SHA256H2

SHA256 hash update (part 2).

Advanced SIMD
(FEAT_SHA256)

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 1 0 1 1 1 1 0	0 0 0	Rm	0	1 0	1	0 0	Rn	Rd

P

        SHA256H2 <Qd>, <Qn>, <Vm>.4S

```
integer d = UInt(Rd);
integer n = UInt(Rn);
integer m = UInt(Rm);
if !IsFeatureImplemented(FEAT_SHA256) then UNDEFINED;
```

Assembler Symbols

<Qd>   Is the 128-bit name of the SIMD&FP source and destination, encoded in the "Rd" field.

<Qn>   Is the 128-bit name of the second SIMD&FP source register, encoded in the "Rn" field.

<Vm>   Is the name of the third SIMD&FP source register, encoded in the "Rm" field.

Operation

```
AArch64.CheckFPAdvSIMDEnabled();

bits(128) result;
result = SHA256hash(V[n, 128], V[d, 128], V[m, 128], FALSE);
V[d, 128] = result;
```

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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