TRCCNTRLDVR<n>, Counter Reload Value Register <n>, n = 0 - 3

The TRCCNTRLDVR<n> characteristics are:

Purpose

This sets or returns the reload count value for Counter <n>.

Configuration

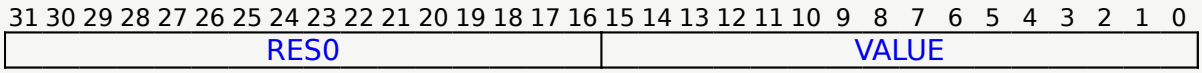
External register TRCCNTRLDVR<n> bits [31:0] are architecturally mapped to AArch64 System register TRCCNTRLDVR<n>[31:0].

This register is present only when FEAT_ETE is implemented, FEAT_TRC_EXT is implemented and UInt(TRCIDR5.NUMCNTR) > n. Otherwise, direct accesses to TRCCNTRLDVR<n> are res0.

Attributes

TRCCNTRLDVR<n> is a 32-bit register.

Field descriptions



Bits [31:16]

Reserved, res0.

VALUE, bits [15:0]

Contains the reload value for Counter <n>. When a reload event occurs for Counter <n> then the trace unit copies the VALUE<n> field into Counter <n>.

The reset behavior of this field is:

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

Accessing TRCCNTRLDVR<n>

Must be programmed if TRCRSCTLR<a>.GROUP == `0b0010` and TRCRSCTLR<a>.COUNTERS[n] == 1.

Writes are constrained unpredictable if the trace unit is not in the Idle state.

TRCCNTRLDVR<n> can be accessed through the external debug interface:

Component	Offset	Instance
ETE	`0x140` + (4 * n)	TRCCNTRLDVR<n>

This interface is accessible as follows:

- When OSLockStatus(), or !AllowExternalTraceAccess() or ! IsTraceCorePowered(), accesses to this register generate an error response.
- Otherwise, accesses to this register are **RW**.

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