External

Registers

AMAIR2_EL3, Extended Auxiliary Memory Attribute Indirection Register (EL3)

The AMAIR2 EL3 characteristics are:

Purpose

AArch32

Registers

Provides implementation defined memory attributes for the memory regions specified by MAIR2 EL3.

Configuration

This register is present only when FEAT_AIE is implemented. Otherwise, direct accesses to AMAIR2 EL3 are undefined.

Attributes

AMAIR2 EL3 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

IMPLEMENTATION DEFINED	
IMPLEMENTATION DEFINED	

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

IMPLEMENTATION DEFINED, bits [63:0]

implementation defined.

Accessing AMAIR2 EL3

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

MRS <Xt>, AMAIR2_EL3

op0	op1	CRn	CRm	op2
0b11	0b110	0b1010	0b0011	0b001

```
UNDEFINED;
elsif PSTATE.EL == EL1 then
     UNDEFINED;
elsif PSTATE.EL == EL2 then
     UNDEFINED;
elsif PSTATE.EL == EL3 then
     X[t, 64] = AMAIR2_EL3;
```

MSR AMAIR2_EL3, <Xt>

op0	op1	CRn	CRm	op2	
0b11	0b110	0b1010	0b0011	0b001	

```
if PSTATE.EL == EL0 then
    UNDEFINED;
elsif PSTATE.EL == EL1 then
    UNDEFINED;
elsif PSTATE.EL == EL2 then
    UNDEFINED;
elsif PSTATE.EL == EL3 then
    AMAIR2_EL3 = X[t, 64];
```

AArch32	AArch64	AArch32	AArch64	<u>Index by</u>	<u>External</u>
<u>Registers</u>	<u>Registers</u>	<u>Instructions</u>	<u>Instructions</u>	Encoding	<u>Registers</u>

28/03/2023 16:02; 72747e43966d6b97dcbd230a1b3f0421d1ea3d94

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