

UQCVT (two registers)

Multi-vector unsigned saturating extract narrow

Saturate the unsigned integer value in each element of the two source vectors to half the original source element width, and place the results in the half-width destination elements.

This instruction is unpredicated.

SME2

(FEAT_SME2)

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
1	1	0	0	0	0	0	1	0	0	1	0	0	0	1	1	1	1	1	0	0	0	Zn			1	Zd					
																										U					

UQCVT <Zd>.H, { <Zn1>.S-<Zn2>.S }

```
if !HaveSME2() then UNDEFINED;
constant integer esize = 16;
integer n = UInt(Zn:'0');
integer d = UInt(Zd);
```

Assembler Symbols

- <Zd> Is the name of the destination scalable vector register, encoded in the "Zd" field.
- <Zn1> Is the name of the first scalable vector register of a multi-vector sequence, encoded as "Zn" times 2.
- <Zn2> Is the name of the second scalable vector register of a multi-vector sequence, encoded as "Zn" times 2 plus 1.

Operation

```
CheckStreamingSVEEnabled();
constant integer VL = CurrentVL;
constant integer elements = VL DIV (2 * esize);
bits(VL) result;

for r = 0 to 1
    bits(VL) operand = Z[n+r, VL];
    for e = 0 to elements-1
        integer element = UInt(Elem[operand, e, 2 * esize]);
        Elem[result, r*elements + e, esize] = UnsignedSat(element, esize);
Z[d, VL] = result;
```

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