To configure permission settings in a memory region, perform the following steps.

1. Define the memory region by configuring STARTADDR and ENDADDR. The values must be multiples of the override region granularity, which is 4096.
2. Use PERMMASK to define which of the access permissions in PERM to apply.
3. Enable and lock the override using the CONFIG register.

To prevent unintended reconfiguration of MPC, all overrides should be safeguarded by using the LOCK bit in the CONFIG register.

Note: For overlapping regions, MPC will perform a logical OR between the permission bits. The logical OR applies to both PERMMASK and PERM registers. Because of this, it is not possible to retract the READ, WRITE or EXECUTE permissions. For PERM.SECURE, the OR operation between Secure (1) and NonSecure (0) will result in a Secure overlap region.

7.8.4.2 MPC error reporting

MPC reports an error when an access violation is detected.

MPC generates an EVENTS_MEMACCERR event when an erroneous transaction is detected. The following errors can be detected.

- The address cannot be decoded or the bus Manager does not have permissions to access the Subordinate. When this happens, the MEMACCERR.ADDRESS will capture the failing address issued by the bus Manager port and MEMACCERR.INFO will capture additional access information for the attempted transaction.
- If a transaction is routed to a Subordinate, but the Subordinate responds with an error.

The MEMACCERR registers will not be updated when EVENTS_MEMACCERR is set.

7.8.4.3 Registers

Instances

Instance	Domain	Base address	TrustZone			Split access	Description
			Map	Att	DMA		
MPC00	GLOBAL	0x50041000	HF	S	NA	No	Memory privilege controller MPC00

Configuration

Instance	Domain	Configuration
MPC00	GLOBAL	The override region granularity is 4096 bytes Overrides 0 through 4 are available for override configuration. Override 5 can be configured for access blocking. Override 6 is reserved by the system and cannot be configured.

Register overview

Register	Offset	TZ	Description
EVENTS_MEMACCERR	0x100		Memory Access Error event
INTEN	0x300		Enable or disable interrupt
INTENSET	0x304		Enable interrupt
INTENCLR	0x308		Disable interrupt