MPAMCFG_DIS, MPAM Partition Configuration Disable Register

The MPAMCFG_DIS characteristics are:

Purpose

Disables a PARTID configuration as set in other MPAMCFG registers.

MPAMCFG_DIS_s disables a Secure PARTID. MPAMCFG_DIS_ns disables a Non-secure PARTID. MPAMCFG_DIS_rl disables a Realm PARTID. MPAMCFG_DIS_rt disables a Root PARTID.

Configuration

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

Attributes

MPAMCFG_DIS 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
NFU	RES0	PARTID

NFU, bit [31]
When MPAMF_IDR.HAS_NFU == 1:

No Future Use. Software indicates that the PARTID disabled with NFU of 1 will not be used again and will be reconfigured and reenabled before being used again.

NFU	Meaning
0b0	Control settings of the disabled PARTID must be retained.
0b1	Control settings of the disabled PARTID may take an unknown value.

Otherwise:

Reserved, res0.

Bits [30:16]

Reserved, res0.

PARTID, bits [15:0]

Selects the PARTID to disable.

Accessing MPAMCFG_DIS

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:

- MPAMCFG_DIS_s must only be accessible from the Secure MPAM feature page.
- MPAMCFG_DIS_ns must only be accessible from the Non-secure MPAM feature page.
- MPAMCFG_DIS_rt must only be accessible from the Root MPAM feature page.
- MPAMCFG_DIS_rl must only be accessible from the Realm MPAM feature page.

MPAMCFG_DIS_s, MPAMCFG_DIS_ns, MPAMCFG_DIS_rt, and MPAMCFG_DIS_rl must be separate registers:

- The Secure instance (MPAMCFG_DIS_s) accesses the PARTID disable used for Secure PARTIDs.
- The Non-secure instance (MPAMCFG_DIS_ns) accesses the PARTID disable used for Non-secure PARTIDs.
- The Root instance (MPAMCFG_DIS_rt) accesses the PARTID disable used for Root PARTIDs.
- The Realm instance (MPAMCFG_DIS_rl) accesses the PARTID disable used for Realm PARTIDs.

When RIS is implemented, loads and stores to MPAMCFG_DIS access the PARTID disable configuration settings for the PARTID disable resource instance selected by MPAMCFG_PART_SEL.RIS and the PARTID selected by MPAMCFG_PART_SEL.PARTID_SEL.

When RIS is not implemented, loads and stores to MPAMCFG_DIS access the PARTID disable configuration settings for the PARTID selected by MPAMCFG_PART_SEL.PARTID_SEL.

When PARTID narrowing is implemented, loads and stores to MPAMCFG_DIS access the PARTID disable configuration settings for the internal PARTID selected by MPAMCFG_PART_SEL.PARTID_SEL, and MPAMCFG_PART_SEL.INTERNAL must be 1.

When PARTID narrowing is not implemented, loads and stores to MPAMCFG_DIS access the PARTID disable configuration settings for the request PARTID selected by MPAMCFG_PART_SEL.PARTID_SEL, and MPAMCFG_PART_SEL.INTERNAL must be 0.

MPAMCFG_DIS can be accessed through the memory-mapped interfaces:

Component	Frame	Offset	Instance
MPAM	MPAMF_BASE_s	0x0310	MPAMCFG_DIS_s

Accesses on this interface are **WO/RAZ**.

Component	Frame	Offset	Instance
MPAM	MPAMF_BASE_ns	0x0310	MPAMCFG_DIS_ns

Accesses on this interface are **WO/RAZ**.

Component	Frame	Offset	Instance
MPAM	MPAMF_BASE_rt	0x0310	MPAMCFG_DIS_rt

When FEAT_RME is implemented, accesses on this interface are **WO/RAZ**.

Component	Frame	Offset	Instance
MPAM	MPAMF_BASE_rl	0x0310	MPAMCFG_DIS_rl

When FEAT_RME is implemented, accesses on this interface are **WO/RAZ**.

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