



Elektrobit

EB tresos Bootloader

Release note

product release 3.9.2



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1. Overview

This document provides you information about this new release of EB tresos Bootloader:

- ▶ New features
- ▶ Enhancements
- ▶ Important Notes
- ▶ Fixed issues
- ▶ Limitations

2. BL-3.9.2 Release

2.1. New features

This chapter lists all new features added in Bootloader since previous release:

- ▶ Dual bank: Bootloader supports new callbacks allowing integration code supporting dual bank update (hardware specific).
- ▶ LZSS decompression feature: Bootloader supports the decompression of the received data before writing them in Flash memory. LZSS algorithm is used.

2.2. Enhancements

This chapter lists all enhancements added in Bootloader since previous release:

No new enhancements

2.3. Important Notes

This chapter lists important notes to take care for integration of this new release:

- ▶ Bootloader implementation matrix provides you information about what is supported in EB tresos Bootloader. Please read it carefully to identify if project specific requirements shall be implemented, at integration side, by customer.
- ▶ Bootloader User guide (Bootloader_xxx_documentation) has been updated, please read it carefully to integrate and configure the bootloader correctly.
- ▶ Bootloader has been qualified for following ACG versions: ACG-6.4.10 / ACG-7.7.2 / ACG-8.7.1
- ▶ Board API BoardPerformReset was renamed to BoardPerformSwReset and takes no parameter now. Please update your integration accordingly.
- ▶ Board API BoardSetState was renamed to BoardSetSleepState and takes no parameter now. Please update your integration accordingly.
- ▶ Board API BoardGetResetType was renamed to BoardIsSwReset and takes no parameter now. It returns TRUE if the reset type is software. Please update your integration accordingly.
- ▶ Dual Bank feature has been added and require the following actions to be used:

- ▶ Enable "Dual Memory Bank Used" configuration parameter in Prog plugin.
- ▶ Implement callback `BM_CustomDualBankInit` performing hardware initialization required to use the dual bank (Hardware specific).
- ▶ Implement callback `PROG_CustomCalcInactiveBankWriteAddr` performing address translation, for write operation, depending of the active bank (Hardware specific).
- ▶ Implement callback `PROG_CustomCalcInactiveBankReadAddr` performing address translation, for read operation, depending of the active bank (Hardware specific).
- ▶ Callbacks `PROG_CustomStoreResetCause` and `PROG_CustomGetResetCause` have been added and shall be implemented to exchange information between Bootloader and application in case a response shall be sent after reset.

2.4. Known issues

Known issues can be found in Known issue list document send to customer. This document can be found on EB command server.

2.5. Fixed issues

This chapter lists all fixed issues in Bootloader:

- ▶ OSCPROG-1901: NRC78 response is not sent for an `EcuReset (0x11)` request with the `SuppressPositiveResponse` bit set
- ▶ OSCPROG-1872: Checksum generation errors are not detected if Authenticated/Secured Boot is enabled
- ▶ OSCPROG-1829: Flash writing operation is not done correctly when signature verification is performed on received data
- ▶ OSCBLPDUR-156: No `NRC=13(IMLOIF)` response for `TesterPresent` with suppress response bit
- ▶ OSCPROG-1872: Checksum generation errors are not detected if Authenticated/Secured Boot is enabled
- ▶ OSCPROG-1961: Sleep Timer is deactivated once a request is received
- ▶ OSCPROG-1943: On bootloader start-up, the sleep time-out only happens if the TCP connection is established
- ▶ OSCPROGOEMIND-81: Unexpected call to callback `PROG_CustomSetDownloadVerificationSuccess()` when it returns `PROG_E_NOT_OK`
- ▶ OSCPROG-1930: Corruption flag of the flash driver is not correctly updated after a signature length check failure

- ▶ OSCPLOG-1917: Response to a DSC01 request is not sent after reset
- ▶ OSCPLOG-1906: The callback `PROG_CustomSetCrcCompareSuccess()` is not called if CRC verification is wrong

For more details, please refer to the known issue list from the previous release.

2.6. Limitations

This chapter lists current limitations in Bootloader (features that will be supported in next releases). Generic limitation for the full product are defined in EB tresos Product Description.

- ▶ No limitation in this version

3. BL-3.9.1 Release

3.1. New features

This chapter lists all new features added in Bootloader since previous release:

3.2. Enhancements

This chapter lists all enhancements added in Bootloader since previous release:

No new enhancements

3.3. Important Notes

This chapter lists important notes to take care for integration of this new release:

- ▶ Bootloader implementation matrix provides you information about what is supported in EB tresos Bootloader. Please read it carefully to identify if project specific requirements shall be implemented, at integration side, by customer.
- ▶ Bootloader User guide (Bootloader_xxx_documentation) has been updated, please read it carefully to integrate and configure the bootloader correctly.
- ▶ Bootloader has been qualified for following ACG versions: ACG-6.4.10 / ACG-7.7.2 / ACG-8.7.0
- ▶ Callback PROG_CustomSetCrcCompareSuccess has been renamed to PROG_CustomSetDownloadVerificationSuccess. Please update your integration accordingly.
- ▶ Callbacks BM_DisableECCCheck and BM_EnableECCCheck have been added and shall be implemented in integration code to enable/disable the ECC check if available on the hardware.
- ▶ Callbacks UDS_CustomPositiveAnswerInd has been added and can (optional) be used in integration code to implement action on the sending of a positive response.
- ▶ LZSS Decompression feature has been added and require the following actions to be used:
 - ▶ Enable "Enable_Compression" configuration parameter in Prog plugin.

- ▶ Indicate in "Compression algorithm Id" configuration parameter in Prog plugin the algorithm Id used in RequestDownload request.
- ▶ Indicate in "Decomp_Out_Buffer_size" configuration parameter in Prog plugin the size of the decompression buffer depending of available RAM memory.

3.4. Known issues

Known issues can be found in Known issue list document send to customer. This document can be found on EB command server.

3.5. Fixed issues

This chapter lists all fixed issues in Bootloader:

- ▶ OSCPROG-1865: NRC78 response is not sent for a DiagnosticSessionControl(defaultSession) request with the SuppressPositiveResponse bit set
- ▶ OSCPROG-1847: SecurityAccess subfunction parameter is not read correctly
- ▶ OSCPROG-1825: CheckMemory fails with infinite NRC78 in specific configuration
- ▶ OSCPROG-1772: Bootloader goes to sleep during programming session
- ▶ OSCPROGOEMIND-73: Continuous pending response when some transitions are requested
- ▶ OSCPROG-1827: No response to a RequestDownload request when previous CheckMemory failed
- ▶ OSCPROG-1821: ECU does not return to Lock state when GetSeed is not allowed (NRC_37)
- ▶ OSCPROG-1765: Continuous pending response when two successive WriteFingerPrint requests are received and the first is wrong

For more details, please refer to the known issue list from the previous release.

3.6. Limitations

This chapter lists current limitations in Bootloader (features that will be supported in next releases). Generic limitation for the full product are defined in EB tresos Product Description.

- ▶ No limitation in this version