GICM_CLRSPI_NSR, Clear Non-secure SPI Pending Register

The GICM CLRSPI NSR characteristics are:

Purpose

Removes the pending state from a valid SPI if permitted by the Security state of the access and the GICD NSACR<n> value for that SPI.

A write to this register changes the state of a pending SPI to inactive, and the state of an active and pending SPI to active.

Configuration

This register is present only when GICM_TYPER.CLR == 1. Otherwise, direct accesses to GICM_CLRSPI_NSR are res0.

When $\underline{\text{GICD_CTLR}}.\text{DS} == 1$, this register provides functionality for all SPIs.

Attributes

GICM CLRSPI NSR 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 | INTID | | | | | | | | | |

Bits [31:13]

Reserved, res0.

INTID, bits [12:0]

This field is an alias of GICD CLRSPI NSR.

Accessing GICM_CLRSPI_NSR

Writes to this register have no effect if:

 The value written specifies a Secure SPI, the value is written by a Non-secure access, and the value of the corresponding GICD_NSACR<n> register is less than 0b10.

- The value written specifies an invalid SPI.
- The SPI is not pending.

16-bit accesses to bits [15:0] of this register must be supported.

Note

A Secure access to this register can clear the pending state of any valid SPI.

GICM_CLRSPI_NSR can be accessed through the memory-mapped interfaces:

| Component | Frame | Offset | Instance |
|--------------------|----------|--------|-----------------|
| GIC Distributor | MSI_base | 0x0048 | GICM_CLRSPI_NSR |

Accesses on this interface are **WO**.

AArch32AArch64AArch32AArch64Index byExternalRegistersRegistersInstructionsInstructionsEncodingRegisters

28/03/2023 16:02; 72747e43966d6b97dcbd230a1b3f0421d1ea3d94

Copyright © 2010-2023 Arm Limited or its affiliates. All rights reserved. This document is Non-Confidential.