EB tresos® IOC release notes

product release 7.0

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Table of Contents

1. Release Notes

Release:

EB tresos IOC 7.0.0 [revision 0000]

Date:

2020-09-01

AUTOSAR version and revision:

4.0.3

AUTOSAR SWS version and revision:

5.0.0

Supplier:

Elektrobit Automotive GmbH

1.1. Compiler and Hardware

For an updated list of supported compilers including supported compiler options and hardware used for testing, refer to the qualification report provided with the EB tresos Safety OS delivery.

1.2. New features

IOC 7.0.0

EB tresos IOC is now only available with EB tresos Safety OS.

1.3. Deviations

Deviations are described in the EB tresos IOC User's Guide, section "Deviations".

1.4. Change log

This chapter lists the changes between different versions. Only changes for the current architecture are listed. Please note that a change for the current architecture may also be listed within the version entry for another architecture, if the release of this architecture coincided with the change.

IOC version 7.0.0

Initial release now only with EB tresos Safety OS

This version is backwards compatible to versions 6.0.x summarised below.

IOC versions 6.0.x

Summary of changes from previous versions

► ASCIOC-15 Added interface to EB tresos AutoCore OS.

► The IocWrite API now unlocks the channel's spinlock correctly.

► The IOC is now able to send/write primitive data elements, having a value of zero.

► The IOC is now able to send/write complex data elements, which are smaller than four bytes.

► Group communication channels now support IocEmptyQueue.

► ASCIOC-27 Fixed known issue: AutoCore OS IOC is vulnerable to intra-core preemption.

► Removed all trapping receive APIs (activated by OsIocReceiverApiIsTrapping) as well as the configuration parameters OsIocTargetVarsStart and OsIocTargetVarsEnd. All read and receive operations are now serviced in the caller's context.

► The user-mode variants of IocSend and IocWrite no longer check, whether the calling application is allowed to request their service. This check is now meant to be done by memory protection.

► ASCIOC-25 Fixed known issue: Passing illegal pointers to the 'IsTrapping' API of a channel might break spatial isolation or crash the kernel.

► Support variable length transmissions and partial updates.

► Removed the MaxRetryTime feature. Read[Ext] operations will now read the buffer until it is in a consistent state. The operating system's execution budget monitoring can be used instead of this feature.

► ASCIOC-109 Fixed known issue: EB tresos AutoCore OS IOC intra-core lock is ineffective.

► ASCIOC-290 Fixed known issue: IOC cannot cope with compiler options which force structure size to a certain minimum value.