GICR_ICFGR0, Interrupt Configuration Register 0

The GICR ICFGR0 characteristics are:

Purpose

Determines whether the corresponding SGI is edge-triggered or levelsensitive.

Configuration

A copy of this register is provided for each Redistributor.

Attributes

GICR ICFGR0 is a 32-bit register.

Field descriptions

Int_config<x>, bits [2x+1:2x], for x = 15 to 0

Indicates whether the is level-sensitive or edge-triggered.

Int_config <x></x>	Meaning
0b00	Corresponding
	interrupt is level-
	sensitive.
0b10	Corresponding
	interrupt is edge-
	triggered.

SGIs are always edge-triggered.

When the interrupt is visible to the current Security state, a read of this bit always returns the correct value to indicate the interrupt triggering method.

The reset behavior of this field is:

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

Accessing GICR_ICFGR0

This register is used when affinity routing is enabled.

When affinity routing is disabled for the Security state of an interrupt, the field for that interrupt is res0 and an implementation is permitted to make the field RAZ/WI in this case. Equivalent functionality is provided by GICD ICFGR<n> with n=0.

When <u>GICD_CTLR</u>.DS==0, a register bit that corresponds to a Group 0 or Secure Group 1 interrupt is RAZ/WI to Non-secure accesses.

GICR_ICFGR0 can be accessed through the memory-mapped interfaces:

Component	Frame	Offset	Instance
GIC Redistributor	SGI_base	0x0C00	GICR_ICFGR0

Accesses on this interface are RW.

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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