



## NRDY, bit [31]

Not Ready. Indicates whether the captured monitor value has possibly inaccurate data.

NRDY	Meaning
0b0	The captured monitor instance was ready and the MSMON_CSU_CAPTURE.VALUE field is accurate.
0b1	The captured monitor instance was not ready and the contents of the MSMON_CSU_CAPTURE.VALUE field might be inaccurate or otherwise not represent the actual cache storage usage.

## VALUE, bits [30:0]

Captured cache storage usage measurement if MSMON\_CSU\_CAPTURE.NRDY is 0. Invalid if MSMON\_CSU\_CAPTURE.NRDY is 1.

VALUE is the captured cache storage usage measurement in bytes meeting the criteria set in [MSMON\\_CFG\\_CSU\\_FLT](#) and [MSMON\\_CFG\\_CSU\\_CTL](#) for the monitor instance selected by [MSMON\\_CFG\\_MON\\_SEL](#).

## Accessing MSMON\_CSU\_CAPTURE

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:

- MSMON\_CSU\_CAPTURE\_s must only be accessible from the Secure MPAM feature page.
- MSMON\_CSU\_CAPTURE\_ns must only be accessible from the Non-secure MPAM feature page.
- MSMON\_CSU\_CAPTURE\_rt must only be accessible from the Root MPAM feature page.
- MSMON\_CSU\_CAPTURE\_rl must only be accessible from the Realm MPAM feature page.

MSMON\_CSU\_CAPTURE\_s, MSMON\_CSU\_CAPTURE\_ns, MSMON\_CSU\_CAPTURE\_rt, and MSMON\_CSU\_CAPTURE\_rl must be separate registers:

- The Secure instance (MSMON\_CSU\_CAPTURE\_s) accesses the captured cache storage usage monitor used for Secure PARTIDs.

- The Non-secure instance (MSMON\_CSU\_CAPTURE\_ns) accesses the captured cache storage usage monitor used for Non-secure PARTIDs.
- The Root instance (MSMON\_CSU\_CAPTURE\_rt) accesses the captured cache storage usage monitor used for Root PARTIDs.
- The Realm instance (MSMON\_CSU\_CAPTURE\_rl) accesses the captured cache storage usage monitor used for Realm PARTIDs.

When RIS is implemented, reads and writes to MSMON\_CSU\_CAPTURE access the monitor instance for the cache resource instance selected by [MSMON\\_CFG\\_MON\\_SEL](#).RIS and the cache storage usage monitor instance selected by [MSMON\\_CFG\\_MON\\_SEL](#).MON\_SEL.

When RIS is not implemented, reads and writes to MSMON\_CSU\_CAPTURE access the monitor instance for the cache storage usage monitor instance selected by [MSMON\\_CFG\\_MON\\_SEL](#).MON\_SEL.

### MSMON\_CSU\_CAPTURE can be accessed through the memory-mapped interfaces:

Component	Frame	Offset	Instance
MPAM	MPAMF_BASE_s	0x0848	MSMON_CSU_CAPTURE_s

Accesses on this interface are **RW**.

Component	Frame	Offset	Instance
MPAM	MPAMF_BASE_ns	0x0848	MSMON_CSU_CAPTURE_ns

Accesses on this interface are **RW**.

Component	Frame	Offset	Instance
MPAM	MPAMF_BASE_rt	0x0848	MSMON_CSU_CAPTURE_rt

When FEAT\_RME is implemented, accesses on this interface are **RW**.

Component	Frame	Offset	Instance
MPAM	MPAMF_BASE_rl	0x0848	MSMON_CSU_CAPTURE_rl

When FEAT\_RME is implemented, accesses on this interface are **RW**.

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