

MECIDR_EL2, MEC Identification Register

The MECIDR_EL2 characteristics are:

Purpose

MEC identification register. Describes the supported MECID width by this PE.

Configuration

This register is present only when FEAT_MEC is implemented and (EL2 is implemented or EL3 is implemented). Otherwise, direct accesses to MECIDR_EL2 are undefined.

Attributes

MECIDR_EL2 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																															
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
RES0																															
MECIDWidthm1																															

Bits [63:4]

Reserved, res0.

MECIDWidthm1, bits [3:0]

The number of bits of MECID supported by the PE, minus 1.

The maximum permitted value is 0xF which indicates a MECID width of 16 bits and 2¹⁶ MECIDs.

MECIDWidth is defined as MECIDWidthm1 + 1.

The reset behavior of this field is:

- On a Warm reset, this field resets to an architecturally unknown value.

Accessing MECIDR_EL2

For accesses from EL2 and EL3, this register is RO.

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

MRS <Xt>, MECIDR_EL2

op0	op1	CRn	CRm	op2
0b11	0b100	0b1010	0b1000	0b111

```
if PSTATE.EL == EL0 then
    UNDEFINED;
elsif PSTATE.EL == EL1 then
    UNDEFINED;
elsif PSTATE.EL == EL2 then
    X[t, 64] = MECIDR_EL2;
elsif PSTATE.EL == EL3 then
    X[t, 64] = MECIDR_EL2;
```

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