

DC CIGDPAE, Clean and invalidate of data and allocation tags by PA to PoE

The DC CIGDPAE characteristics are:

Purpose

Clean and invalidate of data and allocation tags by PA to PoE.

Configuration

This instruction is present only when FEAT_MEC is implemented. Otherwise, direct accesses to DC CIGDPAE are undefined.

Attributes

DC CIGDPAE is a 64-bit System instruction.

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																															
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

Bits [63:0]

Reserved, res0.

Executing DC CIGDPAE

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

DC CIGDPAE, <Xt>

op0	op1	CRn	CRm	op2
0b01	0b100	0b0111	0b1110	0b111

```
if PSTATE.EL == EL0 then
    UNDEFINED;
elsif PSTATE.EL == EL1 then
```

```
if EL2Enabled() && HCR_EL2.NV == '1' then
    AArch64.SystemAccessTrap(EL2, 0x18);
else
    UNDEFINED;
elsif PSTATE.EL == EL2 then
    AArch64.DC(X[t, 64], CacheType_Data_Tag,
    CacheOp_CleanInvalidate, CacheOpScope_PoE);
elsif PSTATE.EL == EL3 then
    AArch64.DC(X[t, 64], CacheType_Data_Tag,
    CacheOp_CleanInvalidate, CacheOpScope_PoE);
```

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