External

Registers

TRCIMSPECO, IMP DEF Register 0

The TRCIMSPEC0 characteristics are:

Purpose

TRCIMSPEC0 shows the presence of any implementation defined features, and provides an interface to enable the features that are provided.

Configuration

External register TRCIMSPEC0 bits [31:0] are architecturally mapped to AArch64 System register TRCIMSPEC0[31:0].

This register is present only when FEAT_ETE is implemented and FEAT_TRC_EXT is implemented. Otherwise, direct accesses to TRCIMSPEC0 are res0.

Attributes

TRCIMSPEC0 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
RES0		EN			SUPPORT				

Bits [31:8]

Reserved, res0.

EN, bits [7:4] When TRCIMSPECO.SUPPORT != 0b0000:

Enable. Controls whether the implementation defined features are enabled.

EN	Meaning
0b0000	The implementation defined
	features are not enabled. The
	trace unit must behave as if the
	implementation defined
	features are not supported.
0b0001	The trace unit behavior is
	implementation defined.

0b0010	The trace unit behavior is implementation defined.
0b0011	The trace unit behavior is implementation defined.
0b0100	The trace unit behavior is implementation defined.
0b0101	The trace unit behavior is
0b0110	implementation defined. The trace unit behavior is
0b0111	implementation defined. The trace unit behavior is
111000	implementation defined.
0b1000	The trace unit behavior is implementation defined.
0b1001	The trace unit behavior is
0b1010	implementation defined. The trace unit behavior is
01 1 0 1 1	implementation defined. The trace unit behavior is
0b1011	implementation defined.
0b1100	The trace unit behavior is implementation defined.
0b1101	The trace unit behavior is
0b1110	implementation defined. The trace unit behavior is
	implementation defined.
0b1111	The trace unit behavior is implementation defined.
	±

The reset behavior of this field is:

• On a Trace unit reset, this field resets to 0.

Otherwise:

Reserved, res0.

SUPPORT, bits [3:0]

Indicates whether the implementation supports implementation defined features.

SUPPORT	Meaning
0b0000	No implementation defined
	features are supported.
0b0001	implementation defined
	features are supported.
0b0010	implementation defined
	features are supported.

0b0011	implementation defined features are supported.
0b0100	implementation defined
	features are supported.
0b0101	implementation defined
	features are supported.
0b0110	implementation defined
	features are supported.
0b0111	implementation defined
	features are supported.
0b1000	implementation defined
	features are supported.
0b1001	implementation defined
	features are supported.
0b1010	implementation defined
	features are supported.
0b1011	implementation defined
	features are supported.
0b1100	implementation defined
	features are supported.
0b1101	implementation defined
	features are supported.
0b1110	implementation defined
	features are supported.
0b1111	implementation defined
	features are supported.

Use of nonzero values requires written permission from Arm.

Access to this field is **RO**.

Accessing TRCIMSPEC0

TRCIMSPEC0 can be accessed through the external debug interface:

Component	Offset	Instance
ETE	0x1C0	TRCIMSPEC0

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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