Safe Watchdog Interface
Release Notes

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Status:	released
Review:	VLE

Revision Chart

A revision is a new edition of the document and affects all sections of this document.

Document Version	Date	Responsible Person	Modification
1.0.0	14.12.2011	VLE	Initial version for the S-WdgIf Subpackage 1.2.0
1.0.1	09.02.2012	VLE	Macro checks implemented
1.0.2	09.03.2012	JDU	Increased Subpackage version number (due to new config generator)
1.0.3	13.04.2012	VLE	Update due to Release 1.7.0
1.0.4	25.05.2012	VLE	Update due to Release 1.8.0
1.0.5	07.09.2012	PPU	Update due to Release 1.9.0
2.0.3	25.10.2012	PPU	**Test release** 2.0.3 to check the delivery structure. This is NOT a customer release!
3.0.1	16.11.2012	PPU	WdgIf_GetTickCounter() API changed therefore also the major version changed to 3.
3.1.0	11.01.2013	PPU	Generators works now with unsupported Wdg Drivers
3.1.1	05.04.2013	JDU	Configuration generator update
3.1.5	29.11.2013	JDU	Configuration generator update
3.2.0	19.02.2014	PPU	Autosar 4 update and bug fixes, beta version
3.3.0	21.03.2014	PPU	Update and bug fixes for Autosar 4 environment compatibility. Backward compatibility to Autosar 3.1 environment added too.
3.3.1	10.04.2014	PPU	Generator bug fix for Autosar compatible driver
3.3.2	27.05.2014	PPU	Release for the AUTOSAR 4.0 and AUTOSAR 3.1 compatible S-WdgIf module
3.3.3	14.08.2014	PPU	Safety Case document release
3.3.4	24.11.2014	PPU	Bugfix release for WdgIf embedded code
3.3.5	20.02.2015	PPU	Bugfix release, Generator only
3.3.6	24.04.2015	PPU	Bugfix release, Generator only

Contents

1 Overview

The **Safe Watchdog Interface** (S-WdgIf) is the middle layer of the **Safe Watchdog Manager Stack**. The Safe Watchdog Manager Stack is part of the service layer of the AUTOSAR architecture. The **Safe Watchdog Interface** abstracts one or more Safe Watchdog Driver modules for the Safe Watchdog Manager module.

The **Safe Watchdog Interface** consists of
- embedded software module and
- configuration generator.

The **Safe Watchdog Interface** is compatible to the WdgIf module as specified in the AUTOSAR 4.0 and AUTOSAR 3.1 specifications but not fully compliant. For deviations and justifications please see the S-WdgIf User Manual.

2 Content of the Module Release

Title	Version*)	Author	Description
WdgIf/	**3.3.6**	TTTech	S-WdgIf Module
S-WdgIf_ReleaseNotes.pdf			
Description/	3.3.6	TTTech	
WdgIf_Bswmd_A4.arxml			AUTOSAR 4.x file
WdgIf_Bswmd.arxml			AUTOSAR 3.y file
Doc_SafetyCase/	1.2.0		
S-WdgIf_SafetyCase.pdf			Safety Case document
Doc_SafetyManual/	1.8.9		
S-WdgIf_SafetyManual.pdf			
Doc_TechRef/	1.9.4	TTTech	
S-WdgIf_UserManual.pdf			User Manual
Generator/	**3.3.27**	TTTech	
LICENSE			
Wdg_If_Cfg_Gen.exe			S-WdgIf Configuration Generator
GenTool_Ead/	1.0.0	TTTech	
Identifier.xml			
Identifier_A4.xml			
Implementation/	3.3.6	TTTech	
WdgIf.c			Watchdog Interface Code
WdgIf.h			Watchdog Interface Code
WdgIf_Cfg.h			Watchdog Interface Code
WdgIf_Types.h			Watchdog Interface Code

*) **Bold/blue** version numbers are new artefacts delivered in this release. The non-bold artefacts are the previously released compatible artifacts. All artefacts listed here are consistent.

3   Quality level of current release

The content of this release is configuration generator only. As the configuration generator has QM quality, for an ASIL application the output of the generator need to be verified, see Safety Manual for S-Wdglf, D-SAFEX-S-70-005.

4 Change history

This chapter describes the changes in each released version.

4.1 Changes with version 3.3.6

Issue Nr.	Area	Found in Wk	Issue title	Release status
76479	G		Safe Execution - WdgIF Generator - Error when generating function names for AS3 drivers delivered by TTTech	S

Release status:
 S … solved, O … open, C … Closed as obsolete
Area:
 E … embedded, G … generator, V … verifier, SWC … SWC/bswmd file, T … Tests
 D … documentation

4.2 Changes with version 3.3.5

Issue Nr.	Area	Found in Wk	Issue title	Release status
44900	G		WdgIf: Multiple Wdg Modules and WdgIfDevices are not allowed	S

Release status:
 S … solved, O … open, C … Closed as obsolete
Area:
 E … embedded, G … generator, V … verifier, SWC … SWC/bswmd file, T … Tests
 D … documentation

4.3 Changes with version 3.3.4

Based on the ESCAN00079353 following changes in the S-WdgIf module was done:

Issue Nr.	Area	Found in Wk	Issue title	Release status
68905	E	wk44	`AUTOSAR API – Wdg_SetTriggerCondition has no return value` (ESCAN00079353)	S

69579	G	wk46	Mismatch re Vendor-ID and WDGIF_USE_AUTOSAR_DRV_API is an error condition	S

Release status:
 S … solved, O … open, C … Closed as obsolete
Area:
 E … embedded, G … generator, V … verifier, SWC … SWC/bswmd file, T … Tests
 D … documentation

4.4   Changes with version 3.3.3

S-WdgIf module was not changed, only Safety Case document added.

Issue Nr.	Area	Found in Wk	Issue title	Release status
65369	all		Release Management Tasks for 1.26.1 CW 31/2014	S

4.5   Changes with version 3.3.2

S-WdgIf module changes and corrections:

Issue Nr.	Area	Found in Wk	Issue title	Release status
62326	all		Safe Execution Release 1.26.0 - Release Management Tasks (collection of issues for this release)	S

4.6   Changes with version 3.3.1

S-WdgIf module changes and corrections:

Issue Nr.	Area	Found in Wk	Issue title	Release status
61768	G	Wk15	SafeExecution - Deactivate cross-cutting tests to avoid problems with AS3-compatible Third-Party Drivers	S

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4.7 Changes with version 3.3.0

S-WdgIf module changes and corrections:

Issue Nr.	Area	Found in Wk	Issue title	Release status
61023	G+E		Issue collection for Autosar4.x S-WdgM issues and Autosar compatibility of the S-WdgIf module.	S

4.8 Changes with version 3.2.0

S-WdgIf module changes and corrections:

Issue Nr.	Area	Found in Wk	Issue title	Release status
59931	G+E		API and generator points for AUTOSAR 4, reported by Vector	S

4.9 Changes with version 3.1.5

S-WdgIf module changes and corrections:

Issue Nr.	Area	Found in Wk	Issue title	Release status
58478	G	Wk 48	MPC5643L_ATA5021 is no "third-party" driver	S

Release status:
 S … solved, O … open, C … Closed as obsolete
Area:
 E … embedded, G … generator, V … verifier, SWC … SWC/bswmd file, T … Tests
 D … documentation

4.10 Changes with version 3.1.1

S-WdgIf module changes and corrections:

Issue	Area	Found	Issue title	Release

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Nr.		in Wk		status
51694	G	Wk 5	`#include WdgIf.h` in `WdgIf_Lcfg.c`	S
52056	G	Wk 7	Avoid ugly linebreaks inside comments	S

Release status:

 S … solved, O … open, C … Closed as obsolete

Area:

 E … embedded, G … generator, V … verifier, SWC … SWC/bswmd file, T … Tests
 D … documentation

4.11   Changes with version 3.1.0

S-WdgIf module changes and corrections:

Issue Nr.	Area	Found in Wk	Issue title	Release status
50131	G	Wk45	WdgM and WdgIf config generators must work together with unsupported Wdg Drivers	S

Release status:

 S … solved, O … open, C … Closed as obsolete

Area:

 E … embedded, G … generator, V … verifier, SWC … SWC/bswmd file, T … Tests
 D … documentation

4.12   Changes with version 3.0.1

S-WdgIf module changes and corrections:

Embedded Code changes:
- [48993]   WdgIf_GetTickCounter(ptr) API changed to WdgIf_GetTickCounter(void)

Generator changes:
- none

Documentation changes:
- Documentation updated according to [48993]

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4.13 Changes with Release 1.9.0: S-WdgIf SubPackage 2.0.2

- Internal modifications to match AUTOSAR's null pointer macro

4.14 Changes with Release 1.8.0: S-WdgIf SubPackage 1.4.0

- Internal modifications to match AUTOSAR's null pointer macro

4.15 Changes with Release 1.7.0: S-WdgIf SubPackage 1.3.0

- Support for internal tick counter (provided by an S-Wdg driver)

4.16 Changes with Release 1.6.0: S-WdgIf Subpackage 1.2.1

- Internal modifications to config generator

4.17 Changes with Release 1.5.0: S-WdgIf Subpackage 1.2.0

- Checks for completeness of AUTOSAR macros (such as STD_ON) implemented

4.18 Changes with Release 1.2.0: S-WdgIf Subpackage

- This is the initial implementation of the Safe Watchdog Interface.

- The code generator for the S-WdgIf has no further changes in its hardware-independent part.

- The code generator for the S-WdgIf has implemented support for further hardware platforms and/or changes in its hardware-specific part so that the S-WdgIf can be linked to a specific S-Wdg driver. For further information please refer to the S-Wdg release notes.

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5 Test status

Integration test of the generator were performed. A total of 93 integration test cases were executed.

All test results are positive.

6 Known issues, limitations, updates

Known issues:

- No known issues.

Functional limitations of current version:

- No known limitations.

7 Differences to AUTOSAR specification

Depending on the configuration parameter 'WdgIfUseAutosarDrvApi' the API to the Wdg driver is either AUTOSAR or TTTech compatible. For details see S-WdgIf User Manual.

8 Abbreviation and glossary

Acronym / Term	Meaning
S-WdgIf	Safe Watchdog Interface (TTTech product, platform independent module)
S-Wdg	Safe Watchdog Driver (TTTech product, platform dependent module)
WdgIf	Watchdog Interface (module according AUTOSAR specification)
Wdg	Watchdog Driver (module according AUTOSAR specification)