Block number (index i in MEMCONF.POWER)	Feature	RET reset value	Feature description
32	Restore VPR context at VPR reset	0	Enables the VPR context restore from the RAM at VPR reset, where the VPR reset maybe caused by a wakeup from hibernate. [1]

Table 17: Feature overview with MEMCONF.POWER.RET configuration

The following table summarizes the behavior of the CONTROL and RET/RET2 fields when a power domain is powered on or off. The RAM section can be used to read and write data when it is powered. The RAM section is retained during System OFF.

Configuration			RAM section status	
Power mode	CONTROL	RET/RET2	Powered	Retained
System OFF	Any value	Off	No	No
System OFF	Off	On	No	No
System OFF	On	On	No	Yes
System ON IDLE	Off	Any value	No	No
System ON IDLE	On	Any value	No	Yes
System ON RUN	Any value	Any value	Yes	Yes

Table 18: RAM section configuration

The advantage of not retaining RAM content is overall current consumption is reduced.

See chapter Memory on page 13 for more information on RAM sections.

> **Note:** CACHE — Instruction/data cache on page 29 must be disabled when the ICACHE memory block is turned off, and only enabled after the ICACHE memory block is turned on.

4.2.5.1 Registers

Instances

Instance	Domain	Base address	TrustZone			Split	Description
			Map	Att	DMA	access	
MEMCONF : S MEMCONF : NS	GLOBAL	0x500CF000 0x400CF000	US	S	NA	No	Memory Configuration MEMCONF

---

[1] Must enable RAM retention using MEMCONF.POWER[0].RET2.MEM[7] to restore the VPR context correctly.

NORDIC
SEMICONDUCTOR