MPAMCFG_EN, MPAM Partition Configuration Enable Register

The MPAMCFG_EN characteristics are:

Purpose

Enables a PARTID configuration as set in other MPAMCFG registers.

MPAMCFG_EN_s enables a Secure PARTID. MPAMCFG_EN_ns enables a Non-secure PARTID. MPAMCFG_EN_rl enables a Realm PARTID. MPAMCFG_EN_rt enables 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_EN are res0.

Attributes

MPAMCFG_EN 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	PARTID

Bits [31:16]

Reserved, res0.

PARTID, bits [15:0]

Selects the PARTID to enable.

Accessing MPAMCFG_EN

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_EN_s must only be accessible from the Secure MPAM feature page.

- MPAMCFG_EN_ns must only be accessible from the Non-secure MPAM feature page.
- MPAMCFG_EN_rt must only be accessible from the Root MPAM feature page.
- MPAMCFG_EN_rl must only be accessible from the Realm MPAM feature page.

MPAMCFG_EN_s, MPAMCFG_EN_ns, MPAMCFG_EN_rt, and MPAMCFG_EN_rl must be separate registers:

- The Secure instance (MPAMCFG_EN_s) accesses the PARTID enable used for Secure PARTIDs.
- The Non-secure instance (MPAMCFG_EN_ns) accesses the PARTID enable used for Non-secure PARTIDs.
- The Root instance (MPAMCFG_EN_rt) accesses the PARTID enable used for Root PARTIDs.
- The Realm instance (MPAMCFG_EN_rl) accesses the PARTID enable used for Realm PARTIDs.

When RIS is implemented, loads and stores to MPAMCFG_EN access the PARTID enable configuration settings for the PARTID enable 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_EN access the PARTID enable configuration settings for the PARTID selected by MPAMCFG_PART_SEL.PARTID_SEL.

When PARTID narrowing is implemented, loads and stores to MPAMCFG_EN access the PARTID enable 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_EN access the PARTID enable configuration settings for the request PARTID selected by MPAMCFG_PART_SEL.PARTID_SEL, and MPAMCFG_PART_SEL.INTERNAL must be 0.

MPAMCFG_EN can be accessed through the memory-mapped interfaces:

Component	Frame	Offset	Instance
MPAM	MPAMF_BASE_s	0x0300	MPAMCFG_EN_s

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

Component	Frame	Offset	Instance
MPAM	MPAMF_BASE_ns	0x0300	MPAMCFG_EN_ns

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

Component	Frame	Offset	Instance

MPAM	MPAMF_BASE_rt	0x0300	MPAMCFG_EN_rt

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

Component	Frame	Offset	Instance
MPAM	MPAMF_BASE_rl	0x0300	MPAMCFG_EN_rl

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

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