Document Title	Release 4.0 Overview and Revision History
Document Owner	AUTOSAR
Document Responsibility	Release Management
Document Identification No	000
Document Classification	Auxiliary

Document Version	1.2.3
Document Status	Final
Part of Release	4.0
Revision	3
Release Life Cycle Status	R4.x is in Evolution, R4.0.3 has been superseded by R4.1.1

Document Change History

Date	Version	Changed by	Change Description
15.03.2013	1.2.3	Release Management	Update of Life Cycle Status with release of R4.1.1
27.06.2012	1.2.2	Release Management	Late Update of BWC Statement for R4.0.3
19.01.2012	1.2.1	Release Management	Fix of Meta Model and XML Schema for R4.0.3
22.12.2011	1.2.0	Release Management	Update for Revision 3
15.04.2011	1.1.0	Release Management	Update for Revision 2
18.12.2009	1.0.0	Release Management	Initial Release with Revision 1

Table of Contents

1 Scope of this Document

This document provides an overview of the complement of AUTOSAR documents comprising the Release 4.0 in its latest Revision 3. Further a history is provided aimed to identify the changes between the individual Revisions within Release 4.0.

1.1 Document Overview

This document is structured as follows:

Chapter 2 provides a list of documentation references.

Chapter 3 provides a set of definitions aimed to increase the understanding of the content of this document and the Release 4.0.

Chapter 4 provides a summary of changes that were implemented since the preceding Release 3.1.

Chapter 5 states the Release's 4.0 validity status and contains the overview of documents comprising the Release 4.0 in its latest Revision 3. This chapter is structured according to the clusters being in use in AUTOSAR Release 4.0.

Chapter 6 contains remarks about known technical deficiencies.

Chapter 7 contains the detailed Revision History.

2 Related Documentation

[1] Glossary
AUTOSAR_TR_Glossary.pdf

[2] Main Requirements
AUTOSAR_RS_Main.pdf

[3] ECU Configuration
AUTOSAR_TPS_ECUConfiguration.pdf

[4] Layered Software Architecture
AUTOSAR_EXP_LayeredSoftwareArchitecture.pdf

3 Definitions

As far as not explained in this chapter, a collection of AUTOSAR definitions is provided in the Glossary [1].

3.1 Release Number

AUTOSAR applies a two-digit numbering scheme Rx.y to identify Releases. Its primary purpose is to identify a Release as a major (upgrade) or as minor (update) Release. Refering to previous Releases (e.g. R2.0), incrementing the first digit “x” does identify a Release as major, whereas incrementing “y” will mark a Release as only minor by nature.

3.2 Revision Number

The Revision Number was first time introduced with Release 2.1 and extends the Release Numbering scheme as explained in section 3.1. Combined with the Release Number, the Revision Number shall:

1) Precisely identify the actual content (set of documents) of a given Release,
2) As depicted in every document, precisely identify a given document (with its unique name and three-digit version ID) as being part of the Release (here: Release 4.0)

Item 1) addresses the fact that the set of documents comprising a Release (in the meaning of a baseline) is rarely established once at a certain point in time (“Big Bang”), but rather evolves and/or varies over a certain timeframe the maximum duration of which is limited by the timeframe a Release is declared as “valid” by the AUTOSAR Partnership (see section 3.3).

Hence with Item 1), a major prerequisite will be put in place to enable the Standard Maintenance as planned by the AUTOSAR Partnership. In general, the primary objective is to avoid the provision of an additional – previously not planned – Release in case only one or a few documents were to be modified as part of the Standard Maintenance. Conversely, without the application of a Revision Number, if the AUTOSAR partnership wants to avoid the provision of (an) additional intermediate Release(s), one would have to defer the introduction of any changes until the next planned Release – even in case of changes urgently needed by the applicants of the AUTOSAR Standard.

Item 2) is complementary to Item 1) in that for every document a unique identifier is provided upon which Revision a) a document was either 1st time added to/removed from a Release or b) a document was modified as being part of one and the same Release, as long the latter is valid and therefore subject to Standard Maintenance.

Hence with item 2), the combination of Release and Revision Number in a document can be interpreted either as a) “document was (1st time) added to the Release x.y Rev n” or b) as “document was modified as part of Release x.y Rev m”, with m > n.

Conversely, the Revision number will only change for documents subject to addition or modification of a valid Release (baseline). After their 1st time addition to the Release (baseline), it will not change for documents which are not modified.

In the light of the above provided background, as an additional remark, the Revision Number will only be applied for each document's Release version, i.e. it will not be applied to working versions.

3.3 Release Validity Status

Each Release (baseline) can enter one of the four consecutive steps within its lifecycle:

1. CURRENT: The latest Release. A CURRENT Release is by default VALID.
2. VALID: a Release preceding the CURRENT Release. A VALID Release is subject to Standard Maintenance.
3. LOKI: a Release preceding the current Release for which no Standard Maintenance is provided any more but for which still the List of known Issues is kept up to date.
4. OBSOLETE: a Release preceding the VALID and/or CURRENT Release for which, however, no Standard Maintenance is provided anymore.

3.4 Standard Specifications and Auxiliary Material

Standard Specifications are documents, models or formats which comprise the main result of the AUTOSAR Partnership. It includes the standardized results which have to be fulfilled to achieve AUTOSAR conformance. Standard Specifications are the base for AUTOSAR conformance tests.

In Release 4.0, Standard Specifications are stored at the following URL:
https://svn3.autosar.org/repos2/work/22_Releases/40_Release4.0/01_Standard

Auxiliary Material is a supporting document, model or format meant to further explain and/or improve the usability of standard specifications of the AUTOSAR partnership. Auxiliary material is recommended to read and/or use for a better understanding or harmonized usage of the AUTOSAR standard but is not mandatory to follow for AUTOSAR conformance.

In Release 4.0, Auxiliary Material is stored at the following URL:
https://svn3.autosar.org/repos2/work/22_Releases/40_Release4.0/02_Auxiliary

3.5 Release Clusters

3.5.1 Main Documents

"Main Documents" are general AUTOSAR documents facilitating a global view on requirements, concepts and terms.

3.5.2 Basic Software Architecture and Runtime Environment

Documents belonging to this Release cluster provide descriptions, requirements and specifications of the AUTOSAR Software Architecture and the Runtime Environment.

3.5.3 Methodology and Templates

Documents belonging to this Release cluster provide requirements, specifications, templates and guidelines on the AUTOSAR methodology and tool chain.

3.5.4 Application Interfaces

Documents belonging to this Release cluster provide specifications of interfaces between applications and related explanatory material.

3.5.5 Conformance Test

Documents belonging to this Release Cluster provide descriptions, requirements, specifications, and scripts for the planning and execution of conformance tests.

3.5.6 Other Documents

This cluster contains documents which do not belong to any of the previous Release clusters.

4 Release 4.0 – Summary of Changes

This chapter contains a summary of changes which were implemented since the previous Release 3.1. The following lists of new concepts which have been incorporated with R4.0 contain major achievements in the three clusters of Architecture (BSW&RTE), Methodology and Application Interfaces:

- Functional Safety
  - Memory Partitioning Concept
  - Time Determinism Concept
  - Program Flow Monitoring Concept
  - SW-C E2E Comm protection Concept
  - BSWM Defensive Behavior Concept
  - Dual Microcontroller Concept
  - E-Gas Monitoring Applicability Concept

- Architectural improvement
  - Error Handling Concept
  - Multi Core Architectures Concept
  - Bootloader Interaction Concept
  - Build System Enhancement Concept
  - Memory Related Concept
  - Support of Windowed Watchdog Concept
  - Enabling CDDs in the BSW Architecture Concept

- RTE enhancement
  - Triggered Event Concept
  - Integrity and Scaling at Ports Concept
  - RTE API Enhancement Concept

- Evolution of COM
  - LIN 2.1 Std Concept
  - Flex Ray Spec 3.0 Concept
  - XCP for AUTOSAR Concept
  - TCP/IP CommStack Extensions Concept
  - Support of Large Data Types Concept

- Functional enhancement
  - VMM AMM Concept
  - Support of SAE J1939 Protocol Features Concept
  - NM Coordination Concept
  - AUTOSAR Scheduler Harmonization Concept
  - Functional Diagnostic of SWC Concept
  - Communication Stack Concept

- Debugging
  - Debugging Concept
  - Log and Trace Concept

- Enhancement of M&T
  - Variant Handling Concept
  - Methodology Refinement Concept
  - Timing Model Concept
  - ECUC Parameter Definition Harmonization Concept
  - M2 Support Concept for Documentation on M1 Level
  - M2 Support Concept for Definition of Calibration Data Sets on M1 level
  - Calculation Formula Language Concept
  - Specification Improvement for the ECU Extract Concept
  - MetaModel Cleanup Concept

5 Release 4.0 – Document Overview

5.1 Release Validity Information

This Release 4.0 in its latest Revision 3 has the validity status R4.X IS IN EVOLUTION, R4.0.3 HAS BEEN SUPERSEDED BY R4.1.1.

5.2 Cluster: Main Documents

As of the latest Revision 3, the following Main Documents are part of Release 4.0:

Document	*Classification*	*Version*	*File Name*
Main Requirements	aux	3.0.0	AUTOSAR_RS_Main
Glossary	aux	2.4.0	AUTOSAR_TR_Glossary
Feature Specification of the BSW Architecture and the RTE	aux	1.1.0	AUTOSAR_RS_BSWAndRTEFeatures
Project Objectives	aux	3.0.0	AUTOSAR_RS_ProjectObjectives
Specification of Predefined Names in AUTOSAR	aux	1.0.0	AUTOSAR_TR_PredefinedNames

5.3 Cluster: Basic Software Architecture and Runtime Environment

As of the latest Revision 3, the following Basic Software and Runtime Environment documents are part of Release 4.0:

Document	*Classification*	*Version*	*File Name*
Virtual Functional Bus	aux	2.2.0	AUTOSAR_EXP_VFB
Layered Software Architecture	aux	3.2.0	AUTOSAR_EXP_LayeredSoftwareArchitecture
List of Basic Software Modules	aux	1.6.0	AUTOSAR_TR_BSWModuleList
General Requirements on Basic Software Modules	std	3.2.0	AUTOSAR_SRS_BSWGeneral
Requirements on Free Running Timer	aux	1.0.4	AUTOSAR_SRS_FreeRunningTimer
Specification of Development Error Tracer	std	3.2.0	AUTOSAR_SWS_DevelopmentErrorTracer
Specification of Platform Types	std	2.5.0	AUTOSAR_SWS_PlatformTypes
Specification of Standard Types	std	1.3.0	AUTOSAR_SWS_StandardTypes
Specification of C Implementation Rules	aux	1.0.5	AUTOSAR_TR_CImplementationRules
Specification of Communication Stack Types	std	3.2.0	AUTOSAR_SWS_CommunicationStackTypes
Specification of Memory Mapping	std	1.4.0	AUTOSAR_SWS_MemoryMapping
Specification of Compiler Abstraction	std	3.2.0	AUTOSAR_SWS_CompilerAbstraction
Modeling Guidelines of Basic Software EA UML Model	aux	1.3.0	AUTOSAR_TR_BSWUMLModelModelingGuide
Basic Software UML Model	aux	3.2.0	AUTOSAR_MOD_BSWUMLModel
Requirements on Runtime Environment	aux	2.2.0	AUTOSAR_SRS_RTE
Specification of RTE Software	std	3.2.0	AUTOSAR_SWS_RTE

Document	*Classification*	*Version*	*File Name*
Requirements on LIN	aux	1.3.0	AUTOSAR_SRS_LIN
Specification of LIN Interface	std	4.0.0	AUTOSAR_SWS_LINInterface
Specification of LIN Driver	std	1.5.0	AUTOSAR_SWS_LINDriver
Requirements on CAN	aux	4.0.0	AUTOSAR_SRS_CAN
Specification of CAN Transport Layer	std	4.0.0	AUTOSAR_SWS_CANTransportLayer
Specification of CAN Interface	std	5.0.0	AUTOSAR_SWS_CANInterface
Specification of CAN Driver	std	4.0.0	AUTOSAR_SWS_CANDriver
Specification of CAN Transceiver Driver	std	3.0.0	AUTOSAR_SWS_CANTransceiverDriver
Requirements on Communication	aux	3.1.0	AUTOSAR_SRS_COM
Specification of Communication	std	4.2.0	AUTOSAR_SWS_COM
Requirements on I-PDU Multiplexer	aux	1.0.5	AUTOSAR_SRS_IPDUMultiplexer
Specification of I-PDU Multiplexer	std	2.2.0	AUTOSAR_SWS_IPDUMultiplexer
Requirements on Network Management	aux	3.0.0	AUTOSAR_SRS_NetworkManagement
Specification of Generic Network Management Interface	std	3.0.0	AUTOSAR_SWS_NetworkManagementInterface
Specification of FlexRay Network Management	std	4.2.0	AUTOSAR_SWS_FlexRayNetworkManagement
Specification of CAN Network Management	std	3.3.0	AUTOSAR_SWS_CANNetworkManagement
Requirements on Function Inhibition Manager	aux	1.2.0	AUTOSAR_SRS_FunctionInhibitionManager
Specification of Function Inhibition Manager	std	2.2.0	AUTOSAR_SWS_FunctionInhibitionManager
Requirements on Diagnostic	aux	2.4.0	AUTOSAR_SRS_Diagnostic
Specification of Diagnostic Communication Manager	std	4.2.0	AUTOSAR_SWS_DiagnosticCommunicationManager
Specification of Diagnostic Event Manager	std	4.2.0	AUTOSAR_SWS_DiagnosticEventManager
Requirements on FlexRay	aux	3.1.0	AUTOSAR_SRS_FlexRay
Specification of FlexRay Interface	std	3.3.0	AUTOSAR_SWS_FlexRayInterface
Specification of FlexRay Driver	std	2.5.0	AUTOSAR_SWS_FlexRayDriver
Specification of FlexRay Transceiver Driver	std	1.5.0	AUTOSAR_SWS_FlexRayTransceiverDriver
Requirements on Gateway	aux	2.2.0	AUTOSAR_SRS_Gateway
Specification of PDU Router	std	3.2.0	AUTOSAR_SWS_PDURouter
Requirements on Memory Services	aux	3.0.0	AUTOSAR_SRS_MemoryServices
Specification of NVRAM Manager	std	3.2.0	AUTOSAR_SWS_NVRAMManager
Specification of CRC Routines	std	4.2.0	AUTOSAR_SWS_CRCLibrary
Requirements on Mode Management	aux	2.1.0	AUTOSAR_SRS_ModeManagement
Specification of ECU State Manager	std	4.0.0	AUTOSAR_SWS_ECUStateManager
Specification of Communication Manager	std	3.0.0	AUTOSAR_SWS_COMManager
Specification of Watchdog Manager	std	2.2.0	AUTOSAR_SWS_WatchdogManager
Requirements on Operating System	aux	3.0.0	AUTOSAR_SRS_OS
Specification of Operating System	std	5.0.0	AUTOSAR_SWS_OS

Document	*Classifi-cation*	*Version*	*File Name*
General Requirements on SPAL	aux	2.2.0	AUTOSAR_SRS_SPALGeneral
Requirements on SPI Handler/Driver	aux	2.0.5	AUTOSAR_SRS_SPIHandlerDriver
Specification of SPI Handler/Driver	std	3.2.0	AUTOSAR_SWS_SPIHandlerDriver
Requirements on ICU Driver	aux	2.0.5	AUTOSAR_SRS_ICUDriver
Specification of ICU Driver	std	4.2.0	AUTOSAR_SWS_ICUDriver
Requirements on ADC Driver	aux	3.0.0	AUTOSAR_SRS_ADCDriver
Specification of ADC Driver	std	4.2.0	AUTOSAR_SWS_ADCDriver
Requirements on I/O Hardware Abstraction	aux	1.1.0	AUTOSAR_SRS_IOHWAbstraction
Specification of I/O Hardware Abstraction	aux	3.2.0	AUTOSAR_SWS_IOHardwareAbstraction
Requirements on RAM Test	aux	1.2.0	AUTOSAR_SRS_RAMTest
Specification of RAM Test	std	1.5.0	AUTOSAR_SWS_RAMTest
Requirements on PWM Driver	aux	2.1.3	AUTOSAR_SRS_PWMDriver
Specification of PWM Driver	std	2.5.0	AUTOSAR_SWS_PWMDriver
Requirements on GPT Driver	aux	2.2.0	AUTOSAR_SRS_GPTDriver
Specification of GPT Driver	std	3.2.0	AUTOSAR_SWS_GPTDriver
Requirements on DIO Driver	aux	2.1.0	AUTOSAR_SRS_DIODriver
Specification of DIO Driver	std	2.5.0	AUTOSAR_SWS_DIODriver
Requirements on Watchdog Driver	aux	2.1.0	AUTOSAR_SRS_WatchdogDriver
Specification of Watchdog Driver	std	2.5.0	AUTOSAR_SWS_WatchdogDriver
Specification of Watchdog Interface	std	2.5.0	AUTOSAR_SWS_WatchdogInterface
Requirements on Port Driver	aux	2.0.5	AUTOSAR_SRS_PortDriver
Specification of Port Driver	std	3.2.0	AUTOSAR_SWS_PortDriver
Requirements on MCU Driver	aux	3.0.0	AUTOSAR_SRS_MCUDriver
Specification of MCU Driver	std	3.2.0	AUTOSAR_SWS_MCUDriver
Requirements on EEPROM Driver	aux	2.0.5	AUTOSAR_SRS_EEPROMDriver
Specification of EEPROM Driver	std	3.2.0	AUTOSAR_SWS_EEPROMDriver
Requirements on Flash Driver	aux	2.0.5	AUTOSAR_SRS_FlashDriver
Specification of Flash Driver	std	3.2.0	AUTOSAR_SWS_FlashDriver
Requirements on Memory Hardware Abstraction Layer	aux	1.0.5	AUTOSAR_SRS_MemoryHWAbstractionLayer
Specification of Memory Abstraction Interface	std	1.4.0	AUTOSAR_SWS_MemoryAbstractionInterface
Specification of Flash EEPROM Emulation	std	2.0.0	AUTOSAR_SWS_FlashEEPROMEmulation
Specification of EEPROM Abstraction	std	2.0.0	AUTOSAR_SWS_EEPROMAbstraction
Technical Safety Concept Status Report	aux	1.1.0	AUTOSAR_TR_SafetyConceptStatusReport
Specification of CAN State Manager	std	2.2.0	AUTOSAR_SWS_CANStateManager
Specification of FlexRay State Manager	std	2.2.0	AUTOSAR_SWS_FlexRayStateManager
Specification of LIN State Manager	std	1.3.0	AUTOSAR_SWS_LINStateManager
Specification of LIN Transceiver Driver	std	1.2.0	AUTOSAR_SWS_LINTransceiverDriver
Requirements on Core Test	aux	1.2.0	AUTOSAR_SRS_CoreTest
Specification of Core Test	std	1.2.0	AUTOSAR_SWS_CoreTest
Requirements on Flash Test	aux	1.0.0	AUTOSAR_SRS_FlashTest
Specification of Flash Test	std	1.2.0	AUTOSAR_SWS_FlashTest

Document	*Classification*	*Version*	*File Name*
Specification of LIN Network Management	std	2.0.0	AUTOSAR_SWS_LINNetworkManagement
Explanation of Interrupt Handling within AUTOSAR	aux	1.0.2	AUTOSAR_EXP_InterruptHandlingExplanation
Specification of Basic Software Mode Manager	std	1.2.0	AUTOSAR_SWS_BSWModeManager
Requirements on Libraries	aux	2.1.0	AUTOSAR_SRS_Libraries
Specification of Debugging in AUTOSAR	std	1.2.0	AUTOSAR_SWS_Debugging
Requirements on Debugging in AUTOSAR	aux	1.0.0	AUTOSAR_SRS_Debugging
Requirements on Diagnostic Log and Trace	aux	1.0.0	AUTOSAR_SRS_DiagnosticLogAndTrace
Specification of Diagnostic Log and Trace	std	1.2.0	AUTOSAR_SWS_DiagnosticLogAndTrace
Description of the AUTOSAR standard errors	aux	1.0.0	AUTOSAR_EXP_ErrorDescription
Explanation of Error Handling on Application Level	aux	1.0.0	AUTOSAR_EXP_ApplicationLevelErrorHandling
Specification of Fixed Point Math Routines	std	1.2.0	AUTOSAR_SWS_MFXLibrary
Specification of Fixed Point Interpolation Routines	std	1.2.0	AUTOSAR_SWS_IFXLibrary
Specification of Floating Point Math Routines	std	1.2.0	AUTOSAR_SWS_MFLLibrary
Specification of Floating Point Interpolation Routines	std	1.2.0	AUTOSAR_SWS_IFLLibrary
Specification of Bit Handling Routines	std	2.0.0	AUTOSAR_SWS_BFXLibrary
Specification of Extended Fixed Point Routines	std	2.0.0	AUTOSAR_SWS_EFXLibrary
Specification of Crypto Service Manager	std	1.2.0	AUTOSAR_SWS_CryptoServiceManager
Specification of Module XCP	std	2.0.0	AUTOSAR_SWS_XCP
Specification of UDP Network Management	std	2.0.0	AUTOSAR_SWS_UDPNetworkManagement
Specification of Ethernet State Manager	std	1.2.0	AUTOSAR_SWS_EthernetStateManager
Specification of Socket Adaptor	std	1.2.0	AUTOSAR_SWS_SocketAdaptor
Specification of Ethernet Interface	std	1.2.0	AUTOSAR_SWS_EthernetInterface
Requirements on Ethernet Support in AUTOSAR	aux	1.0.0	AUTOSAR_SRS_Ethernet
Requirements on Synchronized Time-Base Manager	aux	1.0.0	AUTOSAR_SRS_SynchronizedTimeBaseManager
Specification of Synchronized Time-Base Manager	std	2.0.0	AUTOSAR_SWS_SynchronizedTimeBaseManager
Requirements on a Transport Layer for SAE J1939	aux	1.0.0	AUTOSAR_SRS_SAEJ1939TransportLayer
Specification of a Transport Layer for SAE J1939	std	1.2.0	AUTOSAR_SWS_SAEJ1939TransportLayer
Requirements on Crypto Service Manager	aux	1.0.0	AUTOSAR_SRS_CryptoServiceManager
Specification of SW-C End-to-End Communication Protection Library	std	2.0.0	AUTOSAR_SWS_E2ELibrary
Requirements on Module XCP	aux	1.1.0	AUTOSAR_SRS_XCP

Document	Classification	Version	File Name
Specification of Ethernet Driver	std	1.2.0	AUTOSAR_SWS_EthernetDriver
Specification of Ethernet Transceiver Driver	std	1.2.0	AUTOSAR_SWS_EthernetTransceiverDriver
Specification of TTCAN Driver	std	1.2.0	AUTOSAR_SWS_TTCANDriver
Specification of TTCAN Interface	std	1.1.0	AUTOSAR_SWS_TTCANInterface
Specification of Crypto Abstraction Library	std	1.2.0	AUTOSAR_SWS_CryptoAbstractionLibrary
Guide to Mode Management	aux	1.0.0	AUTOSAR_EXP_ModeManagementGuide
Requirements on TTCAN	aux	1.0.0	AUTOSAR_SRS_TTCAN
Specification of ECU State Manager with fixed state machine	std	1.2.0	AUTOSAR_SWS_ECUStateManagerFixed
Backward Compatibility Statement	aux	1.1.0	AUTOSAR_TR_BWCStatement
Specification of FlexRay ISO Transport Layer	std	4.0.0	AUTOSAR_SWS_FlexRayISOTransportLayer
Specification of FlexRay AUTOSAR Transport Layer	std	3.0.0	AUTOSAR_SWS_FlexRayARTransportLayer

5.4 Cluster: Methodology and Templates

As of the latest Revision 3, the following Methodology and Template documents are part of Release 4.0:

Document	Classification	Version	File Name
Requirements on Interaction with Behavioral Models	aux	1.0.5	AUTOSAR_RS_InteractionWithBehavioralModels
Specification of Interaction with Behavioral Models	aux	1.0.6	AUTOSAR_TR_InteractionWithBehavioralModels
Requirements on Interoperability of Autosar Tools	aux	1.0.5	AUTOSAR_RS_InteroperabilityOfAutosarTools
Specification of Interoperability of Autosar Tools	aux	2.1.0	AUTOSAR_TR_InteroperabilityOfAutosarTools
Specification of ECU Resource Template	std	2.2.0	AUTOSAR_TPS_ECUResourceTemplate
Requirements on Software Component Template	aux	2.1.0	AUTOSAR_RS_SoftwareComponentTemplate
Software Component Template	std	4.2.0	AUTOSAR_TPS_SoftwareComponentTemplate
System Template	std	4.2.0	AUTOSAR_TPS_SystemTemplate
Model Persistence Rules for XML	std	2.4.0	AUTOSAR_TR_XMLPersistenceRules
Generic Structure Template	std	3.2.0	AUTOSAR_TPS_GenericStructureTemplate
Meta Model	aux	4.2.1	AUTOSAR_MMOD_MetaModel
Meta Model-generated XML Schema	std	4.2.1	AUTOSAR_MMOD_XMLSchema
Requirements on ECU Configuration	aux	2.1.0	AUTOSAR_RS_ECUConfiguration
Specification of ECU Configuration	std	3.2.0	AUTOSAR_TPS_ECUConfiguration
Requirements on Basic Software Module Description Template	aux	1.1.1	AUTOSAR_RS_BSWModuleDescriptionTemplate
Basic Software Module Description Template	std	2.2.0	AUTOSAR_TPS_BSWModuleDescriptionTemplate

Document	Classification	Version	File Name
Methodology	aux	2.1.0	AUTOSAR_TR_Methodology
Requirements on System Template	aux	3.1.0	AUTOSAR_RS_SystemTemplate
Requirements on ECU Resource Template	aux	1.0.0	AUTOSAR_RS_ECUResourceTemplate
Specification of ECU Configuration Parameters (XML)	std	4.2.0	AUTOSAR_MOD_ECUConfigurationParameters
Requirements on Methodology	aux	1.1.0	AUTOSAR_RS_Methodology
Requirements on Timing Extensions	aux	1.0.0	AUTOSAR_RS_TimingExtensions
Specification of Timing Extensions	std	1.2.0	AUTOSAR_TPS_TimingExtensions
Standardization Template	std	1.0.0	AUTOSAR_TPS_StandardizationTemplate
Requirements on Standardization Template	aux	1.0.0	AUTOSAR_RS_StandardizationTemplate

5.5 Cluster: Application Interfaces

As of the latest Revision 3, the following Application Interfaces documents are part of Release 4.0:

Document	Classification	Version	File Name
SW-C and System Modeling Guide	aux	3.0.0	AUTOSAR_TR_SWCModelingGuide
Table of Application Interfaces	aux	2.2.0	AUTOSAR_MOD_AITable
Requirements on SW-C and System Modeling	aux	1.1.0	AUTOSAR_RS_SWCModeling
Explanation of Application Interfaces of the Body and Comfort Domain	aux	2.0.0	AUTOSAR_EXP_AIBodyAndComfortExplanation
Explanation of Application Interfaces of the Powertrain Domain	aux	2.2.0	AUTOSAR_EXP_AIPowertrainExplanation
Explanation of Application Interfaces of the Chassis Domain	aux	1.1.0	AUTOSAR_EXP_AIChassisExplanation
Explanation of Application Interfaces of Occupant and Pedestrian Safety Systems Domain	aux	1.1.0	AUTOSAR_EXP_AIOccupantAndPedestrianSafetyExplanation
Explanation of Application Interfaces of the HMI, Multimedia and Telematics Domain	aux	1.0.0	AUTOSAR_EXP_AIHMIMultimediaAndTelematicsExplanation
Application Interfaces User Guide	aux	1.1.0	AUTOSAR_EXP_AIUserGuide
Table of Application Interfaces (XML)	std	1.2.0	AUTOSAR_MOD_AISpecification
AIMeasurementCalibrationDiagnostics	aux	1.0.0	AUTOSAR_TR_AIMeasurementCalibrationDiagnostics

5.6 Cluster: Conformance Test

The documents related to conformance tests have not been updated together with the changes inside the specifications and are thus removed from R4.0.3.
Nevertheless they are still available inside the R4.0.2 environment which is accessible under
https://svn3.autosar.org/repos2/work/22_Releases/01_CTSpecs

5.7 Cluster: Other Documents

There are currently no documents in cluster “other documents” as of the latest Revision 3 of Release 4.0.

6 Remarks to Known Technical Deficiencies

The technical deficiencies per document are – if applicable – mentioned inside the respective specification in a chapter called “Known Limitations” which is located after the table of contents.
There are two technical deficiencies to be mentioned which are not related to a specific document:

- **Requirements traceability rework ongoing**
  Starting with R4.0.3 the requirements traceability between SRS and SWS documents is reworked using an automated tooling.
  Due to the high workload SWS documents in R4.0.3 show an intermediate status of the requirements traceability. This means that - among other changes - there are new tables to list the requirements tracing which may look less informative than the old ones.
  For the next revision R4.0.4 the rework of the requirements traceability is expected to be complete.
- **Symbolic Name Values**
  According to the specification of the ECU Configuration [3] TPS_ECUC_02108 the handling of symbolic name values and their generation into header files has changed.
  For examples please consult the Layered Software Architecture [4]:
  - page id: 9000d
  - page id: 9000f
  - page id: fghjk

7 Revision History of the Release 4.0

Date	Rev.	Document		Description	
		Name	Version	State	Comment
22-Dec-11	3	Backward Compatibility Statement	1.1.0	modified	• Adapted to compare R4.0.3 with R4.0.3
		Virtual Functional Bus	2.2.0	modified	• Enhanced graphical notation (NV data interface support) • Introduction of a mixed conversion block • Clarification of the use of AUTOSAR services within compositions
		Layered Software Architecture	3.2.0	modified	• added a note for the R3-compatibility FlexRay Transport Layer FrArTp on slide "ki890". • added an overview chapter for energy management and partial networking • corrected examples regarding DEM symbol generation • fixed minor typography issues • clarification of term AUTOSAR-ECU on slide "94jt1" • corrected CDD access description for EcuM on slide "11123“
		List of Basic Software Modules	1.6.0	modified	• Changed "FlexRay Transport Layer" into "FlexRay ISO Transport Layer" • Added FlexRay AUTOSAR Transport Layer • Layer assignment of module "Flash Test" (FlsTst) corrected • Added page "Special Files"
		General Requirements on Basic Software Modules	3.2.0	modified	• Improvement of safety and integrity: o Limitation on callers for Init and definite functions o Re-entrant handling o New implementation requirements for the interrupt routines in the BSW modules • Adaptation to the Include structure of the BSW modules. (e.g. RTE headers handling) • The format of VENDOR_ID adapted to ease the verification
		Specification of Development Error Tracer	3.2.0	modified	• Clarifications related to include structure etc.
		Specification of Platform Types	2.5.0	modified	• Clarified use of operators for boolean variables • Implemented new traceability mechanism
		Specification of Communication Stack Types	3.2.0	modified	• ComStack Artifacts have been generated from BSW Model • Update of SWS document for new traceability mechanism
		Specification of Memory Mapping	1.4.0	modified	• Consistent naming pattern for memory allocation keywords is introduced • Refine definition the <PREFIX> part in memory allocation keywords

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Compiler Abstraction	3.2.0	modified	• Added macros ‚FUNC_P2CONST‘ and ‘FUNC_P2VAR’ • Added pointer class ‘REGSPACE’ (for register access) • Updated the compiler symbols list
		Basic Software UML Model	3.2.0	modified	Changes according to changes in AUTOSAR specifications
		Specification of Interoperability of AUTOSAR Tools	2.1.0	modified	• Editorial changes including tagged specification items • Improved recommendation of usecases for AUTOSAR files • Refined definition of XML serialization
		Specification of ECU Resource Template	2.2.0	modified	• Added detailed change history (appendix C) • Added [constr_3500]
		Requirements on Runtime Environment	2.2.0	modified	• SRS_Rte_00155: Changed description • SRS_Rte_00154: Changed description • SRS_Rte_00234: Added requirement • SRS_Rte_00235: Added requirement
		Specification of RTE Software	3.2.0	modified	• Adapted to new version of meta model • Support for mixed compu methods with categories SCALE_LINEAR_AND_TEXTTABLE and SCALE_RATIONAL_AND_TEXTTABLE added • Support for compatibility of partial record types added • Consolidation of signal invalidation, data conversion, and out-of-range handling • General consolidation and bug fixes
		Requirements on LIN	1.3.0	modified	• Delete [BSW01527] • Change [SRS_Lin_01588] - Add requirement of wake pin
		Specification of LIN Interface	4.0.0	modified	• Added the As/Cs/Cr timeout observation for LIN TP. • Clarified the buffer handling requirement for LIN TP. • Deleted CDD for LIN TP. • Added the specification of transceiver wakeup.
		Specification of LIN Driver	1.5.0	modified	• Changed error reporting • Improved wake-up handling • Corrected call of Lin_Init
		Requirements on CAN	4.0.0	modified	• Added high level requirements for partial networking • Added improvement of transmit buffer handling • Added full duplex support
		Specification of CAN Transport Layer	4.0.0	modified	• CanTp does not report production errors anymore • Metamodel structure changed • Harmonization with the new buffer concept • Change the BlockSize to be statically configurable instead a maximum value
		Specification of CAN Interface	5.0.0	modified	• Partial Networking Support • Improved Transmit Buffering • Improved Error Detection

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of CAN Driver	4.0.0	modified	• Added SWS_Can_00461 to capture - Detection of Power ON of controller due to CAN communication • Changed Can_InitController to Can_ChangeBaudrate • Added Can_CheckBaudrate • Added sub container CanMainFunctionRWPeriods to CanGeneral • Changed CanHardwareObject container • Updated description of ECUC_Can_00321 • Changed Can_SetControllerMode in SWS_Can_00370 to Can_Mainfunction_Mode • Added CanControllerDefaultBaudrate parameter • Updated description of SWS_Can_00279 • Updated description of CAN321 • Added SWS_Can_00445, SWS_Can_00446 and SWS_Can_00447 to capture Possible loss of CAN Wakeup • Changed "Module Short Name" (MODULENAME) to "Module Abbreviation" (MAB)
		Specification of CAN Transceiver Driver	3.0.0	modified	• Added support for Partial Networking • Implemented Production error concept • Updated Baud rate configuration parameter handling • Added support to detect that power-on was caused by CAN communication • Reentrancy attribute is corrected for APIs • Corrections in few requirements • Optional Interfaces Table is corrected
		Requirements on Communication	3.1.0	modified	• several minor changes and bug-fixes • clarification and minor extensions of transmission mode usage and activation • clarification and extension of transfer properties • added retry mechanism for failed transmission requests
		Specification of Communication	4.2.0	modified	• Several minor changes and bug-fixes • Clarification and minor extensions of transmission mode usage and activation • Clarification and extension of transfer properties • Added retry mechanism for failed transmission requests
		Specification of I-PDU Multiplexer	2.2.0	modified	• Minor bug fixes and editorial changes • Added configurable JIT-update
		Requirements on Network Management	3.0.0	modified	• Added support for Partial Networking • Added support for NM Co-ordination on Nested Sub-buses

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Network Management Interface	3.0.0	modified	• NmMultipleChannelsEnabled removed • Added Mandatory Interfaces provided by ComM to Chapter 8.6.1 • move NmPassiveMode • Enabled form global configuration to channel configuration • Removed Nm_ReturnType • Fixed some min and max values of FloatPAramDef configuration parameters • Added support of NmCarWakup-Feature • Added support of coordinated shutdown of nested sub-busses
		Specification of FlexRay Network Management	4.2.0	modified	• Support of a coordinated shutdown if more than one gateway coordinator is connected to the same network • Support of CarWakeup in NM user data • Extension for Partial Network
		Specification of CAN Network Management	3.3.0	modified	• Support for Partial Networking • Support for Car Wakeup • Immediate Transmission of NM-PDUs • Support of a coordinated shutdown with multiple connected gateways
		Specification of Function Inhibition Manager	2.2.0	modified	• Renaming of FiMCyclicEventEvaluation configuration parameter into FiMEventUpdateTriggeredByDem • Reformulation of SWS_Fim_00070, SWS_Fim_00073 • Inhibition masks use TestFailed bit instead of TestFailedThisOperationCycle • File structure schema changed • Initialization sequence diagram added • Remove development error FIM_E_EVENTID_OUT_OF_RANGE
		Requirements on Diagnostic	2.4.0	modified	• Clarification of DET functionality • Formal Rework for Requirements Tracing
		Specification of Diagnostic Communication Manager	4.2.0	modified	• Change interaction with BswM module for mode management • Change of callout configuration management for services and sub-services processing • Synchronous and asynchronous clarification
		Specification of Diagnostic Event Manager	4.2.0	modified	• Introduced multiple formats per DTC • Reworked Dem_ResetEventStatus behavior • Reworked Dlt interaction • Reworked Dem/Dcm interface • Corrected include-structure and RTE interfaces • Refined several aspects on features
		Requirements on FlexRay	3.1.0	modified	• Added "Wake-pin" as wake-up Reason • Update of ISO 15765-2 and ISO 15765-4 support
		Specification of FlexRay Transport Layer		removed	(removed)
		Specification of FlexRay Interface	3.3.0	modified	Added User-defined communication operations

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of FlexRay Driver	2.5.0	modified	• Small corrections and clarification on existing features
		Specification of FlexRay Transceiver Driver	1.5.0	modified	• Improved interrupt support by ICU • Improved production error concept
		Requirements on Gateway	2.2.0	modified	• Added transparent non-TP PDU routing • Added support of partial networking extension
		Specification of PDU Router	3.2.0	modified	• clarifications regarding non-TP PDU routing • new feature: non-TP PDU routing idependent of the Pdu lengh • FIFO handling for non-TP PDU routing clarified / improved • Service ID's for generic serivices introduced • clarification regarding multicast routing of TP-PDU's • DEM error reporting removed
		Specification of NVRAM Manager	3.2.0	modified	• Added NvM_CancelJobs behaviour • Added NvM and BswM interaction • Added NvM_SetBlockLockStatus API functional description • Corrected inconsistency between C-interface and port interface • Updated Include structure • Updated configuration parameters description and range
		Specification of CRC Routines	4.2.0	modified	• The GetVersionInfo API is always available
		Requirements on Mode Management	2.1.0	modified	• Extension of BswM in order to implement the mode management relevant parts of the Partial Networks concept.• Extension of ComM in order to implement the communication mode management relevant parts of the Partial Networks concept.
		Specification of Communication Manager	4.0.0	modified	• Partial Network Cluster Management • Improved/Corrected illustration of start-up sequences (chap 9) • Forbid assigning ComM users to channels with NmVariant=PASSIVE • Removed re-request of unchanged communication mode in case of mismatch with BusStateManager (ComM901) • Removed remains of DEM error reporting
		Specification of ECU State Manager	3.0.0	modified	• Fixed interoperability problems between EcuM and BswM • Terminology of ECU State Manager Flexible more consistently described • Modification of sleep sequences to minimize misses of wakeup interrupts
		Specification of Watchdog Manager	2.2.0	modified	• Include file structure changed • Added a method to read after restart which SE caused the reset: WdgM_GetFirstExpiredSEID. • New template with requirements traceability
		Requirements on Operating System	3.0.0	modified	• Merging of AUTOSAR_SRS_MultiCoreOS

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Operating System	5.0.0	modified	• Included MultiCore support from former “Specification of Multi-Core OS Architecture”
		Specification of SPI Handler/Driver	3.2.0	modified	• Rephrased: requirement SWS_Spi_00002, SWS_Spi_00046, SWS_Spi_00129, SWS_Spi_00233, SWS_Spi_00163, SPI 171, SWS_Spi_00172, SWS_Spi_00289 and SWS_Spi_00290, block 2 in chapter 7.2.2 • Removed: requirement SPI083; SPI132, SPI284 and SPI107 removed from statement • Corrected:Dem_EventStatusType in SWS_Spi_00191, Spi_SyncTransmit Syn/Async changed to Synchronous, SPI_E_PARAM_POINTER in SWS_Spi_00371, • Reference to MCU in SWS_Spi_00244 and SWS_Spi_00342 • Added: requirement SWS_Spi_00140, chapter 10 - SpiCsSelection, SWS_Spi_00194 - SPI_JOB_QUEUED state introduced, SWS_Spi_00195 with error table update • Modified: SWS_Spi_00114 and SWS_Spi_00135, chapter 10 - SpiEnableCs
		Specification of ICU Driver	4.2.0	modified	• Corrected Type errors • Updated description of Icu_IndexType
		Specification of ADC Driver	4.2.0	modified	• Requirement of ADC group status to be available for debugging removed
		Specification of I/O Hardware Abstraction	3.2.0	modified	• Update Version Check requirement
		Specification of RAM Test	1.5.0	modified	• Clarification of some requirements. • Typos correction. • Added a new requirement for DET error reporting
		Specification of PWM Driver	2.5.0	modified	• Re-formulated SWS_Pwm_00045
		Requirements on GPT Driver	2.2.0	modified	• Requirements tracing reworked
		Specification of GPT Driver	3.2.0	modified	• Range added to ECUC_Gpt_00331 • "module short name" replaced by "module abbreviation" • Chapter 6 revised and chapter 13 added due to new traceability mechanism
		Specification of DIO Driver	2.5.0	modified	• Removed Dem.h from SWS_Dio_00171 and added new requirement SWS_Dio_00194
		Requirements on Watchdog Driver	2.1.0	modified	• Requirement for Windowed Watchdog Concept added
		Specification of Watchdog Driver	2.5.0	modified	• DET-Error for Wdg_GetVersionInfo added
		Specification of Watchdog Interface	2.5.0	modified	• Modification in DeviceIndex • New template with requirements traceability
		Specification of MCU Driver	3.2.0	modified	• Mcu_SetMode assumes that all interrupts are disabled prior the call
		Specification of EEPROM Driver	3.2.0	modified	• Min max values of FloatParamDef parameters added for EEP178 & EEP185 • Replaced Module short name by module abbreviation

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Flash Driver	3.2.0	modified	• References to HW specific errors corrected • Range of configuration parameters adapted • Consistency checking reformulated • Module short name changed
		Specification of Memory Abstraction Interface	1.4.0	modified	• Module short name changed • Consistency checking reformulated
		Specification of Flash EEPROM Emulation	2.0.0	modified	• DET errors added / removed • Handling of internal management operations detailed • Module short name changed • Consistency checking reformulated
		Specification of EEPROM Abstraction	2.0.0	modified	• Introduced parameter checks and corresponding DET errors • Handling of internal management operations detailed • Module short name changed
		Conformance Test Process Definition Path D		removed	(removed)
		Conformance Test Process Definition Path A-C		removed	(removed)
		Main Requirements	3.0.0	modified	The following features are incorporated • Acceptance tests • multicore support • safety requirements
		Glossary	2.4.0	modified	Extended Abbreviations (0) Following terms added: • Callback (3.35) • Callout (3.36) • ECU (3.69)
		SW-C and System Modeling Guide	3.0.0	modified	• Description of “Blueprint” mechanism and its impact on Blueprintable elements in Application Interfaces domain • New Autosar Application Interfaces Package Structure • Keywords handling reformulated according to the Standardization Template specification and the new Application Interfaces Packages Structure • “Units” section enhanced and new “Physical Dimensions” section introduced
		Table of Application Interfaces	2.2.0	modified	• Optimization of data types, restructuring of data elements and port interfaces. • Update of XML package structure especially regarding Port Blueprints. • Synchronization to updates of AUTOSAR meta model.
		Requirements on Software Component Template	2.1.0	modified	Added requirements for: • Record Type subsetting • Partial networking

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Software Component Template	4.2.0	modified	• Added CompuMethod categories SCALE_LINEAR_AND_TEXTTABLE and SCALE_RATIONAL_AND_TEXTTABLE (table 5.67) • Clarification concerning the usage of invalid values • Revised support for data filters • Support for partial networking • Support for the specification of local connections between software-components • Improved description of service needs • Change history of constraints and specification items • Miscellaneous improvements and clarifications • “Support for Standardization” moved to Standardization Template [1]
		System Template	4.2.0	modified	• Added support for Partial Networking • Added support for Complex Device Drivers • Added support for new COM transfer properties • Added support for transmission mode switch via Com_SwitchIpduTxMode COM API • Added support for treating byte arrays with primitive type mapping • Added support for partial routing in signal gateways • Added support for FlexRay AUTOSAR TP • Added rules for creation of Pdu Triggerings and Pdu Ports • Explained the general approach of bit counting
		Model Persistence Rules for XML	2.4.0	modified	• Formal adaptations concernign traceability • Harmonized naming proposal for arxml files with AUTOSAR_TR_InteroperabilityOfAutosarTools • Updated XML Persistence mechanism regarding primitive types with attributes
		Generic Structure Template	3.2.0	modified	• Editorial changes including tagged specification items • Improvements in UML usage (M3), especially mark obsolete elements • Improved specification of primitives, primitive definition, formula language, category • Improved variant handling and blueprint support • Improved support for instanceRef and arrays • Improved definition of package structures
		Meta Model	4.2.1	modified	Changes according to changes in AUTOSAR template specifications
		Meta Model-generated XML Schema	4.2.1	modified	Changes according to changes in AUTOSAR template specifications 0
		Requirements on ECU Configuration	2.1.0	modified	• Updated RS_ECUC_00083, Added detailed change history in chapter 6

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of ECU Configuration	3.2.0	modified	• ecuc_sws_5001 removed. • Clarified modeling of destinationType and destinationContext. • Clarified scope of parameters. • Clarified postBuildChangeable and multipleConfigurationContainer. • Added annotation to EcucAbstractReferenceValue. • Updated semantics of definitionRef and introduced the term "pure VSMD" • Clarification of PostBuildSelectable, PostBuildLoadable in VSMD • Set configuration class affection support to deprecated • Support for ordering of EcucParameters and EcucReferences • Reworked CDD configuration to reflect the direction of the communication • Clarified usage of symbolic name references
		Requirements on Basic Software Module Description Template	1.1.1	modified	• Added detailed change history (chapter 6)
		Basic Software Module Description Template	2.2.0	modified	• Introduced formal specification items and Constraint and Specification History • Added several clarifications, examples and constraints • Improved support for AUTOSAR Services, memory mapping and calibration • New attributes in various parts of the model
		Methodology	2.1.0	modified	• Simplification of use case diagrams by removing task use and introducing deliverables on use cases level (see Methodology Concept chapter) • Readability improvement by generation of tables with navigable links • Introduction of Variant Handling, E2E support, System Constraints Description • Refinement of Methodology Library, including the extension of deliverables in different use cases
		Requirements on System Template	3.1.0	modified	• Added requirement RS_SYSCT_00042

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of CAN State Manager	2.2.0	modified	• Added new handling to support partial networking • Changed handling for bus deinitialisation according to AR3.x behaviour • New API and handling to change the baudrate of a CAN network • Changed handling for bus-off recovery and related production error report • Comprehensive revision of all state machine diagrams and SWS-ID-items • Changed classification of production errors and development errors • Solve conflicts of SWS-ID items with the conformance test specification
		Specification of FlexRay State Manager	2.2.0	modified	• Short term loss of synchronization is reported to DEM or DET. • Number of startup frames can be monitored during normal operation. • Revised production error handling.
		Specification of LIN State Manager	1.3.0	modified	• Added post-build configuration support • Added completion of Production error concept in Com Stack • Removed local network index
		Specification of LIN Transceiver Driver	1.2.0	modified	• Update of wake-up validation (power-up) • Several minor corrections (typos and wordings)
		Requirements on Core Test	1.2.0	modified	• Clarification of one requirement
		Specification of Core Test	1.2.0	modified	• Clarification of some requirements. • Typos correction. • Removed redundant and useless requirements.
		Specification of Flash Test	1.2.0	modified	• SWS_FlsTst_00026: minor text change • Figure1: IRQ files removed • SWS_FlsTst_00052: parameter range modified • SWS_FlsTst_00053: minor text correction
		AUTOSAR BSW & RTE Conformance Test Specification Part 1: Background		removed	(removed)
		AUTOSAR BSW & RTE Conformance Test Specification Part 2: Process Overview		removed	(removed)
		AUTOSAR BSW & RTE Conformance Test Specification Part 3: Creation & Validation		removed	(removed)

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		AUTOSAR BSW & RTE Conformance Test Specification Part 4: Execution Constraints		removed	(removed)
		Explanation of Application Interfaces of the Body and Comfort Domain	2.0.0	modified	• Inconsistencies fixed between Ap-plication Interfaces Master Table and Body Domain Explanatory Document : all functions impacted • Update of all functionality Software Components Decompositions for better readability • Removed ParkDistance Control functionality
		Explanation of Application Interfaces of the Powertrain Domain	2.2.0	modified	• Splitting of document: Topic of Measurement and Calibration moved to new document TR_AIMeasurementCalibrationDiagnostics_537 • update w.r.t. to names etc. according to changes in AISpecification
		Specification of ECU Configuration Parameters (XML)	4.2.0	modified	Changes according to changes in AUTOSAR specifications
		Feature Specification of the BSW Architecture and the RTE	1.1.0	modified	Corrected wrong usage of term “module short name”
		Specification of LIN Network Management	2.0.0	modified	• Added support for NM Coordinator Synchronization • Changed Nm_ReturnType to Std_ReturnType • Updated “Module short name” to “Module Abbreviation”
		Specification of Basic Software Mode Manager	1.2.0	modified	• Support of Mode Machine Instances assigned to the SchM • Include of user defined header files • Possibility to provide an initial value for a BswMModeRequestPort
		Specification of Debugging in AUTOSAR	1.2.0	modified	• Clarify interface toward "to be debugged" modules • Configuration for debugging variables (DbgStaticDID) is corrected and extended
		Specification of Diagnostic Log and Trace	1.2.0	modified	• Added Dlt control messages for getting values of modifiable parameters • Modification and update of Dem and Dcm interfaces • Added FIBEX example for non verbose transmission mode
		Requirements on Methodology	1.1.0	modified	• Improved requirements tracing. • New requirements numbering according to AUTOSAR definition.
		Specification of Fixed Point Math Routines	1.2.0	modified	• Addition to the list of function for consis-tency and completeness • Fix typing errors in document
		Specification of Fixed Point Interpolation Routines	1.2.0	modified	Removal of rounding off feature from 'MAP lookup routines'

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Floating Point Math Routines	1.2.0	modified	• Removal of 'Accumulator routine' • Revised 'Trigonometric routines' names • Added 'Median Sort Routines'
		Specification of Floating Point Interpolation Routines	1.2.0	modified	• Error classification support and defini-tion removed as DET call not supported by library • Configuration parameter description / support removed for XXX_GetVersionInfo routine. • XXX_GetVersionInfo routine name cor-rected.
		Specification of Bit Handling Routines	2.0.0	modified	• Requirements described with more clarity for 'Bit Shift and Rotate' op-erations • Table correction for PutBit rou-tines. • 'Copy Bit routine' interfaces cor-rected. • Error classification support and definition removed as DET call not supported by library • Configuration parameter descrip-tion / support removed for XXX_GetVersionInfo routine.
		Specification of Extended Fixed Point Routines	2.0.0	modified	• Initialization functionality introduced for 'Counter Routines' • Interface for Efx_CtrlSetLimit corrected • Efx_MovingAverage routine interface corrected • Efx_RampCalcSwitch routine definition and requirements updated for correct behavior • Interface for Efx_Debounce_u8_u8 routine updated • Updated parameter sequences for DT1 and PI controller routines. • Name revised for Efx_PCalc routine • Description correct for Efx_DebounceParam_Type and Efx_DebounceState_Type • Interface table corrected for Efx_Div routine • Interface table corrected for Efx_MedianSort routine • Error classification support and definition removed as DET call not supported by library • Configuration parameter description / support removed for XXX_GetVersionInfo routine. • XXX_GetVersionInfo routine name corrected.
		Specification of Crypto Service Manager	1.2.0	modified	• Fixed issues with AUTOSAR Port Interfaces
		Requirements on Multi-Core OS Architecture		removed	(removed, integrated into SRS OS)
		Specification of Multi-Core OS Architecture		removed	(removed, integrated into SWS OS)
		Specification of Timing Extensions	1.2.0	modified	• Added new timing constraint types AgeConstraint and ExecutionTimeConstraint • Added occurrence expression language for TimingDescriptionEvents • Improved TDEventModeDeclaration, BurstPatternEventTriggering and SwcTiming

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Module XCP	2.0.0	modified	• Added parameters for Event Channel and Timestamp configuration • Added possibility to calculate memory consumption for ODT (DAQ & STIM) • Restructuring configuration parameters for static & dynamic ODT • Added support for deactivation of transmission capabilities
		Specification of UDP Network Management	2.0.0	modified	• Support coordinated shutdown • New traceability mechanism
		Specification of Ethernet State Manager	1.2.0	modified	• Update Chapter 10 (Parameter adjustment)
		Specification of Socket Adaptor	1.2.0	modified	• Rectify inconsistencies in synchronicity and reentrancy • Adjust parameter multiplicity • New traceability mechanism
		Specification of Ethernet Interface	1.2.0	modified	• Description of payload data in EthIf_Cbk_RxIndication adapted
		Specification of Synchronized Time-Base Manager	2.0.0	modified	• Added functionality for absolute time provision
		Specification of a Transport Layer for SAE J1939	1.2.0	modified	• API changes: CancelTransmit, CancelReceive, and ChangeParameter were changed to synchronous behavior
		Specification of SW-C End-to-End Communication Protection Library	2.0.0	modified	• E2E Profile 3 removed (not backward compatible) • Several bugfixes in of E2E Protection Wrapper API (not backward compatible) • Addition of init API for the E2E Protection Wrapper • Several bugfixes and modifications in code examples of E2E Protection Wrapper • Extensions in configuration, making sender and receiver more independent • Bugfix in the profile 1 alternating mode CRC calculation • Clarifications with in E2E Profile 1 with respect to the CRC • Several minor bug fixes • Several optimizations in the text descriptions • New template with requirements traceability
		Requirements on Module XCP	1.1.0	modified	Added support for deactivation of transmission capabilities
		Specification of Ethernet Driver	1.2.0	modified	• Description of buffer behaviour in Eth_SetControllerMode extended
		Specification of Ethernet Transceiver Driver	1.2.0	modified	• EthTrcv_GetVersionInfo revised
		Specification of TTCAN Driver	1.2.0	modified	• Provided min/max values of configuration parameters • New tracebility matrix

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Crypto Abstraction Library	1.2.0	modified	• CAL0707 and CAL0708_Conf have been removed and the key types structures (e.g. Cal_AsymPrivateKeyType) now explicitly can contain a key handle instead of key data
		Guide to Mode Management	1.0.0	added	(new)
		Application Interfaces User Guide	1.1.0	modified	• Description of Categories of model elements created • Synchronization of Update of XML package structure especially regarding Port Blueprints • Synchronization to updates of AUTOSAR meta model • Description of Naming conventions for connectors
		XML Specification of Application Interfaces	1.2.0	modified	see AI Table
		Specification of ECU State Manager with fixed state machine	1.2.0	modified	• Re-integrated EcuM_GetState • EcuM_KillAllRUNRequests does no longer clear requests POST RUN • EcuM_RequestPOST_RUN now accepts new requests during shutdown • Fixed include structure (Don't include Rte.h but Rte_EcuM.h) • EcuMEnableDefBehaviour is deprecated for EcuM fixed
		General Conformance Test Specification		removed	(removed)
		General configuration and test parameters used for validating conformance tests		removed	(removed)
		Conformance Test Specification of CAN Driver		removed	(removed)
		Configuration and test parameters used for validating conformance tests of CAN Driver		removed	(removed)
		Conformance Test Specification of MCU Driver		removed	(removed)
		Configuration and test parameters used for validating conformance tests of MCU Driver		removed	(removed)
		Conformance Test Specification of GPT Driver		removed	(removed)
		Configuration and test parameters used for validating conformance tests of GPT Driver		removed	(removed)

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Conformance Test Specification of IPDU Multiplexer		removed	(removed)
		Configuration and test parameters used for validating conformance tests of IPDU Multiplexer		removed	(removed)
		Conformance Test Specification of EEPROM Abstraction		removed	(removed)
		Configuration and test parameters used for validating conformance tests of EEPROM Abstraction		removed	(removed)
		Conformance Test Specification of Flash Driver		removed	(removed)
		Configuration and test parameters used for validating conformance tests of Flash Driver		removed	(removed)
		Conformance Test Specification of FlexRay Transceiver Driver		removed	(removed)
		Configuration and test parameters used for validating conformance tests of FlexRay Transceiver Driver		removed	(removed)
		Conformance Test Specification of LIN Driver		removed	(removed)
		Configuration and test parameters used for validating conformance tests of LIN Driver		removed	(removed)
		Conformance Test Specification of ADC Driver		removed	(removed)
		Configuration and test parameters used for validating conformance tests of ADC Driver		removed	(removed)
		Conformance Test Specification of PWM Driver		removed	(removed)

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Configuration and test parameters used for validating conformance tests of PWM Driver		removed	(removed)
		Conformance Test Specification of CAN Transport Layer		removed	(removed)
		Configuration and test parameters used for validating conformance tests of CAN Transport Layer		removed	(removed)
		Conformance Test Specification of EEPROM Driver		removed	(removed)
		Configuration and test parameters used for validating conformance tests of EEPROM Driver		removed	(removed)
		Conformance Test Specification of FlexRay Driver		removed	(removed)
		Configuration and test parameters used for validating conformance tests of FlexRay Driver		removed	(removed)
		Conformance Test Specification of Watchdog Driver		removed	(removed)
		Configuration and test parameters used for validating conformance tests of Watchdog Driver		removed	(removed)
		Conformance Test Specification of SPI Handler/Driver		removed	(removed)
		Configuration and test parameters used for validating conformance tests of SPI Handler/Driver		removed	(removed)
		Conformance Test Specification of CAN Transceiver Driver		removed	(removed)
		Configuration and test parameters used for validating conformance tests of CAN Transceiver Driver		removed	(removed)

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Conformance Test Specification of CAN Interface		removed	(removed)
		Configuration and test parameters used for validating conformance tests of CAN Interface		removed	(removed)
		Conformance Test Specification of LIN Interface		removed	(removed)
		Configuration and test parameters used for validating conformance tests of LIN Interface		removed	(removed)
		Conformance Test Specification of FlexRay Interface		removed	(removed)
		Configuration and test parameters used for validating conformance tests of FlexRay Interface		removed	(removed)
		Conformance Test Specification of FlexRay Network Management		removed	(removed)
		Configuration and test parameters used for validating conformance tests of FlexRay Network Management		removed	(removed)
		Conformance Test Specification of CAN State Manager		removed	(removed)
		Configuration and test parameters used for validating conformance tests of CAN State Manager		removed	(removed)
		Conformance Test Specification of LIN State Manager		removed	(removed)
		Configuration and test parameters used for validating conformance tests of LIN State Manager		removed	(removed)
		Conformance Test Specification of FlexRay State Manager		removed	(removed)

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Configuration and test parameters used for validating conformance tests of FlexRay State Manager		removed	(removed)
		Conformance Test Specification of CAN Network Management		removed	(removed)
		Configuration and test parameters used for validating conformance tests of CAN Network Management		removed	(removed)
		Conformance Test Specification of Network Management Interface		removed	(removed)
		Configuration and test parameters used for validating conformance tests of Network Management Interface		removed	(removed)
		Conformance Test Specification of Port Driver		removed	(removed)
		Configuration and test parameters used for validating conformance tests of Port Driver		removed	(removed)
		Conformance Test Specification of ICU Driver		removed	(removed)
		Configuration and test parameters used for validating conformance tests of ICU Driver		removed	(removed)
		Conformance Test Specification of Memory Abstraction Interface		removed	(removed)
		Configuration and test parameters used for validating conformance tests of Memory Abstraction Interface		removed	(removed)
		Conformance Test Specification of Flash EEPROM Emulation		removed	(removed)

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Configuration and test parameters used for validating conformance tests of Flash EEPROM Emulation		removed	(removed)
		Conformance Test Specification of Watchdog Interface		removed	(removed)
		Configuration and test parameters used for validating conformance tests of Watchdog Interface		removed	(removed)
		Conformance Test Specification of Development Error Tracer		removed	(removed)
		Configuration and test parameters used for validating conformance tests of Development Error Tracer		removed	(removed)
		Conformance Test Specification of COM		removed	(removed)
		Configuration and test parameters used for validating conformance tests of COM		removed	(removed)
		Conformance Test Specification of DIO Driver		removed	(removed)
		Configuration and test parameters used for validating conformance tests of DIO Driver		removed	(removed)
		Conformance Test Specification of FlexRay Transport Layer		removed	(removed)
		Configuration and test parameters used for validating conformance tests of FlexRay Transport Layer		removed	(removed)
		Conformance Test Specification of NVRAM Manager		removed	(removed)

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Configuration and test parameters used for validating conformance tests of NVRAM Manager		removed	(removed)
		Conformance Test Specification of OS		removed	(removed)
		Configuration and test parameters used for validating conformance tests of OS		removed	(removed)
		Conformance Test Specification of LIN Transceiver Driver		removed	(removed)
		Configuration and test parameters used for validating conformance tests of LIN Transceiver Driver		removed	(removed)
		Conformance Test Specification of DCM		removed	(removed)
		Configuration and test parameters used for validating conformance tests of DCM		removed	(removed)
		Conformance Test Specification of PDU Router		removed	(removed)
		Configuration and test parameters used for validating conformance tests of PDU Router		removed	(removed)
		Conformance Test Specification of ECU State Manager Fixed		removed	(removed)
		Configuration and test parameters used for validating conformance tests of ECU State Manager Fixed		removed	(removed)
		Conformance Test Specification of FIM		removed	(removed)
		Configuration and test parameters used for validating conformance tests of FIM		removed	(removed)
		Conformance Test Specification of RTE		removed	(removed)

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Configuration and test parameters used for validating conformance tests of RTE		removed	(removed)
		Conformance Test Specification of LIN Network Management		removed	(removed)
		Configuration and test parameters used for validating conformance tests of LIN Network Management		removed	(removed)
		Standardization Template	1.0.0	added	(new)
		Requirements on Standardization Template	1.0.0	added	(new)
		Unique Names for Documentation, Measurement and Calibration: Modeling and Naming Aspects including Automatic Generation	1.0.0	added	(new)
		Specification of FlexRay ISO Transport Layer	4.0.0	added	(new)
		Known Issues in AUTOSAR Conformance Testing		removed	(removed)
		Project Objectives	3.0.0	added	(new)
		Specification of Predefined Names in AUTOSAR	1.0.0	added	(new)
		Specification of FlexRay AUTOSAR Transport Layer	3.0.0	added	(new)
15-Apr-11	2	Virtual Functional Bus	2.1.0	modified	Improved description of port compatibility and data conversion scaling Improved consistency to other AUTOSAR specifications Fixed outdated graphical notation in images Reformulated description of timing extension
		Layered Software Architecture	3.1.0	modified	added a note regarding support for System Basis Chips on slide "94juq“ clarification of DBG and DLT text on slide "3edfg" corrected DBG description on slide "11231"
		List of Basic Software Modules	1.5.0	modified	Abbreviations list completely redone Added comment about the OS prefix Added second specification document to the EcuM entry Beautification of file names

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		General Requirements on Basic Software Modules	3.1.0	modified	Changed Requirement [SRS_BSW_00416] (sequence of initialisation): added check of uninitialized module calls. Changed Requirement [SRS_BSW_00004] (version check): reworded to specify pass criteria of checks. Changed Requirement [SRS_BSW_00346] (Basic set of module files): added Link-time and Post-Build configuration header files. Changed Requirement [SRS_BSW_0000408] (Configuration parameter naming convention): requirement relaxed. Changed Requirement [SRS_BSW_0000440] (Function Prototype for Callback functions of AUTOSAR): modified callback call mechanism through RTE. Changed Requirement [SRS_BSW_0000414] (Parameter if init function): added check on coherence of configuration type (pre-compile, link time, post-build) and pointer passed to API. Added Requirement [SRS_BSW_0000462] (Requirement Id for Standardized Autosar Interface): AUTOSAR Standard Interfaces description has now a Requirement ID and is binding.
		Specification of Development Error Tracer	3.1.0	modified	DLT is now an optional interface of DET harmonized parameter error handling removed known limitation of Revision 4.0.1
		Specification of Platform Types	2.4.0	modified	Detailed published parameter names (module names) in chapter 10. The previous definition was ambiguous across several releases. Changed "Module Short Name" (MSN) to "Module Abbreviation" (MAB) for the use of API service prefixes such as "CanIf".
		Specification of Communication Stack Types	3.1.0	modified	Add TPParameterType and Enumeration value TP_NORETRY in RetryInfoType ComStack_Types.h divided into ComStack_Types.h and ComStack_Cfg.h PduIdType and PduLengthType defined in ComStack_Cfg.h file

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Memory Mapping	1.3.0	modified	ECU Configuration Parameters for MemMap defined Define generation of MemMap header files New standardised Memory Allocation Keywords for new initialisation policy CLEARED added Refinement of <SIZE> suffix of Memory Allocation Keywords to <ALIGNMENT> suffix, Clarify link MetaModel attribute values, define MemorySectionType and SectionInitializationPolicy for the standardised Memory Allocation Keywords define that <NAME> used for Memory Allocation Keywords is the MemorySection shortName Application hint for usage of INLINE and LOCAL_INLINE added Handling structs, arrays and unions redefined
		Specification of Compiler Abstraction	3.1.0	modified	Put more emphasize on SwComponentType's name in SWS_COMPILER_00054, COMPILER044 Corrected compiler used in the example (chapter 12.4) Corrected include structure in the example (chapter 12.4)
		Basic Software UML Model	3.1.0	modified	Changes according to changes in AUTOSAR specifications
		Specification of ECU Resource Template	2.1.0	modified	Added Glossary appendix. Updated category definitions to upper case.
		Requirements on Runtime Environment	2.1.0	modified	SRS_Rte_00210: changed rational SRS_Rte_00020: Added access to OS service interface
		Specification of RTE Software	3.1.0	modified	Adapted to new version of meta model Backward compatibility to implicit communication behavior of AUTOSAR 2.1/3.0/3.1 added Support of inter-runnable variables extended to composite data types Clarification which API calls shall be implemented as macro accesses to the component data structure in compatibility mode (see rte_sws_1156) General consolidation and bug fixes
		Specification of LIN Interface	3.1.0	modified	Added 5.3.3 Version Check. Changed from the parameter name "NetworkHandleType Transceiver" to "NetworkHandleType Channel". Changed the type definitions and deleted from LIN Interfase: LinIf_TrcvModeType->LinTrcv_TrcvModeType, LinTp_ParameterValueType->TpParameterType. Changed the function name with "WakeUp" to "Wakeup". Changed the configuration parameter for time to "in second".

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of LIN Driver	1.4.0	modified	Introduce Lin_GeneralTypes.h Add missing DET error code (NULL pointer error)Remove instance ID from Lin_GetVersionInfo APIRemove instance ID from Lin_GetVersionInfo APIRemove instance ID from Lin_GetVersionInfo API Correct naming of “WakeUp” to “Wakeup” Further maintenance for R4.0.2: see chapter 15
		Requirements on CAN	3.1.0	modified	BSW01017 requirement for CAN polling/interrupt mode removed
		Specification of CAN Transport Layer	3.1.0	modified	Corrections and improvement in errors description; API services correction; Clarifications in relation with buffer handling Updated table in Ch.6 for half and full duplex support
		Specification of CAN Interface	4.1.0	modified	updated chapters "Version Checking" and "Published Information" multiple CAN IDs could optionally be assigned to one I-PDU wake-up validation optionally only via NM PDUs asynch. mode indication call-backs instead of synch. mode changes no automatic PDU channel mode change when CC mode changes TxConfirmation state entered for BusOff Recovery WakeupSourceRefIn and WakeupSourceRefOut PduInfoPtr instead of SduDataPtr introduction of Can_GeneralTypes.h and Can_HwHandleType transceiver types of chapter 8. shifted to transceiver SWS
		Specification of CAN Driver	3.1.0	modified	Modified SWS_Can_00111 to correct the "Version Checking" information Added new requirements SWS_Can_00435 to SWS_Can_00440 to introduce Can_GeneralTypes.h. Added new requirements SWS_Can_00441 and SWS_Can_00442 to introduce multiple poll cycles Added new requirements SWS_Can_00443 and SWS_Can_00444 to provide an optional callback on every reception of a LPDU
		Specification of CAN Transceiver Driver	2.1.0	modified	CanTrcv state names changed and state diagram modified Usage of SBCs are no longer restricted. Mode switch requests to the current mode are allowed. CanTrvc driver has to invoke CanIf_TrcvModeIndication after each mode switch request, when the requested mode has been reached.

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Communication	4.1.0	modified	Update: COM696 , COM697, COM442, ECUC_Com_00017 and COM217, ECUC_Com_00550, COM115, COM260, COM708, ECUC_Com_00709, COM469. COM698, COM702, COM703, COM704, COM705 , COM706, ECUC_Com_00549, COM700, COM346, COM198, COM691, COM654, COM655, COM692, COM693, COM459 (Table 12), COM005, COM053, SWS_Com_00673, ECUC_Com_00175, COM401, Com_IpduGroupVector in Chapter 8.2.5, COM495, COM469, ECUC_Com_00263, ECUC_Com_00232, COM707 Remove COM626, COM329 Add COM731, COM733, COM734, COM732
		Specification of I-PDU Multiplexer	2.1.0	modified	Updated: tables for mandatory and optional interfaces, SWS_IpduM_00020, SWS_IpduM_00027, SWS_IpduM_00028, SWS_IpduM_00032, SWS_IpduM_00060, SWS_IpduM_00068, SWS_IpduM_00083, SWS_IpduM_00104, ECUC_IpduM_00112, IPDUM117_Conf, SWS_IpduM_00143 and IPDUM162 Removed: IPDUM013, IPDUM030, IPDUM050_Conf, IPDUM051_Conf, IPDUM063, IPDUM064, IPDUM065, IPDUM072, IPDUM099 and IPDUM154 Added: pre-compile configuration vari-ant (Chapter 10), ECUC_IpduM_00162, ECUC_IpduM_00163, ECUC_IpduM_00164 and SWS_IpduM_00165
		Specification of Network Management Interface	2.1.0	modified	Release check added DET Error Code for false Pointer added ChannelID harmonized in COM-Stack Nm-State-changes in Userdata via NmIf
		Specification of FlexRay Network Management	4.1.0	modified	Added SWS_FrNm_00066, SWS_FrNm_00220, SWS_FrNm_00395, SWS_FrNm_00387, SWS_FrNm_00388, SWS_FrNm_00389, SWS_FrNm_00390, SWS_FrNm_00391, SWS_FrNm_00392 Update SWS_FrNm_00235, FRNM254 Modified SWS_FrNm_00074,SWS_FrNm_00021 SWS_FrNm_00272, SWS_FrNm_00074, SWS_FrNm_00135, SWS_Nm_00192, SWS_FrNm_00154, SWS_FrNm_00155, SWS_FrNm_00324, SWS_FrNm_03829, SWS_FrNm_00394, SWS_FrNm_00181, SWS_FrNm_00229, SWS_FrNm_00066, SWS_FrNm_00359, SWS_FrNm_00106, SWS_FrNm_00035, SWS_FrNm_00257
		Specification of CAN Network Management	3.2.0	modified	Changed Signature of RxIndication and TriggerTransmit Faster NM wakeup

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Function Inhibition Manager	2.1.0	modified	Intra module checks updated Corrected multiplicity of configuration parameters FiMInhChoicedemRef and FiMInhChoiceSumRef Introduction of ImplementationDataType replacing IntegerType and Boolean Clarification of chapter describing interaction between DEM and FiM (7.2.2.2) Relocation of SWS_Fim_00067 explaining evaluation by the FiM of DEM events Addition of a new requirement describing the standardized AUTOSAR interface (SWS_Fim_00090)
		Requirements on Diagnostic	2.3.0	modified	Clarification of DET functionality (remove BSW04088)
		Specification of Diagnostic Communication Manager	4.1.0	modified	ComM_DCM_InactiveDiagnostic and ComM_DCM_ActiveDiagnostic has been defined as mandatory interfaces. DcmDslPeriodicTxConfirmationPduId multiplicity changed and creation of DcmDslPeriodicConnection parameter in order to link the confirmation Id with TxPdu Id for PeriodicTransmission. Dem_GetDTCOfOBDFreezeFrame, Dlt_ConditionCheckRead added as optional interfaces DspInternal_<DiagnosticService> Api moved to mandatory internal interface to support the ECU Supplier diagnosis. Rework of ReadData operation
		Specification of Diagnostic Event Manager	4.1.0	modified	Reworked Dem/Dcm interface Extended definition of “Diagnostic Monitor” Introduced "Event significance" and "DTC suppression" Reworked OBD (esp. interface for service $02, readiness, and permanent memory) Reworked file-structure Finalization of issues on Revision 1
		Specification of FlexRay Transport Layer	3.1.0	modified	Time_CS removed from table 2 Add FrTp051 and Figure 24, Table 4 and Table 5 modified, renamed FrTpMaxBufReq to FrTpMaxFcWait, COUNTER_RX_BUFREQ and COUNTER_TX_BUFREQ removed Transport Protocol supports data transfers of up to 2^16-1 Bytes payload Remove Chapter 7.5.4.3 with FrTp-1086 and FrTp-1087, remove COUNTER_BS, COUNTER_CR, Counter_TX_RN
		Specification of FlexRay Interface	3.2.0	modified	API “FrIf_GetCycleLength” added API “FrIf_ReadCCConfig” added APIs FrIf_EnableTransceiverWakeup / FrIf_DisableTransceiverWakeup removed Configuration parameter “FrIfByteOrder” added

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of FlexRay Driver	2.4.0	modified	New service for reading the FlexRay configuration parameters at runtime Update of configuration parameters according to the FlexRay Protocol Specification 3.0
		Specification of FlexRay Transceiver Driver	1.4.0	modified	Support of local wake up Timing based on OS timer references Support of error handling by Complex Device Drivers Fixed constraints of configuration parameters Removed APIs FrTrcv_EnableTransceiverWakeup and FrTrcv_DisableTransceiverWakeup
		Specification of PDU Router	3.1.0	modified	Introduced new version check Added Std_ReturnType to PduR_<Lo>TriggerTransmit Added functionality of PduR_<LoTp>CopyTxData when TsSduLength is zero
		Specification of NVRAM Manager	3.1.0	modified	Behavior specified to prevent possible loss of data during shutdown References to DEM for production errors, new config container NvmDemEventParameterRefs NvMMaxNoOfWriteRetries renamed to NvMMaxNumOfWriteRetries Note in chapter 7.1.4.5 completed Null pointer handling changed Chapter “Version check” updated New DET error NVM_E_PARAM_POINTER Chapter 10 updated, NvMMainFunctionCycleTime moved, NvMSelectBlockForWriteAll added, some ranges corrected Behavior specified when NVRAM block ID 1 shall be written Chapter 12 updated Handling of single-block callbacks during asynchronous multi-block specified. Some minor changes, typos corrected
		Specification of CRC Routines	4.1.0	modified	New parameter added to APIs in order to chain CRC computations. CRC check values corrected and checked values better explained. CRC magic check added.
		Specification of ECU State Manager	2.1.0	modified	Updated pseudo code for AUTOSAR Services Update startup procedure for multi core systems
		Specification of Communication Manager	3.1.0	modified	Table for interaction between ComM and NM added Production error COMM_E_NET_START_IND removed Lower range of configuration parameter “ComMMainFunctionPeriod” modified

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Watchdog Manager	2.1.0	modified	Streamlined the used terms Reorganized structure of some chapters Clarified ambigious statements and resolved contradicting ones Corrected several bugs Provided more details what WdgM functions do and in which sequence
		Specification of Operating System	4.1.0	modified	Clarification in 7.8.1 (meaning of "do nothing") and 7.1.2.1 ("OSEK declarations") Minor changes as typos and rewording
		General Requirements on SPAL	2.2.0	modified	Changes in SRS_SPAL_12461: removed “All other registers shall be initialized by the start-up code” from description
		Specification of SPI Handler/Driver	3.1.0	modified	Added SWS_Spi_00369, SWS_Spi_00371, SWS_Spi_00370 Removed SPI190, SPI094 Updated configuration: base on min-max value for defined parameter; SpiHwUnit belongs to SpiExternalDevice Container; updated SpiTimeClk2Cs
		Specification of ICU Driver	4.1.0	modified	Services 'Icu_DisableEdgeDetection' and 'Icu_EnableEdgeDetection' were added. Configuration parameters 'IcuEdgeDetectApi'and 'IcuWakeupFunctionalityApi' has been added. Definition of 'duty cycle' has been corrected. Corrected values of the parameter 'Icu_SignalMeasurementPropertyType'.
		Specification of ADC Driver	4.1.0	modified	ADC444 add Adc_ResultAlignmentType SWS_Adc_00124 version number check correction SWS_Adc_00337 reformulation Limitation of ranges for AdcPrescale and AdcChannelId InstanceId removed ADC324 removed, SWS_Adc_00458 introduced , DET for Adc_GetVersionInfo
		Specification of I/O Hardware Abstraction	3.1.0	modified	Names of callback notification APIs have been corrected. Exported files <ModuleName>.h of underlying modules are used, instead of <ModuleName>_Types.h
		Specification of RAM Test	1.4.0	modified	clarification on some configuration parameters. clarification of some types used in APIs. Improvement of error reporting.
		Specification of PWM Driver	2.4.0	modified	New Error symbol: PWM_E_PARAM_POINTER, shall be reported if API Pwm_GetVersionInfo service is called with a NULL parameter. updated the chapter Version Check maintenance in phrasing and explaining

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of GPT Driver	3.1.0	modified	GPT208, GPT376 and GPT378 removed Multiplicity changed in ECUC_Gpt_00312 (chapter 10.2.6 updated) SWS_Gpt_00256 rephrased SWS_Gpt_00256 changed according to changed SRS_BSW_00004
		Requirements on DIO Driver	2.1.0	modified	Added SRS_Dio_12900
		Specification of DIO Driver	2.4.0	modified	Added a new API "Dio_LevelType Dio_FlipChannel(Dio_ChannelType ChannelId)" to flip (change from 1 to 0 or from 0 to 1) the level of a channel and return the level of the channel after flip. Removed requirement DIO174 and rephrased SWS_Dio_00106. Added requirements DIO188 and SWS_Dio_00189, to report DET error DIO_E_PARAM_POINTER from Dio_GetVersionInfo().
		Specification of Watchdog Driver	2.4.0	modified	Requirement WDG141/WDG143 removed
		Specification of Watchdog Interface	2.4.0	modified	Update of module version check, addition of invalid pointer as error code and checking for null pointer
		Specification of Port Driver	3.2.0	modified	Removed Port132 and updated Figure 1 Rephrased SWS_Port_00114 and SWS_Port_00075 Removed Port210 Added Chapter 12
		Specification of MCU Driver	3.1.0	modified	Corrected Mcu210 Removed Mcu225. Rephrased MCU125 and MCU011 Added Chapter 12
		Specification of EEPROM Driver	3.1.0	modified	Added DET errors EEP_E_PARAM_POINTER, EEP_E_TIMEOUT Version check section (section 7.10) modified
		Specification of Flash Driver	3.1.0	modified	Configuration parameter FlsDefaultMode added Container with SPI reference added Check fpr NULL pointer added
		Specification of Memory Abstraction Interface	1.3.0	modified	Check for NULL pointer added Inter module checks detailed

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Flash EEPROM Emulation	1.4.0	modified	Inter-module checks clarified (SWS_Fee_00013) Sequence diagram for Fee_Cancel replaced for generated one Naming in ECUC_Fee_00150 corrected to NVM_DATASET_SELECTION_BITS Sequence diagram for Fee_Init extended Handling of internal management operations refined (SWS_Fee_00022, SWS_Fee_00025, SWS_Fee_00173, SWS_Fee_00174, SWS_Fee_00183) Inter module checks detailed (SWS_Fee_00013) NvM_Cbk.h added to file include structure (SWS_Fee_00002) Ranges for FeeBlockNumber (ECUC_Fee_00150) and FeeBlockSize (ECUC_Fee_00148) adjusted Initialization might not be finished within Fee_Init, state machine adapted accordingly (SWS_Fee_00120, SWS_Fee_00168, SWS_Fee_00169) Handling of internal management operations refined (SWS_Fee_00170 .. SWS_Fee_00182 e.a.)
		Specification of EEPROM Abstraction	1.4.0	modified	Check for NULL pointer added Inter module checks detailed Description of return values clarified
		Conformance Test Process Definition Path D	1.2.0	modified	CT process according to Path D is a valid option although the CT System is established. Conformance validity of self declaration clarified
		Conformance Test Process Definition Path A-C	2.1.0	modified	Revision of the conformance test report template "minor updates/changes" defined Process description for handling failed conformance test added “Release 4.0” instead of “Release 2.1” used as example “Disclaimers” removed. Legal disclaimer to be used by PS or CTA are not provided by AUTOSAR CTA accreditation replaced by CTA self assessment CTA self assessment sheet added. CT process according to Path D is a valid option although the CT System is established
		Main Requirements	2.2.0	modified	Changed [RS_Main_00270]
		Glossary	2.3.0	modified	Following terms added: AUTOSAR Partial Model (3.21), Bus Wake-Up (3.33), Empty Function (3.73)

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		SW-C and System Modeling Guide	2.1.0	modified	Modeling rules optimization for multiple instances. New description of the standardized Autosar packages structure. New RTE specification and requirements references introduced.
		Table of Application Interfaces	2.1.0	modified	Improvement and addition of descriptions for port blueprints and port interfaces in all domains Adaptation of modelling style for port interfaces with several variable data prototypes (usage of record and array application data types, mainly chassis domain) Changes of port blueprint short names (and consequently the port prototype short names in the examples) in order to make them unique (mainly body domain) Improvement of XML generation
		Technical Safety Concept Status Report	1.1.0	modified	Minor changes in [RS_BRF_00120], [RS_BRF_00278] and chapter 5.2
		Software Component Template	4.1.0	modified	Remove restriction on data type of inter-runnable variables Rework end-to-end communication protection Add more constraints on the usage of the meta-model Various fixes and clarifications
		System Template	4.1.0	modified	updated System class category names Changed specification of PduLength parameter from bits to bytes Made Flexray channel specific attributes optional Clarified the usage of EcuPorts in System Extract/Ecu Extract Allowed to define sending and receiving connections to EcuPorts for NmPdus, XcpPdus Aligned FrTP model to AUTOSAR FrTp SWS Replaced ComProcessingPeriod by three timebase parameters Reworked E2E protection of selected I-PDUs Corrected AssignFrameIdRange configuration in LIN model Clarified the routing of ISignalGroups in the Signal Gateway Extended the enumeration "TransferPropertyEnum" with the element "triggeredOnChange" Added a subchapter to the appendix about special use cases that are supported by the System Template Reworked SenderReceiverToSignalGroupMapping and ClientServerToSignalGroupMapping Changed multiplicity between System and SystemMapping from 1 to 0..1.

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Model Persistence Rules for XML	2.3.0	modified	Added description of tag default configuration for association without stereotpe (chapter 4.2.3.1) enhanced description of tag 'xml.xsd.customType'
		Generic Structure Template	3.1.0	modified	editorial changes improvements in variant handling (Package content, composed predefined variants) Align Formula language with ASAM General Expression Language Generalized approach for anntoations Improved aligment with ASAM - FSX Document the admin.* uml tags. Support global referenceing and tracing
		Meta Model	4.1.0	modified	Changes according to changes in Templates
		Meta Model-generated XML Schema	4.1.0	modified	Changes according to changes in Templates
		Specification of ECU Configuration	3.1.0	modified	Updated "refvalue" function requirements Added requirement sws6045 Changed specification of PduLength parameter from bits to bytes Added attribute "origin" to EcucEnumerationParamDef Added "Template Glossary" to Appendix Added "Rules for navigating in Ecu Configuration Artifacts" chapter Removed restriction on hex-representation of integers Updated description of refinedModuleDef within class ModuleDef Changed calculation language key words to lower case Changed structure of EcucQuery and EcucQueryExpression Added section on Communication Channel ID Removed section on EcucMemoryMappingCollection Removed "annotation" from "EcucContainerValue"
		Basic Software Module Description Template	2.1.0	modified	Reworked description of Memory Section Added chapter on Implementation Conformance Statement
		Methodology	2.0.0	added	Changed tool platform for the SPEM model Publish as pdf file instead of html Used new table format for the model elements Added SPEM diagrams Methodology Concept chapter detailed Memory Mapping use case added Reworked and restructured use cases for more readability Direct references to meta-model elements in figures and tables

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of CAN State Manager	2.1.0	modified	Configurable Bus-Off revovery with CAN TX confirmation instead of time based recovery Control of PDU channel modes completely shifted from CanIf to CanSM module
		Specification of FlexRay State Manager	2.1.0	modified	The amount of wakeup patterns can be configured Clearing the Coldstart Inhibit Mode can be delayed also for passive wakeup. Removed enabling and disabling of transceiver wakeups
		Specification of LIN State Manager	1.2.0	modified	Post-build configuration variant added Module version check changed according SRS_General SRS_BSW_00004 TrcvModeType definition moved from LinIf to LinTrcv
		Specification of LIN Transceiver Driver	1.1.0	modified	Literals changed names: the imported LIN interface parameters (from LINInterface) are removed, instead 3 local parameters are introduced. LINIF_TRCV_MODE_NORMAL -> LINTRCV_TRCV_MODE_NORMAL LINIF_TRCV_MODE_STANDBY -> LINTRCV_TRCV_MODE_STANDBY LINIF_TRCV_MODE_SLEEP -> LINTRCV_TRCV_MODE_SLEEP
		Requirements on Core Test	1.1.0	modified	Added a new requirement for foreground test. Clarification of some requirements
		Specification of Core Test	1.1.0	modified	Added new requirements for configuration and error detection. Clarification of some requirements. Added new configuration parameters. Removed obsolete requirements. Improvement of static error detection. Removed unused types.
		Specification of Flash Test	1.1.0	modified	- FlsTst_BlockIdFgndType: type change to uint8-32 - limit range of the following parameters to max. value "0xFFFFFFFF" FlsTstBlockNumberBgnd: FlsTstBlockNumberFgnd: FlsTstBlockIndex: FlsTstBlockSize: FlsTstNumberOfTestedCells: FlsTstNumberOfTestedCellsAtomic: FlsTstTestIntervalIdEndValue: - FlsTst015 removed - ECUC_FlsTst_00119: configuration for each block - ECUC_FlsTst_00158: multiplicity changed to „1“. - FlsTstDemEventParameterRefs table included
		AUTOSAR BSW & RTE Conformance Test Specification Part 1: Background	1.2.0	modified	Change Chapter 3 and Chapter 6.3

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		AUTOSAR BSW & RTE Conformance Test Specification Part 2: Process Overview	1.2.0	modified	removed outdated comment: "The flexibility of the ICS is not entirely fixed at the time of writing and is still under discussion. The details of the ICS might have a substantial impact on the CTSpec execution" removed "BSWMD" and "BSW Module Description" e.g. Figure 3, 3.4.1.2, 2.4.2, 2.4.3
		AUTOSAR BSW & RTE Conformance Test Specification Part 3: Creation & Validation	1.2.0	modified	Removal of Footnotes on p 33 & 37
		AUTOSAR BSW & RTE Conformance Test Specification Part 4: Execution Constraints	1.2.0	modified	Deletion/update of outdated chap-ters Add chapter about CT process Add chapter about test CT function-alities & TTCN-3 organization. Update process with RTE and OS specificities CTA accreditation replaced by CTA self assessment.
		Explanation of Application Interfaces of the Body and Comfort Domain	1.2.0	modified	Update of all chapter according to the introduction of the concept "port blue print" : all functions impacted Inconstancies fixed between Application Interfaces Master Table and explanatory document for the body domain: all functions impacted
		Explanation of Application Interfaces of the Powertrain Domain	2.1.0	modified	display names made consistent to AISpecification rule MCM390 added: Suffix should not exceed 3 char
		Explanation of Application Interfaces of Occupant and Pedestrian Safety Systems Domain	1.1.0	modified	Corrected location of paragraph related to Sensor Safety Requirements to be in Sensor Pool chapter
		Specification of ECU Configuration Parameters (XML)	4.1.0	modified	Changes according to changes in AUTOSAR specifications
		Specification of LIN Network Management	1.1.0	modified	Channel ID of the LinNM is harmonized Added DET check for LinNm_GetVersionInfo API Requirement on Version Check of module is updated. Added requirements for Passive Startup to clarify the behavior in sleep mode.
		Specification of Basic Software Mode Manager	1.1.0	modified	Include file BswMUserCallout.h added. This user defined header file contains declarations of the call out functions. Requirement that the BswM module shall perform inter module version checks added Information added for each configurable action which API to call Functions BswM_TriggerSlaveRTEStop and BswM_TriggerStartUpPhase2 added to control the start and stop of the RTE on slave cores

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Requirements on Libraries	2.1.0	modified	Typo's correction: E2E instead of E2e (Chapter1, Page 6)
		Specification of Debugging in AUTOSAR	1.1.0	modified	NULL pointer check for development mode defined.
		Specification of Diagnostic Log and Trace	1.1.0	modified	Bug fixes and extension of Dlt control message specification Update of communication with Dem (Dem_GetEventFreezeFrameData) Update of interface to Dcm (Dlt_ReadData)
		Specification of Fixed Point Math Routines	1.1.0	modified	new API created to achieve completion of the need file structure has been detailed for what concerns naming conventions
		Specification of Fixed Point Interpolation Routines	1.1.0	modified	DPSearch function optimised using structure pointer
		Specification of Floating Point Math Routines	1.1.0	modified	Introduction of additional LIMITED Functions for controllers Ramp functions optimised for effective usage Separation of DT1 Type 1 and Type 2 Controller functions Introduction of additional approximative function for calculatio of TeQ
		Specification of Floating Point Interpolation Routines	1.1.0	modified	DPSearch function optimised using structure pointer Removal of normalised functions
		Specification of Bit Handling Routines	1.1.0	modified	Signature for necessary Bit handling functions optimized for easy usage Bit handling on all signed variables eliminated Additional bit handling functions introduced
		Specification of Extended Fixed Point Routines	1.1.0	modified	Introduction of additional LIMITED Functions for controllers Ramp functions optimised for effective usage Separation of DT1 Type 1 and Type 2 Controller functions Introduction of additional approximative function for calculatio of TeQ
		Specification of Crypto Service Manager	1.1.0	modified	Complete Configuration parameters Complete API specifications Add support for secure key storage Integration of support for key transport services Introduction of new DET error (checking of the null pointer in getversion info).
		Specification of Multi-Core OS Architecture	1.1.0	modified	Limitation to just one "main" function removed Additional offline checks Extended Multi-Core support for TerminateApplication Minor bugfixes and completions

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Timing Extensions	1.1.0	modified	Dropped InstanceRefs and replaced with ComponentInCompositionInstanceRef Restricted the semantics of ExecutionOrderConstraint and OffsetConstraint Parameterize the observable event 'FlexRayClusterCycleStart' by defining the cycle repetition
		Specification of Module XCP	1.1.0	modified	Add chapter 7.8 (Version check), RTE limitation, OS Counter Ref Remove InstanceID and known limitation (OS)
		Specification of UDP Network Management	1.1.0	modified	ComStack Harmonization. Harmonization of NM interfaces.
		Specification of Ethernet State Manager	1.1.0	modified	Functional changes: - Correction of the naming convention of SW modul version information - Correction of chapter 10 - configuration parameter "EthSmNetworkIndex" - Remove InstanceID from GetVersionId structure - Additional callback function: Call of SoAd_BusSM_ModeIndication realized after the successful initialization of the EthTrcv and the EthController. Non functional changes: - adding a self loop with "No initialization" in the state diagramm
		Specification of Socket Adaptor	1.1.0	modified	ComStack Harmonization. Allow for Post-Build Configuration API for IP address change notification Allow full handling of TCP connections
		Specification of Ethernet Interface	1.1.0	modified	Further post-build configurable parameters EthIf_MainFunctionTx functional requirements improved (functionality split) 'Instance ID' removed from Version Info (concerns EthIf_GetVersionInfo API) Additional development error in EthIf_GetVersionInfo API
		Specification of Synchronized Time-Base Manager	1.1.0	modified	SRS_General: SRS_BSW_00004 Binding character of the Standardized AUTOSAR Interfaces mentioned in the SWS Documents. Missing Port Driver DET Error Codes
		Specification of a Transport Layer for SAE J1939	1.1.0	modified	Fixed service API IDs Removed duplicate requirement J1939TP0099 Clarified requirements SWS_J1939Tp_00125 and SWS_J1939Tp_00189
		Specification of SW-C End-to-End Communication Protection Library	1.1.0	modified	Corrected the wrapper configuration. Corrected the code example for the usage of the wrapper.

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Ethernet Driver	1.1.0	modified	Enhanced development error detection for active controller before controller access Further post-build configurable parameters Improved description of 'XxxCtrlIdx' semantics 'Instance ID' removed from Version Info (concerns Eth_GetVersionInfo API) Additional development error in Eth_GetVersionInfo API
		Specification of Ethernet Transceiver Driver	1.1.0	modified	Further post-build configurable parameters Configuration enhanced by additional parameter EthTrcvWaitCount 'Instance ID' removed from Version Info (concerns EthTrcv_GetVersionInfo API) Additional development error in EthTrcv_GetVersionInfo API Improved description of 'XxxCtrlIdx' semantics Specification of behaviour for state switch into already active state
		Specification of TTCAN Driver	1.1.0	modified	Updated artifacts of configuration section
		Specification of TTCAN Interface	1.1.0	modified	updated <User_TriggerTransmit> function with generated artifact from ComStack harmonization described behaviour of negative return value of <User_TriggerTransmit>
		Specification of Crypto Abstraction Library	1.1.0	modified	Integration of key transport services Key derivation output lenght specified through a parameter Remove descriptions that reference TRNGs Complete Configuration parameters
		Application Interfaces User Guide	1.0.0	added	(new)
		Table of Application Interfaces (XML)	1.1.0	modified	Refer to Change History of AI Table (UID 241)

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of ECU State Manager with fixed state machine	1.1.0	modified	Bugfixing: Removed obsolete interfaces (e.g. CanSM_EcuM) Deleted interface to WdgM (EcuM2861) Added DET errors (EcuM_GetVersionInfo, EcuM_GetBootTarget, EcuM_GetShutdownTarget) Changed polling mechanism in SLEEP SEQUENCE II state Fixed transition from GOSLEEP state to WAKEUP II state Defined binding character of the Standardized AUTOSAR Interfaces (EcuM_StateRequest, EcuM_CurrentMode, EcuM_ShutdownTarget, EcuM_BootTarget) Clarification Clarification under which circumstances the error hook will be called Added note for EcuM_SelectBootTarget / EcuM_GetBootTarget because of the default boot target Added Appendix A (help the application software programmer to understand when to request which mode) Added note for exit from GO SLEEP state
		General Conformance Test Specification	1.0.0	added	(new)
		General configuration and test parameters used for validating conformance tests	1.0.0	added	(new)
		Conformance Test Specification of CAN Driver	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of CAN Driver	1.0.0	added	(new)
		Conformance Test Specification of MCU Driver	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of MCU Driver	1.0.0	added	(new)
		Conformance Test Specification of GPT Driver	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of GPT Driver	1.0.0	added	(new)

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Conformance Test Specification of IPDU Multiplexer	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of IPDU Multiplexer	1.0.0	added	(new)
		Conformance Test Specification of EEPROM Abstraction	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of EEPROM Abstraction	1.0.0	added	(new)
		Conformance Test Specification of Flash Driver	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of Flash Driver	1.0.0	added	(new)
		Conformance Test Specification of FlexRay Transceiver Driver	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of FlexRay Transceiver Driver	1.0.0	added	(new)
		Conformance Test Specification of LIN Driver	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of LIN Driver	1.0.0	added	(new)
		Conformance Test Specification of ADC Driver	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of ADC Driver	1.0.0	added	(new)
		Conformance Test Specification of PWM Driver	1.0.0	added	(new)

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Configuration and test parameters used for validating conformance tests of PWM Driver	1.0.0	added	(new)
		Conformance Test Specification of CAN Transport Layer	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of CAN Transport Layer	1.0.0	added	(new)
		Conformance Test Specification of EEPROM Driver	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of EEPROM Driver	1.0.0	added	(new)
		Conformance Test Specification of FlexRay Driver	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of FlexRay Driver	1.0.0	added	(new)
		Conformance Test Specification of Watchdog Driver	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of Watchdog Driver	1.0.0	added	(new)
		Conformance Test Specification of SPI Handler/Driver	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of SPI Handler/Driver	1.0.0	added	(new)
		Conformance Test Specification of CAN Transceiver Driver	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of CAN Transceiver Driver	1.0.0	added	(new)

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Conformance Test Specification of CAN Interface	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of CAN Interface	1.0.0	added	(new)
		Conformance Test Specification of LIN Interface	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of LIN Interface	1.0.0	added	(new)
		Conformance Test Specification of FlexRay Interface	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of FlexRay Interface	1.0.0	added	(new)
		Conformance Test Specification of FlexRay Network Management	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of FlexRay Network Management	1.0.0	added	(new)
		Conformance Test Specification of CAN State Manager	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of CAN State Manager	1.0.0	added	(new)
		Conformance Test Specification of LIN State Manager	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of LIN State Manager	1.0.0	added	(new)
		Conformance Test Specification of FlexRay State Manager	1.0.0	added	(new)

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Configuration and test parameters used for validating conformance tests of FlexRay State Manager	1.0.0	added	(new)
		Conformance Test Specification of CAN Network Management	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of CAN Network Management	1.0.0	added	(new)
		Conformance Test Specification of Network Management Interface	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of Network Management Interface	1.0.0	added	(new)
		Conformance Test Specification of Port Driver	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of Port Driver	1.0.0	added	(new)
		Conformance Test Specification of ICU Driver	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of ICU Driver	1.0.0	added	(new)
		Conformance Test Specification of Memory Abstraction Interface	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of Memory Abstraction Interface	1.0.0	added	(new)
		Conformance Test Specification of Flash EEPROM Emulation	1.0.0	added	(new)

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Configuration and test parameters used for validating conformance tests of Flash EEPROM Emulation	1.0.0	added	(new)
		Conformance Test Specification of Watchdog Interface	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of Watchdog Interface	1.0.0	added	(new)
		Conformance Test Specification of Development Error Tracer	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of Development Error Tracer	1.0.0	added	(new)
		Conformance Test Specification of COM	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of COM	1.0.0	added	(new)
		Conformance Test Specification of DIO Driver	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of DIO Driver	1.0.0	added	(new)
		Conformance Test Specification of FlexRay Transport Layer	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of FlexRay Transport Layer	1.0.0	added	(new)
		Conformance Test Specification of NVRAM Manager	1.0.0	added	(new)

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Configuration and test parameters used for validating conformance tests of NVRAM Manager	1.0.0	added	(new)
		Conformance Test Specification of OS	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of OS	1.0.0	added	(new)
		Conformance Test Specification of LIN Transceiver Driver	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of LIN Transceiver Driver	1.0.0	added	(new)
		Conformance Test Specification of DCM	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of DCM	1.0.0	added	(new)
		Conformance Test Specification of PDU Router	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of PDU Router	1.0.0	added	(new)
		Conformance Test Specification of ECU State Manager Fixed	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of ECU State Manager Fixed	1.0.0	added	(new)
		Conformance Test Specification of FIM	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of FIM	1.0.0	added	(new)
		Conformance Test Specification of RTE	1.0.0	added	(new)

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Configuration and test parameters used for validating conformance tests of RTE	1.0.0	added	(new)
		Conformance Test Specification of LIN Network Management	1.0.0	added	(new)
		Configuration and test parameters used for validating conformance tests of LIN Network Management	1.0.0	added	(new)
		Backward Compatibility Statement	1.0.0	added	(new)
		Known Issues in AUTOSAR Conformance Testing	1.0.0	added	(new)
		Conformance Test Agency Accreditation	-	removed	
		Requirements for CTA Accreditation Bodies	-	removed	
		AUTOSAR CTA Accreditation - application rules for ISO Guide 65	-	removed	
		AUTOSAR CTA Accreditation - application rules for ISO/IEC 17025	-	removed	
		Methodology Model	-	removed	
		AUTOSAR Methodology HTML document	-	removed	
21-Dec-09	1	Virtual Functional Bus	2.0.0	added	
		Layered Software Architecture	3.0.0	added	
		List of Basic Software Modules	1.4.0	added	
		General Requirements on Basic Software Modules	3.0.0	added	
		Requirements on Free Running Timer	1.0.4	added	
		Specification of Development Error Tracer	3.0.0	added	
		Specification of Platform Types	2.3.0	added	
		Specification of Standard Types	1.3.0	added	
		Specification of C Implementation Rules	1.0.5	added	

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Communication Stack Types	3.0.0	added	
		Specification of Memory Mapping	1.2.0	added	
		Specification of Compiler Abstraction	3.0.0	added	
		Modeling Guidelines of Basic Software EA UML Model	1.3.0	added	
		Basic Software UML Model	3.0.0	added	
		Requirements on Interaction with Behavioral Models	1.0.5	added	
		Specification of Interaction with Behavioral Models	1.0.6	added	
		Requirements on Interoperability of Autosar Tools	1.0.5	added	
		Specification of Interoperability of Autosar Tools	2.0.0	added	
		Specification of ECU Resource Template	2.0.0	added	
		Requirements on Runtime Environment	2.0.0	added	
		Specification of RTE Software	3.0.0	added	
		Requirements on LIN	1.2.0	added	
		Specification of LIN Interface	3.0.0	added	
		Specification of LIN Driver	1.3.0	added	
		Requirements on CAN	3.0.0	added	
		Specification of CAN Transport Layer	3.0.0	added	
		Specification of CAN Interface	4.0.0	added	
		Specification of CAN Driver	3.0.0	added	
		Specification of CAN Transceiver Driver	2.0.0	added	
		Requirements on Communication	3.0.0	added	
		Specification of Communication	4.0.0	added	
		Requirements on I-PDU Multiplexer	1.0.5	added	
		Specification of I-PDU Multiplexer	2.0.0	added	
		Requirements on Network Management	2.1.0	added	
		Specification of Generic Network Management Interface	2.0.0	added	
		Specification of FlexRay Network Management	4.0.0	added	

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of CAN Network Management	3.1.0	added	
		Requirements on Function Inhibition Manager	1.2.0	added	
		Specification of Function Inhibition Manager	2.0.0	added	
		Requirements on Diagnostic	2.2.0	added	
		Specification of Diagnostic Communication Manager	4.0.0	added	
		Specification of Diagnostic Event Manager	4.0.0	added	
		Requirements on FlexRay	3.0.0	added	
		Specification of FlexRay Transport Layer	3.0.0	added	
		Specification of FlexRay Interface	3.1.0	added	
		Specification of FlexRay Driver	2.3.0	added	
		Specification of FlexRay Transceiver Driver	1.3.0	added	
		Requirements on Gateway	2.1.0	added	
		Specification of PDU Router	3.0.0	added	
		Requirements on Memory Services	3.0.0	added	
		Specification of NVRAM Manager	3.0.0	added	
		Specification of CRC Routines	4.0.0	added	
		Requirements on Mode Management	2.0.0	added	
		Specification of ECU State Manager	2.0.0	added	
		Specification of Communication Manager	3.0.0	added	
		Specification of Watchdog Manager	2.0.0	added	
		Requirements on Operating System	2.1.0	added	
		Specification of Operating System	4.0.0	added	
		General Requirements on SPAL	2.1.3	added	
		Requirements on SPI Handler/Driver	2.0.5	added	
		Specification of SPI Handler/Driver	3.0.0	added	
		Requirements on ICU Driver	2.0.5	added	
		Specification of ICU Driver	4.0.0	added	

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Requirements on ADC Driver	3.0.0	added	
		Specification of ADC Driver	4.0.0	added	
		Requirements on I/O Hardware Abstraction	1.1.0	added	
		Specification of I/O Hardware Abstraction	3.0.0	added	
		Requirements on RAM Test	1.2.0	added	
		Specification of RAM Test	1.3.0	added	
		Requirements on PWM Driver	2.1.3	added	
		Specification of PWM Driver	2.3.0	added	
		Requirements on GPT Driver	2.1.0	added	
		Specification of GPT Driver	3.0.0	added	
		Requirements on DIO Driver	2.0.5	added	
		Specification of DIO Driver	2.3.0	added	
		Requirements on Watchdog Driver	2.0.5	added	
		Specification of Watchdog Driver	2.3.0	added	
		Specification of Watchdog Interface	2.3.0	added	
		Requirements on Port Driver	2.0.5	added	
		Specification of Port Driver	3.1.0	added	
		Requirements on MCU Driver	3.0.0	added	
		Specification of MCU Driver	3.0.0	added	
		Requirements on EEPROM Driver	2.0.5	added	
		Specification of EEPROM Driver	3.0.0	added	
		Requirements on Flash Driver	2.0.5	added	
		Specification of Flash Driver	3.0.0	added	
		Requirements on Memory Hardware Abstraction Layer	1.0.5	added	
		Specification of Memory Abstraction Interface	1.2.0	added	
		Specification of Flash EEPROM Emulation	1.3.0	added	
		Specification of EEPROM Abstraction	1.3.0	added	
		Conformance Test Process Definition Path D	1.1.0	added	

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Conformance Test Process Definition Path A-C	2.0.0	added	
		Conformance Test Agency Accreditation	1.1.0	added	
		Requirements for CTA Accreditation Bodies	1.1.0	added	
		AUTOSAR CTA Accreditation - application rules for ISO/IEC Guide 65	1.1.0	added	
		AUTOSAR CTA Accreditation - application rules for ISO/IEC 17025	1.1.0	added	
		Main Requirements	2.1.0	added	
		Glossary	2.2.0	added	
		SW-C and System Modeling Guide	2.0.0	added	
		Table of Application Interfaces	2.0.0	added	
		Technical Safety Concept Status Report	1.0.0	added	
		Requirements on Software Component Template	2.0.0	added	
		Software Component Template	4.0.0	added	
		System Template	4.0.0	added	
		Model Persistence Rules for XML	2.2.0	added	
		Generic Structure Template	3.0.0	added	
		Meta Model	4.0.1	added	
		Meta Model-generated XML Schema	4.0.1	added	
		Requirements on ECU Configuration	2.0.0	added	
		Specification of ECU Configuration	3.0.0	added	
		Requirements on Basic Software Module Description Template	1.1.0	added	
		Basic Software Module Description Template	3.0.0	added	
		Requirements on System Template	3.0.0	added	
		Requirements on ECU Resource Template	1.0.0	added	
		Specification of CAN State Manager	2.0.0	added	
		Specification of FlexRay State Manager	2.0.0	added	
		Specification of LIN State Manager	1.1.0	added	
		Specification of LIN Transceiver Driver	1.0.0	added	

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Requirements on Core Test	1.0.0	added	
		Specification of Core Test	1.0.0	added	
		Requirements on Flash Test	1.0.0	added	
		Specification of Flash Test	1.0.0	added	
		AUTOSAR BSW & RTE Conformance Test Specification Part 1: Background	1.1.0	added	
		AUTOSAR BSW & RTE Conformance Test Specification Part 2: Process Overview	1.1.0	added	
		AUTOSAR BSW & RTE Conformance Test Specification Part 3: Creation & Validation	1.1.0	added	
		AUTOSAR BSW & RTE Conformance Test Specification Part 4: Execution Constraints	1.1.0	added	
		Requirements on SW-C and System Modeling	1.1.0	added	
		Explanation of Application Interfaces of the Body and Comfort Domain	1.1.0	added	
		Explanation of Application Interfaces of the Powertrain Domain	2.0.0	added	
		Explanation of Application Interfaces of the Chassis Domain	1.1.0	added	
		Explanation of Application Interfaces of Occupant and Pedestrian Safety Systems Domain	1.0.0	added	
		Explanation of Application Interfaces of the HMI, Multimedia and Telematics Domain	1.0.0	added	
		Specification of ECU Configuration Parameters (XML)	4.0.1	added	
		Feature Specification of the BSW Architecture and the RTE	1.0.0	added	
		Specification of LIN Network Management	1.0.0	added	
		Explanation of Interrupt Handling within AUTOSAR	1.0.2	added	
		Specification of Basic Software Mode Manager	1.0.0	added	
		Requirements on Libraries	2.0.0	added	

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Debugging in AUTOSAR	1.0.0	added	
		Requirements on Debugging in AUTOSAR	1.0.0	added	
		Requirements on Diagnostic Log and Trace	1.0.0	added	
		Specification of Diagnostic Log and Trace	1.0.0	added	
		Requirements on Methodology	1.0.0	added	
		Description of the AUTOSAR standard errors	1.0.0	added	
		Explanation of Error Handling on Application Level	1.0.0	added	
		Specification of Fixed Point Math Routines	1.0.0	added	
		Specification of Fixed Point Interpolation Routines	1.0.0	added	
		Specification of Floating Point Math Routines	1.0.0	added	
		Specification of Floating Point Interpolation Routines	1.0.0	added	
		Specification of Bit Handling Routines	1.0.0	added	
		Specification of Extended Fixed Point Routines	1.0.0	added	
		Specification of Crypto Service Manager	1.0.0	added	
		Requirements on Multi-Core OS Architecture	1.0.0	added	
		Specification of Multi-Core OS Architecture	1.0.0	added	
		Requirements on Timing Extensions	1.0.0	added	
		Specification of Timing Extensions	1.0.0	added	
		Specification of Module XCP	1.0.0	added	
		Specification of UDP Network Management	1.0.0	added	
		Specification of Ethernet State Manager	1.0.0	added	
		Specification of Socket Adaptor	1.0.0	added	
		Specification of Ethernet Interface	1.0.0	added	
		Requirements on Ethernet Support in AUTOSAR	1.0.0	added	
		Requirements on Synchronized Time-Base Manager	1.0.0	added	

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Synchronized Time-Base Manager	1.0.0	added	
		Requirements on a Transport Layer for SAE J1939	1.0.0	added	
		Specification of a Transport Layer for SAE J1939	1.0.0	added	
		Requirements on Crypto Service Manager	1.0.0	added	
		Specification of SW-C End-to-End Communication Protection Library	1.0.0	added	
		Requirements on Module XCP	1.0.0	added	
		Specification of Ethernet Driver	1.0.0	added	
		Specification of Ethernet Transceiver Driver	1.0.0	added	
		Specification of TTCAN Driver	1.0.0	added	
		Specification of TTCAN Interface	1.0.0	added	
		Specification of Crypto Abstraction Library	1.0.0	added	
		Methodology Model	1.0.0	added	
		Requirements on TTCAN	1.0.0	added	
		Table of Application Interfaces (XML)	1.0.0	added	
		Specification of ECU State Manager with fixed state machine	1.0.0	added	
		AUTOSAR Methodology HTML document	1.0.0	added	