AArch64
Instructions

Index by Encoding

External Registers

AMEVCNTR1<n>, Activity Monitors Event Counter Registers 1, n = 0 - 15

The AMEVCNTR1<n> characteristics are:

Purpose

Provides access to the auxiliary activity monitor event counters.

Configuration

External register AMEVCNTR1<n> bits [63:0] are architecturally mapped to AArch64 System register <u>AMEVCNTR1<n>_EL0[63:0]</u>.

External register AMEVCNTR1<n> bits [63:0] are architecturally mapped to AArch32 System register <u>AMEVCNTR1<n>[63:0]</u>.

It is implementation defined whether AMEVCNTR1<n> is implemented in the Core power domain or in the Debug power domain.

This register is present only when FEAT_AMUv1 is implemented. Otherwise, direct accesses to AMEVCNTR1<n> are res0.

Attributes

AMEVCNTR1<n> 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

05 02 03	- 00 33 30	<u> </u>	505 .	. .	 	5 	 <u></u>	• •	 	<u> </u>	<u></u>	<u> </u>	 	 	<u> </u>	 	<u> </u>	
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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

ACNT, bits [63:0]

Auxiliary activity monitor event counter n.

Value of auxiliary activity monitor event counter n, where n is the number of this register and is a number from 0 to 15.

The reset behavior of this field is:

• On an AMU reset, this field resets to 0.

Accessing AMEVCNTR1<n>

If <n> is greater than or equal to the number of auxiliary activity monitor event counters, reads of AMEVCNTR1<n> are RAZ. Software must treat reserved accesses as res0. See 'Access requirements for reserved and unallocated registers'.

Note

<u>AMCGCR</u>.CG1NC identifies the number of auxiliary activity monitor event counters.

AMEVCNTR1<n> can be accessed through the memory-mapped interfaces:

Component	Offset	Instance	Range			
AMU	0x100	AMEVCNTR1 <n></n>	31:0			
	+ (8 *					
	n)					

Accesses on this interface are **RO**.

Component	Offset	Instance	Range
AMU	0x104	AMEVCNTR1 <n></n>	63:32
	+ (8 *		
	n)		

Accesses on this interface are **RO**.

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