GICD_STATUSR, Error Reporting Status Register

The GICD STATUSR characteristics are:

Purpose

Provides software with a mechanism to detect:

- Accesses to reserved locations.
- Writes to read-only locations.
- Reads of write-only locations.

Configuration

If the GIC implementation supports two Security states this register is Banked to provide Secure and Non-secure copies.

Attributes

GICD_STATUSR is a 32-bit register.

Field descriptions

31302928272625242322212019181716151413121110 9 8 7 6 5 4	3	2	1	0
RES0	WROD	RWOD	WRD	RRD

Bits [31:4]

Reserved, res0.

WROD, bit [3]

Write to an RO location.

WROD	Meaning
0b0	Normal operation.
0b1	A write to an RO location has
	been detected.

When a violation is detected, software must write 1 to this register to reset it.

RWOD, bit [2]

Read of a WO location.

RWOD	Meaning
0b0	Normal operation.
0b1	A read of a WO location has been detected.

When a violation is detected, software must write 1 to this register to reset it.

WRD, bit [1]

Write to a reserved location.

WRD	Meaning
0b0	Normal operation.
0b1	A write to a reserved location has been detected.

When a violation is detected, software must write 1 to this register to reset it.

RRD, bit [0]

Read of a reserved location.

RRD	Meaning
0b0	Normal operation.
0b1	A read of a reserved location has been detected.

When a violation is detected, software must write 1 to this register to reset it.

Accessing GICD_STATUSR

This is an optional register. If the register is not implemented, the location is RAZ/WI.

GICD STATUSR can be accessed through the memory-mapped interfaces:

Component	Frame	Offset	Instance
GIC Distributor	Dist_base	0x0010	GICD_STATUSR (S)

This interface is accessible as follows:

• When an access is Secure, accesses to this register are **RW**.

• When FEAT_RME is implemented and an access is Root, accesses to this register are **RW**.

Component	Frame	Offset	Instance	
GIC Distributor	Dist_base	0x0010	GICD_STATUSR (NS)	

This interface is accessible as follows:

- When an access is Non-secure, accesses to this register are **RW**.
- When FEAT_RME is implemented and an access is Realm, accesses to this register are **RAZ/WI**.

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