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IC IALLUIS, Instruction Cache Invalidate All to PoU, Inner Shareable

The IC IALLUIS characteristics are:

Purpose

Invalidate all instruction caches in the Inner Shareable domain of the PE executing the instruction to the Point of Unification.

Configuration

AArch64 System instruction IC IALLUIS performs the same function as AArch32 System instruction <u>ICIALLUIS</u>.

Attributes

IC IALLUIS is a 64-bit System instruction.

Field descriptions

This instruction has no applicable fields.

The value in the register specified by <Xt> is ignored.

Executing IC IALLUIS

The Rt field should be set to 0b11111. If the Rt field is not set to 0b11111, it is constrained unpredictable whether:

- The instruction is undefined.
- The instruction behaves as if the Rt field is set to 0b11111.

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

IC IALLUIS{, <Xt>}

op0	op1	CRn	CRm	op2
0b01	0b000	0b0111	0b0001	0b000

```
if PSTATE.EL == ELO then
    UNDEFINED;
elsif PSTATE.EL == EL1 then
    if EL2Enabled() && HCR_EL2.TPU == '1' then
        AArch64.SystemAccessTrap(EL2, 0x18);
    elsif EL2Enabled() && HCR_EL2.TICAB == '1' then
        AArch64.SystemAccessTrap(EL2, 0x18);
    elsif EL2Enabled() &&
IsFeatureImplemented(FEAT_FGT) && (!HaveEL(EL3) | |
SCR_EL3.FGTEn == '1') && HFGITR_EL2.ICIALLUIS == '1'
then
        AArch64.SystemAccessTrap(EL2, 0x18);
        AArch64.IC(CacheOpScope_ALLUIS);
elsif PSTATE.EL == EL2 then
   AArch64.IC(CacheOpScope_ALLUIS);
elsif PSTATE.EL == EL3 then
   AArch64.IC(CacheOpScope ALLUIS);
```

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