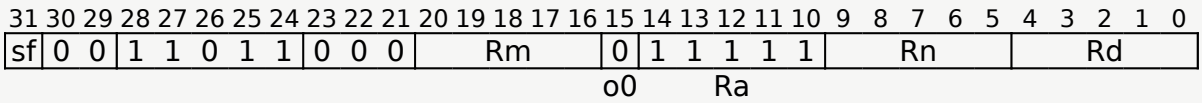
MUL

Multiply

```
: Rd = Rn * Rm.
```

This is an alias of MADD. This means:

- The encodings in this description are named to match the encodings of MADD.
- The description of MADD gives the operational pseudocode, any constrained unpredictable behavior, and any operational information for this instruction.



32-bit (sf == 0)

```
MUL <Wd>, <Wn>, <Wm>
```

is equivalent to

```
MADD <Wd>, <Wn>, <Wm>, WZR
```

and is always the preferred disassembly.

64-bit (sf == 1)

```
MUL <Xd>, <Xn>, <Xm>
```

is equivalent to

```
MADD <Xd>, <Xn>, <Xm>, XZR
```

and is always the preferred disassembly.

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 first general-purpose source register holding the multiplicand, encoded in the "Rn" field.
<Wm>	Is the 32-bit name of the second general-purpose source register holding the multiplier, encoded in the "Rm" 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 first general-purpose source register holding the multiplicand, encoded in the "Rn" field.
<Xm>	Is the 64-bit name of the second general-purpose source register holding the multiplier, encoded in the "Rm" field.

Operation

The description of MADD gives the operational pseudocode for this instruction.

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