GICM_TYPER, Distributor MSI Type Register

The GICM TYPER characteristics are:

Purpose

Provides information about what features the GIC implementation supports.

Configuration

This register is available in all configurations of the GIC. When GICD CTLR.DS==0, this register is Common.

Attributes

GICM TYPER is a 32-bit register.

Field descriptions

31	30	29	28	27	26	25	24	4 2	23	22	21	2	0 1	9	18	17	16	15	1	4 1	3 1	<u>L2</u>	11	10	9	8	7	6	5	4	3	2	1	0
Valid	CLR	SR							ΙN	ΙTΙ	D									RE	S)						Vu	ms	SPI	S			

Valid, bit [31]

Reports whether GICM TYPER content is valid.

Valid	Meaning
0b0	GICM_TYPER reports no
	information on the capabilities of
	the GICM frame, all other fields
	are res0.
0b1	GICM_TYPER reports information on capabilities of GICM frame.
	on capabilities of GICM Haille.

CLR, bit [30]

Reports whether MSI clear registers are supported.

CLR	Meaning
0b0	MSI clear registers not
	implemented.
0b1	MSI clear registers implemented.

SR, bit [29]

Reports whether Secure aliases of MSI registers are supported.

SR	Meaning
0b0	Secure aliases of MSI registers not implemented.
0b1	Secure aliases of MSI registers implemented.

INTID, bits [28:16]

INTID of the first SPI assigned to this GICM frame.

Bits [15:11]

Reserved, res0.

NumSPIs, bits [10:0]

Number of SPIs assigned to this GICM frame.

Accessing GICM_TYPER

GICM_TYPER can be accessed through the memory-mapped interfaces:

Component	Frame	Offset	Instance			
GIC Distributor	MSI_base	0x0004	GICM_TYPER			

Accesses on this interface are **RO**.

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

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