CurrentEL, Current Exception Level

The CurrentEL characteristics are:

Purpose

Holds the current Exception level.

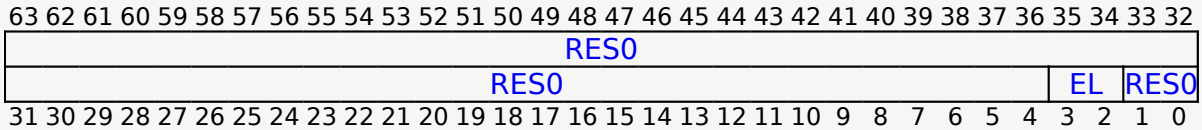
Configuration

There are no configuration notes.

Attributes

CurrentEL is a 64-bit register.

Field descriptions



Bits [63:4]

Reserved, res0.

EL, bits [3:2]

Current Exception level.

EL	Meaning
0b00	EL0.
0b01	EL1.
0b10	EL2.
0b11	EL3.

When the HCR_EL2.NV bit is 1, EL1 read accesses to the CurrentEL register return the value of 0b10 in this field.

The reset behavior of this field is:

- On a Warm reset:
  - When the highest implemented Exception level is EL1, this field resets to 1.

- When the highest implemented Exception level is EL2, this field resets to 2.
- Otherwise, this field resets to 3.

Bits [1:0]

Reserved, res0.

Accessing CurrentEL

Accesses to this register use the following encodings in the System register encoding space:

MRS <Xt>, CurrentEL

op0	op1	CRn	CRm	op2
0b11	0b000	0b0100	0b0010	0b010

```
if PSTATE.EL == EL0 then
    UNDEFINED;
elsif PSTATE.EL == EL1 then
    if EL2Enabled() && HCR_EL2.NV == '1' then
        X[t, 64] = Zeros(60):'10':Zeros(2);
    else
        X[t, 64] = Zeros(60):PSTATE.EL:Zeros(2);
elsif PSTATE.EL == EL2 then
    X[t, 64] = Zeros(60):PSTATE.EL:Zeros(2);
elsif PSTATE.EL == EL3 then
    X[t, 64] = Zeros(60):PSTATE.EL:Zeros(2);
```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