RDFFRS

Return predicate of succesfully loaded elements, setting the condition flags

Read the first-fault register (FFR) and place active elements in the corresponding elements of the destination predicate. 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.

This instruction is illegal when executed in Streaming SVE mode, unless FEAT_SME_FA64 is implemented and enabled.

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	1	0	0	0	1	1	1	1	0	0	0		Pg			0			Pd	

                       S

       RDFFRS **<Pd>**.B, **<Pg>**/Z

```
if !HaveSVE() then UNDEFINED;
integer g = UInt(Pg);
integer d = UInt(Pd);
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.

Operation

```
CheckNonStreamingSVEEnabled();
constant integer VL = CurrentVL;
constant integer PL = VL DIV 8;
bits(PL) mask = P[g, PL];
bits(PL) ffr = FFR[PL];
bits(PL) result = ffr AND mask;

if setflags then
    PSTATE.<N,Z,C,V> = PredTest(mask, result, 8);
P[d, PL] = result;
```

Operational information

If FEAT_SVE2 is implemented or FEAT_SME is implemented, then if PSTATE.DIT is 1:

- The execution time of this instruction is independent of:
    - The values of the data supplied in any of its operand registers when its governing predicate register contains the same value for each execution.
    - 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 operand registers when its governing predicate register contains the same value for each execution.
    - The values of the NZCV flags.