CTIDEVID, CTI Device ID register 0

The CTIDEVID characteristics are:

Purpose

Describes the CTI component to the debugger.

Configuration

CTIDEVID is in the Debug power domain.

Attributes

CTIDEVID is a 32-bit register.

Field descriptions

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

RESO INOURESO NUMCHAN RESO NUMTRIG RESO EXTMUXNUM

Bits [31:26]

Reserved, res0.

INOUT, bits [25:24]

Input/output options. Indicates presence of the input gate. If the CTM is not implemented or CTIv2 is not implemented, this field is RAZ.

INOUT	Meaning			
0b00	CTIGATE does not mask			
	propagation of input events			
	from external channels.			
0b01	CTIGATE masks propagation of			
	input events from external			
	channels.			

All other values are reserved.

Bits [23:22]

Reserved, res0.

NUMCHAN, bits [21:16]

Number of ECT channels implemented. For Armv8, valid values are:

- 0b000011 3 channels (0..2) implemented.
- 0b000100 4 channels (0..3) implemented.
- 0b000101 5 channels (0..4) implemented.
- 0b000110 6 channels (0..5) implemented.

and so on up to 0b100000, 32 channels (0..31) implemented.

All other values are reserved.

This field has an implementation defined value.

Access to this field is **RO**.

Bits [15:14]

Reserved, res0.

NUMTRIG, bits [13:8]

Upper bound for number of triggers. The indices of all implemented input and output triggers are less than this value.

All other values are reserved. If the PE contains a Trace extension, this field must be at least <code>0b001000</code>. There is no guarantee that all of the input and output triggers, including the highest numbered, are connected to any components, or that the implementation of input and output triggers is symmetrical.

This field has an implementation defined value.

Access to this field is **RO**.

Bits [7:5]

Reserved, res0.

EXTMUXNUM, bits [4:0]

Number of multiplexors available on triggers. This value is used in conjunction with External Control register, ASICCTL.

This field has an implementation defined value.

Access to this field is **RO**.

Accessing CTIDEVID

CTIDEVID can be accessed through the external debug interface:

Component	Offset	Instance	
CTI	0xFC8	CTIDEVID	

Accesses on this interface are **RO**.

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

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