

## AFSR1\_EL3, Auxiliary Fault Status Register 1 (EL3)

The AFSR1\_EL3 characteristics are:

### Purpose

Provides additional implementation defined fault status information for exceptions taken to EL3.

### Configuration

This register is present only when EL3 is implemented. Otherwise, direct accesses to AFSR1\_EL3 are undefined.

### Attributes

AFSR1\_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.

The reset behavior of this field is:

- On a Warm reset, this field resets to an architecturally unknown value.

### Accessing AFSR1\_EL3

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

MRS <Xt>, AFSR1\_EL3

op0	op1	CRn	CRm	op2
-----	-----	-----	-----	-----

0b11	0b110	0b0101	0b0001	0b001
------	-------	--------	--------	-------

```

if PSTATE.EL == EL0 then
    UNDEFINED;
elsif PSTATE.EL == EL1 then
    UNDEFINED;
elsif PSTATE.EL == EL2 then
    UNDEFINED;
elsif PSTATE.EL == EL3 then
    X[t, 64] = AFSR1_EL3;

```

## MSR AFSR1\_EL3, <Xt>

op0	op1	CRn	CRm	op2
0b11	0b110	0b0101	0b0001	0b001

```

if PSTATE.EL == EL0 then
    UNDEFINED;
elsif PSTATE.EL == EL1 then
    UNDEFINED;
elsif PSTATE.EL == EL2 then
    UNDEFINED;
elsif PSTATE.EL == EL3 then
    AFSR1_EL3 = X[t, 64];

```

[AArch32  
Registers](#)

[AArch64  
Registers](#)

[AArch32  
Instructions](#)

[AArch64  
Instructions](#)

[Index by  
Encoding](#)

[External  
Registers](#)

28/03/2023 16:02; 72747e43966d6b97dcbd230a1b3f0421d1ea3d94

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