TRCVIPCSSCTLR, ViewInst Start/Stop PE Comparator Control Register

The TRCVIPCSSCTLR characteristics are:

Purpose

Use this to select, or read, which PE Comparator Inputs can control the ViewInst start/stop function.

Configuration

External register TRCVIPCSSCTLR bits [31:0] are architecturally mapped to AArch64 System register TRCVIPCSSCTLR[31:0].

This register is present only when FEAT_ETE is implemented, FEAT_TRC_EXT is implemented and UInt(TRCIDR4.NUMPC) > 0. Otherwise, direct accesses to TRCVIPCSSCTLR are res0.

Attributes

TRCVIPCSSCTLR is a 32-bit register.

Field descriptions

| 3130292827262524 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15141312111098 | 3 |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------------|---|
| RES0 | STOP[7] | STOP[6] | STOP[5] | STOP[4] | STOP[3] | STOP[2] | STOP[1] | STOP[0] | RES0 | S |

Bits [31:24]

Reserved, res0.

STOP[<m>], bit [m+16], for m = 7 to 0

Selects whether PE Comparator Input <m> is in use with ViewInst start/stop function, for the purpose of stopping trace.

| STOP[<m>]</m> | Meaning |
|----------------|-------------------------------|
| 0b0 | The PE Comparator Input |
| | <m>, is not selected as a</m> |
| | stop resource. |
| 0b1 | The PE Comparator Input |
| | <m>, is selected as a</m> |
| | stop resource. |
| | |

This bit is res0 if $m \ge TRCIDR4.NUMPC$.

The reset behavior of this field is:

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

Bits [15:8]

Reserved, res0.

START[< m >], bit [m], for m = 7 to 0

Selects whether PE Comparator Input <m> is in use with ViewInst start/stop function, for the purpose of starting trace.

| START[<m>]</m> | Meaning |
|-----------------|----------------------------|
| 0b0 | The PE Comparator |
| | Input $m>$, is not |
| | selected as a start |
| | resource. |
| 0b1 | The PE Comparator |
| | Input <m>, is selected</m> |
| | as a start resource. |

This bit is res0 if $m \ge TRCIDR4.NUMPC$.

The reset behavior of this field is:

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

Accessing TRCVIPCSSCTLR

Must be programmed if TRCIDR4.NUMPC != 0b0000.

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

TRCVIPCSSCTLR can be accessed through the external debug interface:

| Component | Offset | Instance | | |
|-----------|--------|---------------|--|--|
| ETE | 0x08C | TRCVIPCSSCTLR | | |

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**.

AArch32AArch64AArch32AArch64Index byExternalRegistersRegistersInstructionsInstructionsEncodingRegisters

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