

BRKAS

Break after first true condition, setting the condition flags

Sets destination predicate elements up to and including the first active and true source element to true, then sets subsequent elements to false. Inactive elements in the destination predicate register are set to zero. Sets the first (N), none (Z), !last (C) condition flags based on the predicate result, and the V flag to zero.

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	0	1	0	0	1	0	1	0	1	0	1	0	0	0	0	0	1	Pg				0	Pn				0	Pd			
B								S								M															

BRKAS <Pd> .B, <Pg>/Z, <Pn> .B

```
if !HaveSVE() && !HaveSME() then UNDEFINED;
constant integer esize = 8;
integer g = UInt(Pg);
integer n = UInt(Pn);
integer d = UInt(Pd);
boolean merging = FALSE;
boolean setflags = TRUE;
```

Assembler Symbols

- <Pd> Is the name of the destination scalable predicate register, encoded in the "Pd" field.
- <Pg> Is the name of the governing scalable predicate register, encoded in the "Pg" field.
- <Pn> Is the name of the source scalable predicate register, encoded in the "Pn" field.

Operation

```
CheckSVEEnabled();
constant integer VL = CurrentVL;
constant integer PL = VL DIV 8;
constant integer elements = VL DIV esize;
bits(PL) mask = P[g, PL];
bits(PL) operand = P[n, PL];
bits(PL) operand2 = P[d, PL];
boolean break = FALSE;
bits(PL) result;
constant integer psize = esize DIV 8;

for e = 0 to elements-1
    boolean element = ActivePredicateElement(operand, e, esize);
    if ActivePredicateElement(mask, e, esize) then
        bit pbit = if !break then '1' else '0';
```

```

        Elem[result, e, psize] = ZeroExtend(pbit, psize);
        break = break || element;
    elsif merging then
        bit pbit = PredicateElement(operand2, e, esize);
        Elem[result, e, psize] = ZeroExtend(pbit, psize);
    else
        Elem[result, e, psize] = ZeroExtend('0', psize);

if setflags then
    PSTATE.<N,Z,C,V> = PredTest(mask, result, esize);
P[d, PL] = result;

```

Operational information

If FEAT_SME is implemented and the PE is in Streaming SVE mode, then any subsequent instruction which is dependent on the NZCV condition flags written by this instruction might be significantly delayed.

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