

Document Title	SWS_FlashDriver: Complete Change Documentation 4.3.0 - 4.3.1
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1 SWS_FlashDriver

1.1 Specification Item SWS_Fls_00260

Trace References:

SRS_BSW_00469, SRS_BSW_00339

Content:

API function	Description
Det_ReportRuntimeError	Service to report runtime errors. If a callout has been configured then this callout shall be called.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

Problem description:

Inconsistencies in SWS with semantics of Default errors

–Last change on issue 59085 comment 26–

Agreed solution:

solution in Column "G" of the new attachment
<https://www.autosar.org/bugzilla/attachment.cgi?id=4604>

Notes:

- It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.
- The review task of the ITs shall be done by the WP to which the specification "belongs".

*** BSW UML Model ***

SWS_CanNm:

Chapter 8.6.1 Optional Interfaces:

Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

SWS_LinIf:

SWS_LinIf_00359: add Det_ReportRuntimeError

SWS_UdpNm:

Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***

Not affected. No configuration of runtime error reporting required (see SWS BSW General).

–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.2 Specification Item SWS_Fls_00366

Trace References:

SRS_BSW_00344, SRS_BSW_00170, SRS_BSW_00398, SRS_BSW_00375,
SRS_BSW_00416, SRS_BSW_00168, SRS_BSW_00423, SRS_BSW_00424,
SRS_BSW_00426, SRS_BSW_00427, SRS_BSW_00428, SRS_BSW_00429,
SRS_BSW_00433, SRS_BSW_00336, SRS_BSW_00339, SRS_BSW_00422,
SRS_BSW_00417, SRS_BSW_00161, SRS_BSW_00162, SRS_BSW_00005,
SRS_BSW_00415, SRS_BSW_00342, SRS_BSW_00160, SRS_BSW_00007,
SRS_BSW_00300, SRS_BSW_00347, SRS_BSW_00307, SRS_BSW_00314,
SRS_BSW_00348, SRS_BSW_00353, SRS_BSW_00361, SRS_BSW_00302,
SRS_BSW_00328, SRS_BSW_00312, SRS_BSW_00006, SRS_BSW_00304,
SRS_BSW_00378, SRS_BSW_00306, SRS_BSW_00308, SRS_BSW_00309,
SRS_BSW_00371, SRS_BSW_00359, SRS_BSW_00360, SRS_BSW_00330,
SRS_BSW_00009, SRS_BSW_00401, SRS_BSW_00172, SRS_BSW_00010,
SRS_BSW_00333, SRS_BSW_00321, SRS_BSW_00341, SRS_BSW_00334,
SRS_SPAL_12267, SRS_SPAL_12163, SRS_SPAL_12462, SRS_SPAL_12463,
SRS_SPAL_12069, SRS_SPAL_12063, SRS_SPAL_12064, SRS_SPAL_12067,
SRS_SPAL_12078, SRS_Fls_12083, SRS_Fls_12149

Content:

These requirements are not applicable to this specification.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #73567: [diverse] references to HIS

Problem description:

The HIS website is no more available.

We should check what is the impact on the AUTOSAR documents.

There is already RfC 64155 which will make us rid of some references, but I assume some will remain:

- * SHE
- * list of vendor IDs
- * IO driver API
- * bootloader
- ...

I tried to list the document where the HIS reference will survive RfC 64155 to avoid duplicate ITs.

Agreed solution:

Generic approach for the solutions (to be refined per document by documents owners (see below)

- * Check the need for an external reference
- * Try to find a replacement
- * Backup: ask PL solution

AUTOSAR_SRS_BSW_GENERAL

=====

Create new reference to the AUTOSAR Vendor ID List in §6.1:

[VENDOR_ID_LIST] AUTOSAR Vendor ID List

<https://www.autosar.org/documents/vendor-id/>

SRS_BSW_00374:

Remove reference "(according to HIS)" in the Description

Supporting Material:

replace	reference	"HIS	Software	Supplier	Identifications
[STD_HIS_SUPPLIER_IDS]"					
to "AUTOSAR Vendor ID List [VENDOR_ID_LIST]"					

Remove Chapter 6.2.2 HIS

SRS_COM

=====

Remove Chapter 7.4 HIS
(the reference is not used anymore)

SRS_CryptoStack

=====

Remove abbreviation SHE from table in chapter 3 Acronyms and abbreviations

SRS_DIODriver

=====

Remove abbreviation HIS from table in chapter 3 Acronyms and abbreviations.

SRS_EEPROMDriver

=====

Remove abbreviation HIS from table in chapter 3 Acronyms and abbreviations.

Remove chapter 6.2 Related standards and norms.

SRS_FlashDriver

=====

- remove HIS from list of abbreviations
- remove requirement SRS_Fls_12083
- remove HIS Flash Driver document from reference list

SRS_FlashTest

=====

- Remove HIS from the table of acronyms in chapter 3

SRS_GPTDriver

=====

- Remove abbreviation HIS from table in chapter 4 Acronyms and abbreviations
- Remove from Chapter 7.2 the reference "[5] HIS API I/O Driver Specification [www.automotive-his.de/results/ API_IDriver_2.1.3.pdf](http://www.automotive-his.de/results/API_IDriver_2.1.3.pdf)".

SRS_ICUDriver

=====

- Remove abbreviation HIS from table in chapter 3 Acronyms and abbreviations
- Remove Chapter 7.1.1 HIS

SRS_IOHWAbstraction

=====

Remove chapter 7.2 Related standards and norms.

SRS_MCUDriver

=====

- Remove abbreviation HIS from table in chapter 3 Acronyms and abbreviations
- Remove from Chapter 7.2 the reference "[5] HIS API I/O Driver Specification [www.automotive-his.de/results/ API_IDriver_2.1.3.pdf](http://www.automotive-his.de/results/API_IDriver_2.1.3.pdf)".

SRS_NetworkManagement

=====

- Remove section 7.2.2 "HIS"

SRS_OCUDriver

=====

- Remove abbreviation HIS from table in chapter 2 Acronyms and abbreviations
- Remove whole chapter 5.2 Related standards and norms (including the single subchapter 5.2.1 HIS)

SRS_OS

=====

- Remove abbreviation HIS from table in chapter 2.2 Acronyms and abbreviations
- Remove chapter 5.2.2 HIS

SRS_PortDriver

=====

- Remove abbreviation HIS from table in chapter 3 Acronyms and abbreviations
- Remove reference [STD_HIS_IO_DRIVER] in chapter 6.1 Deliverables of AUTOSAR "[STD_HIS_IO_DRIVER] HIS API IO Driver, V2.1.3, April 29th, 2004, [http://www.automotive-his.de/download API_IDriver_2_1_3.pdf](http://www.automotive-his.de/download/API_IDriver_2_1_3.pdf)"
- Remove chapter 6.2 Related standards and norms

SRS_PWMDriver

=====

- Remove abbreviation HIS from table in chapter 4 Acronyms and abbreviations
- Remove Supporting Material for requirement SRS_Pwm_12299

SRS_RAMTest

=====

- Remove abbreviation HIS from table in chapter 3 Acronyms and abbreviations

SRS_SPALGeneral

=====

- Remove HIS from acronym table in chapter 3
- Set "Supporting Material:" of SRS_SPAL_12163 to –
- Remove section 7.2 "Related standards and norms"

SRS_SPIHandlerDriver

=====

- Remove abbreviation HIS from table in chapter 3 Acronyms and abbreviations

SRS_WatchdogDriver

=====

Remove from Chapter 7.2 the reference "[5] HIS API I/O Driver Specification [www.automotive-his.de/results/ API_IODriver_2.1.3.pdf](http://www.automotive-his.de/results/API_IODriver_2.1.3.pdf)".

SRS_ADCCDriver

=====

- Remove chapter 7.2 Related standards and norms.
- Remove abbreviation HIS from table in chapter 4 Acronyms and abbreviations

SRS_DIAGNOSTIC

=====

Remove in SRS_Diag_04098 the part of the sentence : "(according HIS [FL-504])"

SWS_BSWGeneral

=====

- Remove HIS from section 3.2 "Related standards and norms"
- Remove the sentence "The ID is the same as in HIS Software Supplier"

Identifications [19]." from the description of the line "<MIP>_VENDOR_ID" in SWS_BSW_00059

SWS_DiagnosticCommunicationManager

=====

Remove last 3 occurrences sentences in SWS_Dcm_00988:

"HIS representation of FL_ExtProgRequestType".

"HIS representation of FL_ApplicationUpdateType."

"HIS representation of FL_ResponseRequiredType."

SWS_DIODriver

=====

Remove chapter 3.2 Related standards and norms.

SWS_EEPROMDriver

=====

Remove chapter 3.2 Related standards and norms.

SWS_FlashDriver

=====

- remove SRS_Fls_12083 from traceability Matrix (should be done automatically by the update)

- remove HIS Flash Driver document from reference list

SWS_FlexRayDriver

=====

- Remove HIS from abbreviation table in chapter 2

SWS_FlexRayISOTransportLayer

=====

- Remove HIS from acronym table in chapter 2

- Remove reference to HIS MISRA subset from section 3.2

SWS_FlexRayTransceiverDriver

=====

- remove HIS from table Acronyms and abbreviations

SWS_OS

=====

- remove HIS from table in chapter 2 "Acronyms and abbreviations"
- remove chapter 3.2.2 "HIS" completely
- remove reference to HIS document in chapter 4.1 ("HIS Protected OSEK")

SWS_XCP

=====

- Remove abbreviation HIS from table in chapter 2 Acronyms and abbreviations
- Last change on issue 73567 comment 49–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.3 Specification Item SWS_Fls_00390

Trace References:

none

Content:

If more than one instance of the flash driver is used in an ECU, the individual instances have to be given a unique instance ID. This instance ID shall be configured as the parameter `FlsDriverIndex`. If only one instance of the flash driver is used in an ECU, this instance shall have the parameter `FlsDriverIndex` configured as 0.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #77845: [diverse] Configuration of instance ID for instantiated modules

Problem description:

Some modules that can exist multiple times in an AUTOSAR BSW stack have configurable instance IDs that are used to e.g. call DET. Examples are the bus drivers. Others, like the CDD, Crypto driver, or DIO driver, lack such a configuration parameter.

–Last change on issue 77845 comment 2–

Agreed solution:

TPS EcuConfigurationSpecification (CDD):

Add container CddGeneral with one parameter CddInstanceld to Cdd Ecuc-ModuleDef

Description: Specifies the Instanceld of this module instance. If only one instance is present it shall have the Id 0.

Multiplicity: 1

Type: EcucIntegerParamDef

Range: 0 .. 255

Default value: -

Post-Build Variant Value: false

Value Configuration Class: Pre-compile time - All Variants

=====

Crypto:

Add new pre-compile integer parameter "CryptoInstanceld" (range 0..255) to the container CryptoGeneral,

Description: "Instance ID of the crypto driver. This ID is used to discern several crypto drivers in case more than one driver is used in the same ECU."

=====

Eep:

Change ECUC_Eep_00189 Description from : "Represents the Index of the driver, used by EA" to

"Specifies the Instanceld of this module instance. If only one instance is present it shall have the Id 0."

=====

Fls:

Add REQ:

SWS_Fls_xxx: If more than one instance of the flash driver is used in an ECU, the individual instances have to be given a unique instance ID. This instance ID shall be configured as the parameter FlsDriverIndex. If only one instance of the flash driver is used in an ECU, this instance shall have the parameter FlsDriverIndex configured as 0.

=====

Wdg:

Change ECUC_Wdg_00117 Description from : "Represents the watchdog driver's ID so that it can be referenced by the watchdog interface." to

"Specifies the Instanceld of this module instance. If only one instance is present it shall have the Id 0."

=====

Xfrm:

Add into the container XfrmGeneral a new parameter XfrmInstanceld to XfrmEcucModuleDef

Description: Specifies the Instanceld of this module instance. If only one instance is present it shall have the Id 0.

Multiplicity: 1

Type: EcucIntegerParamDef

Range: 0 .. 255

Default value: -

Post-Build Variant Value: false

Value Configuration Class: Pre-compile time - All Variants

–Last change on issue 77845 comment 32–

BW-C-Level:

Application	Specification	Bus
1	3	1