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MPAMF_ERR_MSI_ADDR_H, MPAM Error MSI High-part Address Register

The MPAMF ERR MSI ADDR H characteristics are:

Purpose

MPAMF_ERR_MSI_ADDR_H is a 32-bit read/write register for the high part of the MPAM error MSI address.

MPAMF_ERR_MSI_ADDR_H_s is the high part of the MSI write address for error interrupts related to Secure PARTIDs.

MPAMF_ERR_MSI_ADDR_H_ns is the high part of the MSI write address for error interrupts related to Non-secure PARTIDs.

MPAMF_ERR_MSI_ADDR_H_rt is the high part of the MSI write address for error interrupts related to Root PARTIDs.

MPAMF_ERR_MSI_ADDR_H_rl is the high part of the MSI write address for error interrupts related to Realm PARTIDs.

Configuration

This register is present only when (FEAT_MPAMv0p1 is implemented or FEAT_MPAMv1p1 is implemented) and MPAMF_IDR.HAS_ERR_MSI == 1. Otherwise, direct accesses to MPAMF_ERR_MSI_ADDR_H are res0.

The power and reset domain of each MSC component is specific to that component.

Attributes

MPAMF_ERR_MSI_ADDR_H 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	MSI_ADDR_H

Bits [31:20]

Reserved, res0.

MSI_ADDR_H, bits [19:0]

MSI write address bits[51:32].

Accessing MPAMF_ERR_MSI_ADDR_H

This register is within the MPAM feature page memory frames.

In a system that supports Secure, Non-secure, Root, and Realm memory maps, there must be MPAM feature pages in all four address maps:

- MPAMF_ERR_MSI_ADDR_H_s must only be accessible from the Secure MPAM feature page.
- MPAMF_ERR_MSI_ADDR_H_ns must only be accessible from the Non-secure MPAM feature page.
- MPAMF_ERR_MSI_ADDR_H_rt must only be accessible from the Root MPAM feature page.
- MPAMF_ERR_MSI_ADDR_H_rl must only be accessible from the Realm MPAM feature page.

MPAMF_ERR_MSI_ADDR_H_s, MPAMF_ERR_MSI_ADDR_H_ns, MPAMF_ERR_MSI_ADDR_H_rt, and MPAMF_ERR_MSI_ADDR_H_rl must be separate registers:

- The Secure instance (MPAMF_ERR_MSI_ADDR_H_s) accesses the high part of the memory address for MSI write to signal an MPAM error used for Secure PARTIDs.
- The Non-secure instance (MPAMF_ERR_MSI_ADDR_H_ns) accesses the high part of the memory address for MSI write to signal an MPAM error used for Non-secure PARTIDs.
- The Root instance (MPAMF_ERR_MSI_ADDR_H_rt) accesses the high part of the memory address for MSI write to signal an MPAM error used for Root PARTIDs.
- The Realm instance (MPAMF_ERR_MSI_ADDR_H_rl) accesses the high part of the memory address for MSI write to signal an MPAM error used for Realm PARTIDs.

MPAMF_ERR_MSI_ADDR_H can be accessed through the memory-mapped interfaces:

Component Frame		Offset	Instance		
MPAM	MPAMF_BASE_s	0x00E4	MPAMF_ERR_MSI_ADDR_H_s		

Accesses on this interface are **RW**.

Component	Frame	Offset	Instance
MPAM	MPAMF_BASE_ns	0x00E4	MPAMF_ERR_MSI_ADDR_H_ns

Accesses on this interface are **RW**.

Component Frame		Offset	Instance		
MPAM	MPAMF_BASE_rt	0x00E4	MPAMF_ERR_MSI_ADDR_H_rt		

When FEAT RME is implemented, accesses on this interface are RW.

Component		Frame	Offset	Instance
	MPAM	MPAMF_BASE_rl	0x00E4	MPAMF_ERR_MSI_ADDR_H_rl

When FEAT_RME is implemented, accesses on this interface are ${f RW}.$

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