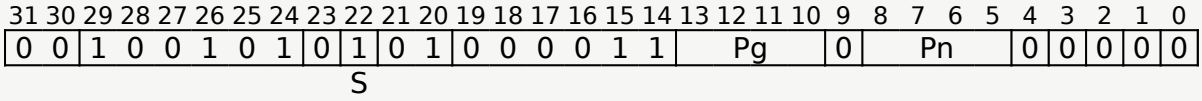
PTEST

Set condition flags for predicate

Sets the first (N), none (Z), !last (C) condition flags based on the predicate source register, and the V flag to zero.



PTEST <Pg>, <Pn>.B

```
if !HaveSVE() && !HaveSME() then UNDEFINED;
constant integer esize = 8;
integer g = UInt(Pg);
integer n = UInt(Pn);
```

Assembler Symbols

<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;
bits(PL) mask = P[g, PL];
bits(PL) result = P[n, PL];

PSTATE.<N,Z,C,V> = PredTest(mask, result, esize);
```

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.

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

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