Non-secure access to a DPPI register or bit field controlling a channel marked as secure in a SPU.DPPI[n].PERM register is ignored. Write access has no effect, and read access returns a zero value.

Exceptions are not triggered when non-secure accesses target a register or a bit field controlling a secure channel. For example, if the bit `i` is set in the SPU.DPPI[0].PERM register (declaring DPPI channel [i] as secure), then the following is true:

- Non-secure write access to registers CHEN, CHENSET, and CHENCLR cannot write bit `i` of these registers
- Non-secure write access to registers TASK_CHG[j].EN and TASK_CHG[j].DIS is ignored if the channel group `j` contains at least one channel defined as secure (it can be the channel [i] itself or any channel declared as secure)
- Non-secure read access to registers CHEN, CHENSET, and CHENCLR always read 0 for the bit at position `i`

For the channel configuration registers (CHG[]), access from non-secure code is only possible if the included channels are all non-secure, whether the channels are enabled or not. If register CHG[g] included one or more secure channels, then the group `g` is considered as secure, and only secure transfers can read to or write from CHG[g]. A non-secure write access is ignored, and a non-secure read access returns 0.

The DPPI can subscribe to secure and non-secure channels through the SUBSCRIBE_CHG[] registers in order to trigger the task for enabling or disabling channel groups. An event from a secure channel is ignored if the group subscribing to this channel is non-secure. A secure group can subscribe to a non-secure channel or a secure channel.

Channel group

Creating a channel group allows all channels in that group to be simultaneously enabled or disabled. The security attribute for a channel group (secure or non-secure) is defined as follows:

- If all channels (enabled or not) within a group are non-secure, then the group is considered non-secure
- If at least one of the channels (enabled or not) within the group is secure, then the group is considered secure

6.2.5 Split security

Individual DPPI channels and channel groups can have independent security attributes.

The split security of DPPI means it handles both secure and non-secure code access. DPPI channels and channel groups can be defined as secure or non-secure.

For more information on DPPI security, see DPPIC on page 130.

6.2.6 Registers

Instances

Instance	Domain	Base address	TrustZone			Split access	Description
			Map	Att	DMA		
DPPIC00 : S DPPIC00 : NS	GLOBAL	0x50042000 0x40042000	US	S	NA	Yes	DPPI controller DPPIC00
DPPIC10 : S DPPIC10 : NS	GLOBAL	0x50082000 0x40082000	US	S	NA	Yes	DPPI controller DPPIC10
DPPIC20 : S DPPIC20 : NS	GLOBAL	0x500C2000 0x400C2000	US	S	NA	Yes	DPPI controller DPPIC20
DPPIC30 : S DPPIC30 : NS	GLOBAL	0x50102000 0x40102000	US	S	NA	Yes	DPPI controller DPPIC30