### BOOT\_ChooseAndLoadSW\_CLSW

#### BOOT\_CLSW\_LoadSW\_Load\_LoadAndTestSIF\_SHA\_RMM

This function retrieves the SHA256 of the SIF Header from the RMM.

Prototype:

void BOOT\_CLSW\_LoadSW\_Load\_LoadAndTestSIF\_SHA\_RMM(

const uint32\_t p\_SIFAddress,

ts\_BOOT\_Data\* p\_BootData,

boolean\_t\* p\_FlashReadFailed,

ts\_LoadStatus\* p\_LoadStatus)

Parameters:

Function return : Not used

{p\_SIFAddress}(R) : SIF Header address

{p\_BootData}(R/W) : BOOT Data

{p\_FlashReadFailed} (W) : Read failure status

{p\_LoadStatus } (W) : Load status

Calls:

LIBBSP\_RMM\_Open

LIBBSP\_RMM\_Read

LIBBSP\_RMM\_Close

Preconditions:

None

##### Input Data

Data:

None

Preconditions:

None

##### Output Data

Data:

NONE

##### Requirements

REQ\_SDDD\_BOOT\_000xx-0x

*[COV.* *REQ\_BOOT\_SRD-00169]*

***BOOT\_CLSW\_LoadSW\_Load\_LoadAndTestSIF\_SHA\_RMM***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Causes | | | |
| Effects | **[**Open the I2C link to RMM**]** | | | |
| [The I2C link to RMM is not successful] | | [The I2C link to RMM is successful] | |
| [Acknowledgment error is detected] | [Acknowledgment error is not detected] | **[**Retrieve the SHA256 of the SIF Header from the RMM**]**  **[**Close the I2C link to RMM**]** | |
| Set {p\_LoadStatus->OutOfOperationalCondition} to TRUE | Set {\*p\_FlashReadFailed} to TRUE |
| [An error is detected] | [No error detected] |
| Set {p\_FlashReadFailed} to TRUE | No effect |

**[**Open the I2C link to RMM**]** corresponds to the following call:

**LIBBSP\_RMM\_Open**

* **Function return**: {access status}

[The I2C link to RMM is not successful]: {access status} is different from {E\_LIBBSP\_I2C\_OK}.

[Acknowledgment error is detected]: {access status} is equal to {E\_LIBBSP\_I2C\_NO\_ACK}.

[Acknowledgment error is not detected]: {access status} is different from {E\_LIBBSP\_I2C\_NO\_ACK}.

[The I2C link to RMM is successful]: {access status} is equal to {E\_LIBBSP\_I2C\_OK}.

**[**Retrieve the SHA256 of the SIF Header from the RMM**]** corresponds to the following call:

**LIBBSP\_RMM\_Read**

* **Function return**: not used
* **IN**: ({C\_BOOT\_RMM\_ADDR\_SHA\_START} +((({p\_SIFAddress} –{C\_BOOT\_RMM\_ADDR\_SIF\_START}) & 0x1000) / 0x1000) \* 0x200)
* **OUT**: {36}
* **OUT**: {p\_BootData}
* **IN/OUT:** Address of {access status}

{p\_SIFAddress} the bit 0 is set to 0.

The read from {p\_BootData} is done by 1byte.

**[**Close the I2C link to RMM**]** corresponds to the following call

**LIBBSP\_RMM\_Close**

* **Function return:** Not used.

[An error is detected]: {access status} is different from {E\_LIBBSP\_I2C\_OK}.

[No error detected]: {access status} is equal to {E\_LIBBSP\_I2C\_OK}.

Traceability: Refined

Rationale:

Mean of verification: Test

[END\_REQ\_SDDD\_BOOT\_CLSW\_LoadSW\_Load\_LoadAndTestSIF\_SHA\_RMM\_000xx-0x]