

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	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Valid	CLR	SR	INTID												RES0				NumSPIs												

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.

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**.