AArch64
Instructions

Index by Encoding

External Registers

RVBAR_EL2, Reset Vector Base Address Register (if EL3 not implemented)

The RVBAR EL2 characteristics are:

Purpose

If EL2 is the highest Exception level implemented, contains the implementation defined address that execution starts from after reset when executing in AArch64 state.

Configuration

This register is present only when the highest implemented Exception level is EL2. Otherwise, direct accesses to RVBAR_EL2 are undefined.

Attributes

RVBAR 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

ResetAddress

ResetAddress
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

ResetAddress, bits [63:0]

The implementation defined address that execution starts from after reset when executing in 64-bit state. Bits[1:0] of this register are 00, as this address must be aligned, and the address must be within the physical address size supported by the PE.

This field has an implementation defined value.

Access to this field is **RO**.

Accessing RVBAR EL2

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

MRS <Xt>, RVBAR_EL2

op0	op1	CRn	CRm	op2
0b11	0b100	0b1100	0b0000	0b001

```
if PSTATE.EL == EL1 && EL2Enabled() &&
IsHighestEL(EL2) && HCR_EL2.NV == '1' then
         AArch64.SystemAccessTrap(EL2, 0x18);
elsif PSTATE.EL == EL2 && IsHighestEL(EL2) then
         X[t, 64] = RVBAR_EL2;
else
         UNDEFINED;
```

AArch32AArch64AArch32AArch64Index byExternalRegistersRegistersInstructionsInstructionsEncodingRegisters

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