

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

63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32
RES0																															
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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

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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