AArch64
Instructions

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External Registers

DBGCLAIMCLR_EL1, Debug CLAIM Tag Clear Register

The DBGCLAIMCLR EL1 characteristics are:

Purpose

Used by software to read the values of the CLAIM tag bits, and to clear CLAIM tag bits to 0.

The architecture does not define any functionality for the CLAIM tag bits.

Note

CLAIM tags are typically used for communication between the debugger and target software.

Used in conjunction with the <u>DBGCLAIMSET_EL1</u> register.

Configuration

External register DBGCLAIMCLR_EL1 bits [31:0] are architecturally mapped to AArch64 System register <u>DBGCLAIMCLR_EL1[31:0]</u>.

External register DBGCLAIMCLR_EL1 bits [31:0] are architecturally mapped to AArch32 System register <u>DBGCLAIMCLR[31:0]</u>.

DBGCLAIMCLR_EL1 is in the Core power domain.

An implementation must include eight CLAIM tag bits.

Attributes

DBGCLAIMCLR_EL1 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
RAZ/WI	CLAIM

Bits [31:8]

Reserved, RAZ/WI.

CLAIM, bits [7:0]

Read or clear CLAIM tag bits. Reading this field returns the current value of the CLAIM tag bits.

Writing a 1 to one of these bits clears the corresponding CLAIM tag bit to 0. This is an indirect write to the CLAIM tag bits. A single write operation can clear multiple CLAIM tag bits to 0.

Writing 0 to one of these bits has no effect.

The reset behavior of this field is:

• On a Cold reset, this field resets to 0.

Accessing DBGCLAIMCLR_EL1

DBGCLAIMCLR_EL1 can be accessed through the external debug interface:

Component	Offset	Instance
Debug	0xFA4	DBGCLAIMCLR_EL1

This interface is accessible as follows:

- When IsCorePowered(), !DoubleLockStatus(), !OSLockStatus() and SoftwareLockStatus(), accesses to this register are **RO**.
- When IsCorePowered(), !DoubleLockStatus(), !OSLockStatus() and ! SoftwareLockStatus(), accesses to this register are **RW**.
- Otherwise, accesses to this register generate an error response.

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