AArch64 Instructions Index by Encoding

External Registers

# RVBAR\_EL1, Reset Vector Base Address Register (if EL2 and EL3 not implemented)

The RVBAR EL1 characteristics are:

#### **Purpose**

If EL1 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 EL1. Otherwise, direct accesses to RVBAR EL1 are undefined.

#### **Attributes**

RVBAR EL1 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\_EL1

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

## MRS <Xt>, RVBAR\_EL1

op0	op1	CRn	CRm	op2
0b11	0b000	0b1100	0b0000	0b001

```
if PSTATE.EL == EL1 && IsHighestEL(EL1) then
    X[t, 64] = RVBAR_EL1;
else
    UNDEFINED;
```

AArch32AArch64AArch32AArch64Index byExternalRegistersRegistersInstructionsInstructionsEncodingRegisters

28/03/2023 16:02; 72747e43966d6b97dcbd230a1b3f0421d1ea3d94

Copyright © 2010-2023 Arm Limited or its affiliates. All rights reserved. This document is Non-Confidential.