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1 Scope of this Document

This document provides an overview of the complement of AUTOSAR documents comprising the Release 4.1 in its latest Revision 2. Further a history is provided aimed to identify the changes between the individual Revisions within Release 4.1.

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 4.1.

Chapter 4 provides a summary of changes that were implemented since the preceding Release 4.0.

Chapter 5 contains the overview of documents comprising the Release 4.1 in its latest Revision 3. This chapter is structured according to the clusters being in use in AUTOSAR Release 4.1.

Chapter 6 contains remarks about known technical deficiencies.

Chapter 7 contains the detailed Revision History.

2 Related Documentation

- [1] Glossary
AUTOSAR_TR_Glossary.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, can contain non-backward-compatible extensions) or as minor (update, backward compatible extensions) Release. Referring 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

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, 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 Life Cycle of a major Release

Each major release goes through four consecutive steps within its lifecycle:

1. Development: Between start of life cycle and the initial release (e.g. R4.0.1)
2. Evolution: Following the initial release with zero, one or several minor releases and/or revisions (e.g. R4.0.2, R4.1.1)
3. Maintenance: No new contents is added to a major release but only maintenance of the existing content with zero, one or several revisions (e.g. R3.2.2) is provided
4. Issue Notice: No more revisions but zero, one or several issue notices, i.e. updates of the list of known issues until end of life cycle.

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.

In Release 4.1, Standard Specifications are stored at the following URL:

https://svn.autosar.org/repos/work/22_Releases/41_Release4.1/01_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 4.1, Auxiliary Material is stored at the following URL:

https://svn.autosar.org/repos/work/22_Releases/41_Release4.1/02_Auxiliary

Contents of auxiliary documents remain of auxiliary nature even if they are referenced from standard documents.

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 Other Documents

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

4 Release 4.1 – Summary of Changes

This chapter contains a summary of changes which were implemented since the previous Release 4.0. The following three lists of new concepts which have been incorporated with R4.1 contain major achievements in the three clusters of Architecture (BSW&RTE), Methodology and Application Interfaces:

- Architecture (BSW & RTE)
 - Completion of CDD Concept
 - Updated OSApplication Termination Functionality
 - TimeService And TimerConformanceClasses
 - Enhanced BSW allocation in partitioned systems
 - Define resource locking behavior
 - Enhanced compatibility of Ports
 - Partial Networking on Ethernet
 - Secure Key Storage Support in Crypto Service Manager (CSM)
 - Output compare unit driver
 - Socket-Interface for applications to communicate via TCP/IP
 - Support for Heavy Duty Vehicles and J1939
 - BSW & RTE Configuration Profiles
 - Pretended Networking
 - Combined require and provide semantic of Ports
 - Provide activating RTE-Event
 - Rapid prototyping implementation
 - ECU Degradation
- Methodology & Templates
 - Define Implicit Communication Behavior Description
 - Harmonize Definition of ECUC Parameters
 - Refined Scheduling of Runnables
 - Continued Harmonization with FIBEX (FIBEX4MOST)
 - AUTOSAR Timing Concept
 - Abstract System Description
 - Roles And Rights
 - Processor Manifest
 - AUTOSAR Feature Model Exchange Format
- Application Interfaces
 - Life Cycles
 - Variant Handling for Application Interfaces

The following two lists of changes common to several documents contain achievements in the improvement of maintainability:

- Harmonization of Content
 - Adapted the scope of every ECU configuration parameter to the values "local" or "ECU" (Chapter 10).
 - Replaced in all affected documents the term "Complex Device Driver" by "Complex Driver"
 - Removed content of affected documents that is now covered by the newly introduced SWS BSW General
 - Adapted errors reported by BSW module according to recommendations from the "Task Force Production Errors"
 - Introduced uplinks to newly introduced feature list (AUTOSAR_RS_BSWAndRTEFeatures) for the requirements in all affected documents
- Harmonization of Format
 - Introduced specification item IDs for all type definitions in all AUTOSAR specifications (Chapter 8)
 - Adapted format of requirements and specification items according to TPS_StandardizationTemplate (TPS_STDT_00078) for BSW and Methodology specifications
 - Removed nested requirements (often in API descriptions) for affected documents. Content has been moved outside encapsulating requirement to avoid nesting

4.1 Revision 4.1.2 – Summary of Changes

This revision focused on corrections. In addition, the formalization of service interfaces and types (initiated in release 4.1.1) has been extended for the following 7 modules:

- COMManager
- DiagnosticCommunicationManager
- DiagnosticEventManager
- DiagnosticOverIP
- SAEJ1939DiagnosticCommunicationManager
- SAEJ1939RequestManager
- SynchronizedTimeBaseManager

4.2 Revision 4.1.3 – Summary of Changes

This revision focused on corrections, and continuous the work on the formalization of service interfaces and types (initiated in release 4.1.1).

5 Release 4.1 – Document Overview

The published documents are divided up into the following clusters:

- Main Documents,
- Basic Software Architecture and Runtime Environment,
- Methodology and Templates,
- Application Interfaces and
- Other Documents

These clusters are then further structured by subcategories to provide a better orientation to the specification users. The assignment of the documents to those clusters is shown below.

5.1 Cluster: Main Documents

As of the latest Revision 3, the following Main Documents are part of Release 4.1:

Document	Classification	Version	File Name
Main Requirements	aux	3.2.0	AUTOSAR_RS_Main
Glossary	aux	2.6.0	AUTOSAR_TR_Glossary
Project Objectives	aux	3.2.6	AUTOSAR_RS_ProjectObjectives
Specification of Predefined Names in AUTOSAR	aux	1.2.1	AUTOSAR_TR_PredefinedNames
Requirements on AUTOSAR Features	aux	1.2.1	AUTOSAR_RS_Features

5.2 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 4.1:

Document	Classification	Version	File Name
Virtual Functional Bus	aux	3.2.0	AUTOSAR_EXP_VFB
Layered Software Architecture	aux	3.4.0	AUTOSAR_EXP_LayeredSoftwareArchitecture
List of Basic Software Modules	aux	1.7.0	AUTOSAR_TR_BSWModuleList
General Requirements on Basic Software Modules	aux	4.2.0	AUTOSAR_SRS_BSWGeneral
Requirements on Free Running Timer	aux	1.1.1	AUTOSAR_SRS_FreeRunningTimer
Specification of Development Error Tracer	std	3.4.1	AUTOSAR_SWS_DevelopmentErrorTracer
Specification of Platform Types	std	2.6.1	AUTOSAR_SWS_PlatformTypes
Specification of Standard Types	std	1.4.9	AUTOSAR_SWS_StandardTypes
Specification of Communication Stack Types	std	4.2.0	AUTOSAR_SWS_CommunicationStackTypes
Specification of Memory Mapping	std	1.7.0	AUTOSAR_SWS_MemoryMapping
Specification of Compiler Abstraction	std	3.3.1	AUTOSAR_SWS_CompilerAbstraction
Modeling Guidelines of Basic Software EA UML Model	aux	1.3.1	AUTOSAR_TR_BSWUMLModelModelingGuide

Document	Classification	Version	File Name
Basic Software UML Model	aux	3.4.0	AUTOSAR_MOD_BSWUMLModel
Requirements on Runtime Environment	aux	2.3.1	AUTOSAR_SRS_RTE
Specification of RTE Software	std	3.5.0	AUTOSAR_SWS_RTE
Requirements on LIN	aux	1.5.0	AUTOSAR_SRS_LIN
Specification of LIN Interface	std	4.3.0	AUTOSAR_SWS_LINInterface
Specification of LIN Driver	std	2.2.0	AUTOSAR_SWS_LINDriver
Requirements on CAN	aux	4.3.0	AUTOSAR_SRS_CAN
Specification of CAN Transport Layer	std	5.2.0	AUTOSAR_SWS_CANTransportLayer
Specification of CAN Interface	std	6.2.0	AUTOSAR_SWS_CANInterface
Specification of CAN Driver	std	4.3.0	AUTOSAR_SWS_CANDriver
Specification of CAN Transceiver Driver	std	3.3.0	AUTOSAR_SWS_CANTransceiverDriver
Requirements on Communication	aux	3.3.1	AUTOSAR_SRS_COM
Specification of Communication	std	5.1.1	AUTOSAR_SWS_COM
Requirements on I-PDU Multiplexer	aux	1.1.0	AUTOSAR_SRS_IPDUMultiplexer
Specification of I-PDU Multiplexer	std	2.4.1	AUTOSAR_SWS_IPDUMultiplexer
Requirements on Network Management	aux	4.1.0	AUTOSAR_SRS_NetworkManagement
Specification of Generic Network Management Interface	std	3.3.0	AUTOSAR_SWS_NetworkManagementInterface
Specification of FlexRay Network Management	std	5.2.0	AUTOSAR_SWS_FlexRayNetworkManagement
Specification of CAN Network Management	std	3.6.0	AUTOSAR_SWS_CANNetworkManagement
Requirements on Function Inhibition Manager	aux	1.3.2	AUTOSAR_SRS_FunctionInhibitionManager
Specification of Function Inhibition Manager	std	2.5.0	AUTOSAR_SWS_FunctionInhibitionManager
Requirements on Diagnostic	aux	3.1.0	AUTOSAR_SRS_Diagnostic
Specification of Diagnostic Communication Manager	std	5.2.0	AUTOSAR_SWS_DiagnosticCommunicationManager
Specification of Diagnostic Event Manager	std	5.2.0	AUTOSAR_SWS_DiagnosticEventManager
Requirements on FlexRay	aux	4.0.1	AUTOSAR_SRS_FlexRay
Specification of FlexRay Interface	std	3.6.0	AUTOSAR_SWS_FlexRayInterface
Specification of FlexRay Driver	std	2.7.0	AUTOSAR_SWS_FlexRayDriver
Specification of FlexRay Transceiver Driver	std	1.7.1	AUTOSAR_SWS_FlexRayTransceiverDriver
Requirements on Gateway	aux	2.3.1	AUTOSAR_SRS_Gateway
Specification of PDU Router	std	4.2.0	AUTOSAR_SWS_PDURouter
Requirements on Memory Services	aux	3.1.1	AUTOSAR_SRS_MemoryServices
Specification of NVRAM Manager	std	3.5.0	AUTOSAR_SWS_NVRAMManager
Specification of CRC Routines	std	4.5.0	AUTOSAR_SWS_CRCLibrary
Requirements on Mode Management	aux	3.1.1	AUTOSAR_SRS_ModeManagement
Specification of ECU State Manager	std	4.2.0	AUTOSAR_SWS_ECUStateManager
Specification of Communication Manager	std	4.3.0	AUTOSAR_SWS_COMManager

Document	Classification	Version	File Name
Specification of Watchdog Manager	std	2.5.0	AUTOSAR_SWS_WatchdogManager
Requirements on Operating System	aux	3.1.1	AUTOSAR_SRS_OS
Specification of Operating System	std	5.3.0	AUTOSAR_SWS_OS
General Requirements on SPAL	aux	2.3.0	AUTOSAR_SRS_SPALGeneral
Requirements on SPI Handler/Driver	aux	2.1.1	AUTOSAR_SRS_SPIHandlerDriver
Specification of SPI Handler/Driver	std	4.3.0	AUTOSAR_SWS_SPIHandlerDriver
Requirements on ICU Driver	aux	2.1.1	AUTOSAR_SRS_ICUDriver
Specification of ICU Driver	std	4.4.0	AUTOSAR_SWS_ICUDriver
Requirements on ADC Driver	aux	4.0.1	AUTOSAR_SRS_ADCDriver
Specification of ADC Driver	std	5.1.1	AUTOSAR_SWS_ADCDriver
Requirements on I/O Hardware Abstraction	aux	2.0.1	AUTOSAR_SRS_IOHWAbstraction
Specification of I/O Hardware Abstraction	aux	4.1.1	AUTOSAR_SWS_IOHardwareAbstraction
Requirements on RAM Test	aux	2.0.1	AUTOSAR_SRS_RAMTest
Specification of RAM Test	std	2.1.1	AUTOSAR_SWS_RAMTest
Requirements on PWM Driver	aux	3.0.1	AUTOSAR_SRS_PWMDriver
Specification of PWM Driver	std	3.2.0	AUTOSAR_SWS_PWMDriver
Requirements on GPT Driver	aux	2.3.1	AUTOSAR_SRS_GPTDriver
Specification of GPT Driver	std	3.3.1	AUTOSAR_SWS_GPTDriver
Requirements on DIO Driver	aux	2.2.0	AUTOSAR_SRS_DIODriver
Specification of DIO Driver	std	2.7.0	AUTOSAR_SWS_DIODriver
Requirements on Watchdog Driver	aux	2.2.0	AUTOSAR_SRS_WatchdogDriver
Specification of Watchdog Driver	std	3.1.1	AUTOSAR_SWS_WatchdogDriver
Specification of Watchdog Interface	std	2.6.2	AUTOSAR_SWS_WatchdogInterface
Requirements on Port Driver	aux	2.1.0	AUTOSAR_SRS_PortDriver
Specification of Port Driver	std	3.3.1	AUTOSAR_SWS_PortDriver
Requirements on MCU Driver	aux	3.1.1	AUTOSAR_SRS_MCUDriver
Specification of MCU Driver	std	3.4.1	AUTOSAR_SWS_MCUDriver
Requirements on EEPROM Driver	aux	2.1.0	AUTOSAR_SRS_EEPROMDriver
Specification of EEPROM Driver	std	3.4.1	AUTOSAR_SWS_EEPROMDriver
Requirements on Flash Driver	aux	2.1.1	AUTOSAR_SRS_FlashDriver
Specification of Flash Driver	std	4.2.0	AUTOSAR_SWS_FlashDriver
Requirements on Memory Hardware Abstraction Layer	aux	1.1.1	AUTOSAR_SRS_MemoryHWAbstractionLayer
Specification of Memory Abstraction Interface	std	2.1.1	AUTOSAR_SWS_MemoryAbstractionInterface
Specification of Flash EEPROM Emulation	std	3.1.1	AUTOSAR_SWS_FlashEEPROMEmulation
Specification of EEPROM Abstraction	std	3.1.1	AUTOSAR_SWS_EEPROMAbstraction
Technical Safety Concept Status Report	aux	1.2.0	AUTOSAR_TR_SafetyConceptStatusReport
Specification of CAN State Manager	std	3.2.0	AUTOSAR_SWS_CANStateManager
Specification of FlexRay State Manager	std	2.5.0	AUTOSAR_SWS_FlexRayStateManager
Specification of LIN State Manager	std	1.5.1	AUTOSAR_SWS_LINStateManager
Specification of LIN Transceiver	std	1.4.1	AUTOSAR_SWS_LINTransceiverDriver

Document	Classification	Version	File Name
Driver			
Requirements on Core Test	aux	1.4.0	AUTOSAR_SRS_CoreTest
Specification of Core Test	std	2.01.0	AUTOSAR_SWS_CoreTest
Requirements on Flash Test	aux	1.1.1	AUTOSAR_SRS_FlashTest
Specification of Flash Test	std	2.1.0	AUTOSAR_SWS_FlashTest
Specification of LIN Network Management	std	2.2.0	AUTOSAR_SWS_LINNetworkManagement
Explanation of Interrupt Handling within AUTOSAR	aux	1.0.3	AUTOSAR_EXP_InterruptHandlingExplanation
Specification of Basic Software Mode Manager	std	1.5.0	AUTOSAR_SWS_BSWModeManager
Requirements on Libraries	aux	2.3.0	AUTOSAR_SRS_Libraries
Specification of Debugging in AUTOSAR	std	1.4.1	AUTOSAR_SWS_Debugging
Requirements on Debugging in AUTOSAR	aux	1.2.0	AUTOSAR_SRS_Debugging
Requirements on Diagnostic Log and Trace	aux	1.2.0	AUTOSAR_SRS_DiagnosticLogAndTrace
Specification of Diagnostic Log and Trace	std	1.4.0	AUTOSAR_SWS_DiagnosticLogAndTrace
Description of the AUTOSAR standard errors	aux	1.2.0	AUTOSAR_EXP_ErrorDescription
Explanation of Error Handling on Application Level	aux	1.0.1	AUTOSAR_EXP_ApplicationLevelErrorHandling
Specification of Fixed Point Math Routines	std	1.2.3	AUTOSAR_SWS_MFXLibrary
Specification of Fixed Point Interpolation Routines	std	1.5.0	AUTOSAR_SWS_IFXLibrary
Specification of Floating Point Math Routines	std	1.5.0	AUTOSAR_SWS_MFLLibrary
Specification of Floating Point Interpolation Routines	std	1.4.0	AUTOSAR_SWS_IFLLibrary
Specification of Bit Handling Routines	std	3.1.1	AUTOSAR_SWS_BFXLibrary
Specification of Extended Fixed Point Routines	std	2.3.0	AUTOSAR_SWS_EFXLibrary
Specification of Crypto Service Manager	std	2.2.0	AUTOSAR_SWS_CryptoServiceManager
Specification of Module XCP	std	2.3.0	AUTOSAR_SWS_XCP
Specification of UDP Network Management	std	3.3.0	AUTOSAR_SWS_UDPNetworkManagement
Specification of Ethernet State Manager	std	2.2.0	AUTOSAR_SWS_EthernetStateManager
Specification of Socket Adaptor	std	2.2.0	AUTOSAR_SWS_SocketAdaptor
Specification of Ethernet Interface	std	2.2.0	AUTOSAR_SWS_EthernetInterface
Requirements on Ethernet Support in AUTOSAR	aux	2.1.0	AUTOSAR_SRS_Ethernet
Requirements on Synchronized Time-Base Manager	aux	1.1.1	AUTOSAR_SRS_SynchronizedTimeBaseManager
Specification of Synchronized Time-Base Manager	std	2.2.1	AUTOSAR_SWS_SynchronizedTimeBaseManager
Specification of a Transport Layer for SAE J1939	std	1.5.0	AUTOSAR_SWS_SAEJ1939TransportLayer
Requirements on Crypto Service	aux	1.1.1	AUTOSAR_SRS_CryptoServiceManager

Document	Classification	Version	File Name
Manager			
Specification of SW-C End-to-End Communication Protection Library	std	3.2.1	AUTOSAR_SWS_E2ELibrary
Requirements on Module XCP	aux	1.2.1	AUTOSAR_SRS_XCP
Specification of Ethernet Driver	std	1.5.0	AUTOSAR_SWS_EthernetDriver
Specification of Ethernet Transceiver Driver	std	1.4.0	AUTOSAR_SWS_EthernetTransceiverDriver
Specification of TTCAN Driver	std	1.4.1	AUTOSAR_SWS_TTCANDriver
Specification of TTCAN Interface	std	1.2.2	AUTOSAR_SWS_TTCANInterface
Specification of Crypto Abstraction Library	std	1.5.0	AUTOSAR_SWS_CryptoAbstractionLibrary
Guide to Mode Management	aux	2.2.0	AUTOSAR_EXP_ModeManagementGuide
Requirements on TTCAN	aux	1.2.0	AUTOSAR_SRS_TTCAN
Specification of ECU State Manager with fixed state machine	std	1.5.0	AUTOSAR_SWS_ECUSTateManagerFixed
Backward Compatibility Statement	aux	1.0.0	AUTOSAR_TR_BWCStatement
Specification of FlexRay ISO Transport Layer	std	5.2.0	AUTOSAR_SWS_FlexRayISOTransportLayer
Specification of FlexRay AUTOSAR Transport Layer	std	3.3.0	AUTOSAR_SWS_FlexRayARTransportLayer
Utilization of Crypto Services	aux	1.0.0	AUTOSAR_EXP_UtilizationOfCryptoServices
Specification of a Diagnostic Communication Manager for SAE J1939	std	1.2.0	AUTOSAR_SWS_SAEJ1939DiagnosticCommunicationManager
Specification of a Request Manager for SAE J1939	std	1.2.0	AUTOSAR_SWS_SAEJ1939RequestManager
Specification of Network Management for SAE J1939	std	1.2.0	AUTOSAR_SWS_SAEJ1939NetworkManagement
Requirements on BSW Modules for SAE J1939	aux	1.0.1	AUTOSAR_SRS_SAEJ1939
Requirements on OCU Driver	aux	1.0.1	AUTOSAR_SRS_OCUDriver
Specification of OCU Driver	std	1.1.0	AUTOSAR_SWS_OCUDriver
Specification of Service Discovery	std	1.2.0	AUTOSAR_SWS_ServiceDiscovery
Specification of TCP/IP Stack	std	1.1.1	AUTOSAR_SWS_Tcplp
Complex Driver design and integration guideline	aux	1.1.0	AUTOSAR_EXP_CDDDesignAndIntegrationGuideline
Requirements on Time Service	aux	1.0.1	AUTOSAR_SRS_TimeService
Specification of Time Service	std	1.0.1	AUTOSAR_SWS_TimeService
Guide to Multi-Core Systems	aux	1.1.0	AUTOSAR_EXP_MultiCoreGuide
Example for a Serialization Protocol (SOME/IP)	aux	1.1.0	AUTOSAR_TR_SomeIpExample

5.3 Cluster: Methodology and Templates

As of the latest Revision 3, the following Methodology and Template documents are part of Release 4.1:

Document	Classification	Version	File Name
Requirements on Interaction with Behavioral Models	aux	1.0.7	AUTOSAR_RS_InteractionWithBehavioralModels

Document	Classification	Version	File Name
Specification of Interaction with Behavioral Models	aux	1.0.7	AUTOSAR_TR_InteractionWithBehavioralModels
Requirements on Interoperability of Autosar Tools	aux	1.1.0	AUTOSAR_RS_InteroperabilityOfAutosarTools
Specification of Interoperability of Autosar Tools	aux	2.2.1	AUTOSAR_TR_InteroperabilityOfAutosarTools
Specification of ECU Resource Template	std	2.3.1	AUTOSAR_TPS_ECUResourceTemplate
Requirements on Software Component Template	aux	2.2.1	AUTOSAR_RS_SoftwareComponentTemplate
Software Component Template	std	4.5.0	AUTOSAR_TPS_SoftwareComponentTemplate
System Template	std	4.5.0	AUTOSAR_TPS_SystemTemplate
Model Persistence Rules for XML	std	2.7.0	AUTOSAR_TR_XMLPersistenceRules
Generic Structure Template	std	3.5.0	AUTOSAR_TPS_GenericStructureTemplate
Meta Model	aux	4.4.0	AUTOSAR_MMOD_MetaModel
Meta Model-generated XML Schema	std	4.4.0	AUTOSAR_MMOD_XMLSchema
Requirements on ECU Configuration	aux	2.1.2	AUTOSAR_RS_ECUConfiguration
Specification of ECU Configuration	std	3.5.0	AUTOSAR_TPS_ECUConfiguration
Requirements on Basic Software Module Description Template	aux	1.2.1	AUTOSAR_RS_BSWModuleDescriptionTemplate
Basic Software Module Description Template	std	2.5.0	AUTOSAR_TPS_BSWModuleDescriptionTemplate
Methodology	aux	3.2.0	AUTOSAR_TR_Methodology
Requirements on System Template	aux	3.2.1	AUTOSAR_RS_SystemTemplate
Requirements on ECU Resource Template	aux	1.0.2	AUTOSAR_RS_ECUResourceTemplate
Specification of ECU Configuration Parameters (XML)	std	4.4.0	AUTOSAR_MOD_ECUConfigurationParameters
Requirements on Methodology	aux	1.2.1	AUTOSAR_RS_Methodology
Requirements on Timing Extensions	aux	1.2.0	AUTOSAR_RS_TimingExtensions
Specification of Timing Extensions	std	2.1.1	AUTOSAR_TPS_TimingExtensions
Standardization Template	std	1.3.0	AUTOSAR_TPS_StandardizationTemplate
Requirements on Standardization Template	aux	1.2.1	AUTOSAR_RS_StandardizationTemplate
AUTOSAR Miscellaneous Support Files	aux	1.0.0	AUTOSAR_MOD_MiscSupport
General Requirements on Methodology and Templates	aux	1.0.1	AUTOSAR_RS_MethodologyAndTemplatesGeneral
AUTOSAR Feature Model Exchange Format Requirements	aux	1.0.1	AUTOSAR_RS_FeatureModelExchangeFormat
AUTOSAR Feature Model Exchange Format	std	1.0.1	AUTOSAR_TPS_FeatureModelExchangeFormat
Collection of blueprints for AUTOSAR M1 models	aux	1.1.0	AUTOSAR_MOD_GeneralBlueprints
Collection of constraints on AUTOSAR M1 models	std	1.1.0	AUTOSAR_TR_AutosarModelConstraints

Document	Classification	Version	File Name
Standardized M1 Models used for the Definition of AUTOSAR	std	1.1.0	AUTOSAR_MOD_GeneralDefinitions
Recommended Methods and Practices for Timing Analysis and Design within the AUTOSAR Development Process	aux	1.0.0	AUTOSAR_TR_TimingAnalysis

5.4 Cluster: Application Interfaces

As of the latest Revision 3, the following Application Interfaces documents are part of Release 4.1:

Document	Classification	Version	File Name
SW-C and System Modeling Guide	aux	4.0.0	AUTOSAR_TR_SWCModelingGuide
Table of Application Interfaces	aux	3.0.0	AUTOSAR_MOD_AITable
Requirements on SW-C and System Modeling	aux	2.0.0	AUTOSAR_RS_SWCModeling
Explanation of Application Interfaces of the Body and Comfort Domain	aux	2.1.0	AUTOSAR_EXP_AIBodyAndComfort
Explanation of Application Interfaces of the Powertrain Domain	aux	3.1.0	AUTOSAR_EXP_AIPowertrain
Explanation of Application Interfaces of the Chassis Domain	aux	2.1.0	AUTOSAR_EXP_AIChassis
Explanation of Application Interfaces of Occupant and Pedestrian Safety Systems Domain	aux	2.0.0	AUTOSAR_EXP_AIOccupantAndPedestrianSafety
Explanation of Application Interfaces of the HMI, Multimedia and Telematics Domain	aux	1.0.1	AUTOSAR_EXP_AIHMIMultimediaAndTelematics
Application Interfaces User Guide	aux	1.3.0	AUTOSAR_EXP_AIUserGuide
Table of Application Interfaces (XML)	std	1.3.1	AUTOSAR_MOD_AISpecification
Unique Names for Documentation, Measurement and Calibration: Modeling and Naming Aspects including Automatic Generation	aux	2.0.1	AUTOSAR_TR_AIMeasurementCalibrationDiagnostics
Application Interface Examples	aux	1.0.1	AUTOSAR_MOD_AISpecificationExamples

5.5 Cluster: Other Documents

There are currently no documents in cluster “other documents” as of the latest Revision 3 of Release 4.1.

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 the following 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 for SRS documents is reworked. To ease this work, a formal rework of RS and SRS documents was initiated. R4.1.3 shows an intermediate status of the requirements traceability inside the SRS layer. This means that - among other changes - there are new tables to list the requirements tracing which may look less informative than the old ones.

- **Removal of chapter on change documentation from all SWS documents**

In Release 4.1.2 the chapter on change documentation has been removed from all SWS documents. These chapters usually had the number 11. They:

- have been removed to avoid uncertainty about completeness due to the current manual documentation process and
- will be replaced by automatically generated information in the future.

7 Revision History of the Release 4.1

Date	Rev.	Document		Description	
		Name	Version	State	Comment
31-Mar-14	3	Basic Software Module Description Template	2.5.0	modified	- Extended Upstream mapping for BSW - Editorial changes
		Complex Driver design and integration guideline	1.1.0	modified	- Update of CDD code files chapter - Removed chapter(s) on change documentation
		Example for a Serialization Protocol (SOME/IP)	1.1.0	modified	- Added support for bitfields - Client ID is configurable - Defined applicability of SOME/IP-SD Options for entry types
		General Requirements on Basic Software Modules	4.2.0	modified	- Erased/modified requirements about standard header files providing a more abstract view Improved definition of run-time errors Editorial changes
		General Specification of Basic Software Modules	1.2.0	modified	- Update of include file structure and required header files requirement specification - Update of inter-module version check – removed REVISION/PATCH_VERSION from the required check - Formatting and spelling corrections
		Glossary	2.6.0	modified	- Extended Abbreviations (0) Following terms changed: Software Component (SW-C) (3.217)
		Guide to Mode Management	2.2.0	modified	- Clarified Wakeup Handling - Extended diagnostic related mode management - Fixed inconsistencies with BswM
		Guide to Multi-Core Systems	1.1.0	modified	- Clarified terms
		Layered Software Architecture	3.4.0	modified	- editorial changes
		Main Requirements	3.2.0	modified	- Update of tracing information
		Methodology	3.2.0	modified	- Alignment of the AUTOSAR Methodology to the System Description categories - Editorial changes
		Model Persistence Rules for XML	2.7.0	modified	- Minor corrections concerning XML namespace
		Recommended Methods and Practices for Timing Analysis and Design within the AUTOSAR Development Process	1.0.0	modified	- Initial version
		Requirements on CAN	4.3.0	modified	- Revised DLC checks depending on padding configuration
		Requirements on Communication	3.3.1	modified	- editorial changes

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Requirements on Diagnostic	3.1.0	modified	- New requirement for processing a new request in DEM - New requirement for event management mechanisms in DEM
		Requirements on Function Inhibition Manager	1.3.2	modified	- Editorial changes
		Requirements on Mode Management	3.1.1	modified	- Enhanced Traceability
		Requirements on Standardization Template	1.2.1	modified	- editorial changes
		Software Component Template	4.5.0	modified	- Various fixes and clarifications
		Specification of RTE Software	3.5.0	modified	- Various fixes and clarifications
		Specification of a Diagnostic Communication Manager for SAE J1939	1.2.0	modified	- Refinement of J1939Dcm_DemTriggerOnDTCStatus - Smaller corrections - Editorial changes
		Specification of a Request Manager for SAE J1939	1.2.0	modified	- Clarified availability of callbacks - Standardized callback header names - Fixed UserType Enum
		Specification of a Transport Layer for SAE J1939	1.5.0	modified	- Allow for parallel reception via TP (BAM/CMDT) and directly - Clarified ambiguities regarding CTS parameters
		Specification of ADC Driver	5.1.1	modified	- "Common" Published Information corrected - ARXML adaptations
		Specification of Basic Software Mode Manager	1.5.0	modified	- Removal of several unnecessary parameter range checks in APIs J1939 fix: added missing action, missing included header files Corrections in Figures 1, 2, 3, 5 and 6 - Editorial changes
		Specification of Bit Handling Routines	3.1.1	modified	- Editorial changes
		Specification of CAN Driver	4.3.0	modified	- Added new requirements SWS_CAN_00497, SWS_CAN_00498, SWS_CAN_00499, and SWS_CAN_00496 - Modified requirements ECUC_Can_00445, SWS_CAN_00487, SWS_CAN_00469, SWS_CAN_00475, and SWS_CAN_00479 - Removed requirements SWS_CAN_00476, and SWS_Can_00414

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of CAN Interface	6.2.0	modified	<ul style="list-style-type: none"> - Removed BSW Exclusive areas - Set ICOM support to optional - Can_IdType handling - Small improvements
		Specification of CAN Network Management	3.6.0	modified	<ul style="list-style-type: none"> - Rewording and improving Partial Networking Algorithm Requirements - Remote Sleep Indication Timeout handling corrected - Network Release handling during communication control clarified
		Specification of CAN Transceiver Driver	3.3.0	modified	<ul style="list-style-type: none"> - Revised configuration for SPI interface - Revised naming convention for transceiver driver
		Specification of CAN Transport Layer	5.2.0	modified	<ul style="list-style-type: none"> - Revised padding behaviour. Clarified relation between CanTpMainFunctionPeriod and other timers - Revised CanTp_RxIndication() prototype. - Extended parameter CanTpTc for receive cancellation.
		Specification of Communication	5.1.1	modified	<ul style="list-style-type: none"> - Several correction, clarifications and editorial changes - No major functional changes or improvements
		Specification of Communication Manager	4.3.0	modified	<ul style="list-style-type: none"> - Max. number of supported PNCs by ComM now 56 - ComM supports VariantPostBuild instead of VariantPostBuildSelectable - Restrictions for PNCs with ComMChannels of ComMNmVariant "PASSIVE"
		Specification of Communication Stack Types	4.2.0	modified	<ul style="list-style-type: none"> - Added support for Pretended network data type
		Specification of CRC Routines	4.5.0	modified	<ul style="list-style-type: none"> - CRC32 IEEE 802.3 check values corrected - Editorial changes
		Specification of Crypto Abstraction Library	1.5.0	modified	<ul style="list-style-type: none"> - Missed configuration parameters added - Parameter description of Cpl_<Primitive>_xxx APIs corrected
		Specification of Crypto Service Manager	2.2.0	modified	<ul style="list-style-type: none"> - Error fixing and consistency improvements - Editorial changes

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Debugging in AUTOSAR	1.4.1	modified	<ul style="list-style-type: none"> - Editorial changes - Updated the APIs Dbg_PostTaskHook and Dbg_RxIndication parameters - Added missing descriptions for configuration containers - Removed the type Dbg_ReturnType
		Specification of Development Error Tracer	3.4.1	modified	<ul style="list-style-type: none"> - Improved requirement format of SWS_DET_00050
		Specification of Diagnostic Event Manager	5.2.0	modified	<ul style="list-style-type: none"> - Further clarification of event combination - Clarification of DTC groups - Editorial changes
		Specification of Diagnostic Log and Trace	1.4.0	modified	<ul style="list-style-type: none"> - Changed SWS_Dlt_00477
		Specification of Diagnostic over IP	1.2.0	modified	<ul style="list-style-type: none"> - Harmonization of identical APIs - Multiplicity of some configuration parameters were updated - Editorial changes
		Specification of ECU Configuration	3.5.0	modified	<ul style="list-style-type: none"> - Various fixes and clarifications
		Specification of ECU State Manager	4.2.0	modified	<ul style="list-style-type: none"> - EcuM errors reworked - Inconsistencies between API's and Interfaces resolved - Type conflicts solved - Editorial changes
		Specification of EEPROM Abstraction	3.1.1	modified	<ul style="list-style-type: none"> - Editorial changes
		Specification of EEPROM Driver	3.4.1	modified	<ul style="list-style-type: none"> - Corrected formatting of requirements SWS_Eep_00102, SWS_Eep_00068 and SWS_Eep_00137
		Specification of Ethernet Driver	1.5.0	modified	<ul style="list-style-type: none"> - Introduction of periodic call to Eth_SetControllerMode - Support of VLANs (Virtual Local Area Networks) - Editorial changes
		Specification of Ethernet Interface	2.2.0	modified	<ul style="list-style-type: none"> - Extended UL_RxIndication - Editorial changes
		Specification of Ethernet State Manager	2.2.0	modified	<ul style="list-style-type: none"> - Corrective action after timeout - Non mutually exclusive transitions from ETHSM_STATE_ONLINE - Editorial changes
		Specification of Extended Fixed Point Routines	2.3.0	modified	<ul style="list-style-type: none"> - Modified: Rounding mechanism was updated for HpFilter, Average, Array_Average & MovingAverage functions. - Added: A note below SWS_Efx_00307 for Efx_RampGetSwitchPos function.
		Specification of Fixed Point Interpolation Routines	1.5.0	modified	<ul style="list-style-type: none"> - Modified: - Removed columns Element6 & Element7 in the Record Layout table of SWS_ifx_00186.

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Fixed Point Math Routines	1.2.3	modified	- Editorial changes
		Specification of Flash Driver	4.2.0	modified	- Requirements for NULL pointer check during Fls_Init removed - Minor formatting changes
		Specification of Flash EEPROM Emulation	3.1.1	modified	- Editorial changes
		Specification of FlexRay AUTOSAR Transport Layer	3.3.0	modified	- Clarified meaning of FrArTpTc - Clarified requirements for sending FC(OVFLW) - Revised routing path const correctness - Harmonization of API descriptions
		Specification of FlexRay Driver	2.7.0	modified	- Removed NULL_PTR Det check for Fr_Init(). - Splitted config parameter FrBufferReconfig into 3 config parameters FrPrepareLPduSupport, FrReconfigLPduSupport and FrDisableLPduSupport. - Replaced Dem events by genuine uppercase letters - Removed integrator requirement for Fr_GeneralTypes.h
		Specification of FlexRay Interface	3.6.0	modified	- Added Chapter for Production Errors - Editorial Changes
		Specification of FlexRay ISO Transport Layer	5.2.0	modified	- Modified ECUC_FrTp_00024, SWS_FrTp_00150, SWS_FrTp_00152, SWS_FrTp_00153, SWS_FrTp_01092, SWS_FrTp_01141, SWS_FrTp_01147, SWS_FrTp_01148, SWS_FrTp_01149. - Added description in the section 7.5.4 Buffer Handling. - Modified chapter 8.6.2.1 name to Development Error Tracer. - Editorial changes.
		Specification of FlexRay Network Management	5.2.0	modified	- Corrections for Partial Networking - Correction in Initialization sequence - Modification in State Chart - Timing dependencies between parameters in FrNm were updated with more clarifications - Changes in Header file structure
		Specification of FlexRay State Manager	2.5.0	modified	- Removed Dual Channel Wakeup Echo
		Specification of FlexRay Transceiver Driver	1.7.1	modified	- Adapted requirement identifier prefixes - Deleted some redundant software specification items

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Floating Point Math Routines	1.5.0	modified	- Removed: SWS_Efx_00206, SWS_Efx_00207 and SWS_Efx_00281 from Mfl_RampCalc & Mfl_RampCalcJump functions.
		Specification of Function Inhibition Manager	2.5.0	modified	- Revised development error codes - Editorial changes
		Specification of I/O Hardware Abstraction	4.1.1	modified	- Adapted the requirement format
		Specification of Interoperability of AUTOSAR Tools	2.2.1	modified	- Editorial changes
		Specification of I-PDU Multiplexer	2.4.1	modified	- Editorial changes and minor corrections - No major functional change
		Specification of LIN Driver	2.2.0	modified	- Removed SWS_Lin_00243. - Modified SWS_Lin_00237, SWS_Lin_00058, SWS_Lin_00266, SWS_Lin_00255, SWS_Lin_00256, SWS_Lin_00258, SWS_Lin_00259, SWS_Lin_00260. - Updated Figure 7-1. - Removed references to SWS_Lin_00073 and SWS_Lin_00034 from chapter 6.
		Specification of LIN Interface	4.3.0	modified	- Set the parameter LinIfSlave and LinIfLength to obsolete - Changed the signature of <User_RxIndication> - Editorial changes
		Specification of LIN Network Management	2.2.0	modified	- Harmonize descriptions of identical API functions - Removed SWS_LinNm_00003
		Specification of LIN State Manager	1.5.1	modified	- Editorial changes
		Specification of LIN Transceiver Driver	1.4.1	modified	- Editorial changes
		Specification of MCU Driver	3.4.1	modified	- Requirement Traceability Table revised - Correction of requirement tag (Mcu_00146)
		Specification of Memory Abstraction Interface	2.1.1	modified	- Editorial changes
		Specification of Memory Mapping	1.7.0	modified	- Clarify usage of <X> in recovery and saved data zone - editorial changes
		Specification of Module XCP	2.3.0	modified	- Editorial correction for faulty references links. - Minor editorial correction for SWS_Xcp_00841, SWS_Xcp_00844. - Changed Xcp_RxIndication argument from PduInfoType* to const PduInfoType*.

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Network Management for SAE J1939	1.2.0	modified	<ul style="list-style-type: none"> - Introduction of random delays - Fixed state diagram - Removed configurable dummy APIs
		Specification of Network Management Interface	3.3.0	modified	<ul style="list-style-type: none"> - Rework of wakeup and abortion of coordinated shutdown - Rework of coordination of nested sub-busses
		Specification of NVRAM Manager	3.5.0	modified	<ul style="list-style-type: none"> - Removed job postpone in case of explicit synchronization failed after configured number of retries - Updated Service Interfaces tables - Renamed configuration parameter NvMRamBlockHeaderInclude to NvMBlockHeaderInclude - Editorial changes
		Specification of Operating System	5.3.0	modified	<ul style="list-style-type: none"> - Changed multiplicity of attributes in locSender/ReceiverProperties - Minor updates/clarification of descriptions - Editorial changes
		Specification of PDU Router	4.2.0	modified	<ul style="list-style-type: none"> - Clarified handling of routing on-the-fly for unreached TP threshold - Clarify behaviour for TriggerTransmit data provision depending on used buffering strategy - Introduced DET when <DstLo>_Transmit fails - Harmonize descriptions of identical API functions
		Specification of Platform Types	2.6.1	modified	<ul style="list-style-type: none"> - Editorial changes
		Specification of Predefined Names in AUTOSAR	1.2.1	modified	<ul style="list-style-type: none"> - editorial changes
		Specification of RAM Test	2.1.1	modified	<ul style="list-style-type: none"> - Editorial changes - Updated traceability
		Specification of Service Discovery	1.2.0	modified	<ul style="list-style-type: none"> - Editorial changes - More detailed endpoint handling - More detailed message building
		Specification of Socket Adaptor	2.2.0	modified	<ul style="list-style-type: none"> - TP API: Harmonization of ChangeParameter function - Clarifications and corrections of requirements and sequence charts - Editorial changes
		Specification of SPI Handler/Driver	4.3.0	modified	<ul style="list-style-type: none"> - Description for Spi_AsyncTransmit and Spi_SyncTransmit development errors for already ongoing transmission - Clarification of Spi Channel width and data access type relation
		Specification of SW-C End-to-End Communication Protection Library	3.2.1	modified	<ul style="list-style-type: none"> - Editorial changes

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Synchronized Time-Base Manager	2.2.1	modified	- Clarification on Autonomous Time Maintenance
		Specification of TCP/IP Stack	1.1.1	modified	- Clarifications and corrections of requirements Editorial changes
		Specification of Timing Extensions	2.1.1	modified	- Revised the entire contents of chapter "Application Notes" - Applied editorial changes to section "Repetitive Execution Order Constraint"
		Specification of TTCAN Driver	1.4.1	modified	- Updated description of TTCAN EcuC containers - Editorial changes
		Specification of TTCAN Interface	1.2.2	modified	- Adapted description of exported TTCAN EcuC containers - Editorial changes
		Specification of UDP Network Management	3.3.0	modified	- Minor bug fixes - Editorial Changes
		Specification of Watchdog Driver	3.1.1	modified	- Minor editorial changes
		Specification of Watchdog Manager	2.5.0	modified	- Addition of the OS counters for deadline monitoring - Fixed data types for Supervised Entity and Checkpoint types (uint16) - Several minor corrections throughout the document
		Standardization Template	1.3.0	modified	- editorial changes including tagged specification items - update content of specification levels
		System Template	4.5.0	modified	- Various fixes and clarifications
		Unique Names for Documentation, Measurement and Calibration: Modeling and Naming Aspects including Automatic Generation	2.0.1	modified	- Minor changes
		Virtual Functional Bus	3.2.0	modified	- Improvement of the consistency to the RTE specification for client-server communication - Introduction of requirements for the graphical notation
		Recommended Methods and Practices for Timing Analysis and Design within the AUTOSAR Development Process	1.0.0	added	- Initial Release
31-Oct.-13	2	Explanation of Application Interfaces of the Chassis Domain	2.1.0	modified	- Add reference to Sensor Actuator Design Pattern (in chapter 2.5.4.1) - Delete old description for Internal state sensors (in chapter 2.5.4.1)

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Explanation of Application Interfaces of the Powertrain Engine Domain	3.1.0	modified	- Updated/Rework of Chapter "Sensor/Actuator Design Pattern" - Update of Chapter "Appendix: Mapping Ports to Display Names - Powertrain Domain" according to changes in application interfaces model or patterns
		Explanatory material of the AUTOSAR XML Schema		added	- Split up of "Meta Model-generated XML Schema"
		Application Interfaces User Guide	1.3.0	modified	- New ARXML file distribution feature
		Description of the AUTOSAR standard errors	1.2.0	modified	- Removal of reference to obsolete communication stack types
		Guide to Mode Management	2.1.0	modified	- Added section about Pretended Networking
		Virtual Functional Bus	3.1.0	modified	- Support of TEXTTABLE conversion block
		Meta Model	4.4.0	modified	- Reflect changes of specification documents
		Meta Model-generated XML Schema	4.4.0	modified	- Reflect changes of specification documents
		XML Specification of Application Interfaces	1.3.1	modified	- Formal adaptations to ARXML representation
		Application Interface Examples	1.0.1	modified	- Formal adaptations to ARXML representation
		Basic Software UML Model	3.4.0	modified	- Formal adaptations to ARXML representation
		Specification of ECU Configuration Parameters (XML)	4.4.0	modified	- Formal adaptations to ARXML representation
		Collection of blueprints for AUTOSAR M1 models	1.1.0	modified	- Formal adaptations to ARXML representation
		Standardized M1 Models used for the Definition of AUTOSAR	1.1.0	modified	- Formal adaptations to ARXML representation
		AUTOSAR Miscellaneous Support Files	1.1.0	modified	- Formal adaptations to ARXML representation
		Requirements on Basic Software Module Description Template	1.2.1	modified	- Editorial Changes
		Requirements on ECU Configuration	2.1.2	modified	- Editorial Changes
		Requirements on ECU Resource Template	1.0.2	modified	- Editorial Changes
		AUTOSAR Feature Model Exchange Format Requirements	1.0.1	modified	- Editorial changes
		Requirements on AUTOSAR Features	1.2.1	modified	- Name of document changed
		Requirements on Interaction with Behavioral Models	1.0.7	modified	- Editorial changes
		Main Requirements	3.1.4	modified	- Editorial changes
		Requirements on Methodology	1.2.1	modified	- Editorial changes

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		General Requirements on Methodology and Templates	1.0.1	modified	- Editorial changes
		Project Objectives	3.2.6	modified	- Editorial rework of [RS_PO_00005] - Editorial changes
		Requirements on Software Component Template	2.2.1	modified	- Editorial Changes
		Requirements on Standardization Template	1.2.0	modified	- Editorial changes - Improvement of document - Traceability
		Requirements on System Template	3.2.1	modified	- Editorial changes
		Requirements on Timing Extensions	1.2.0	modified	- Removed requirement RS_TIMEX_00021 because it is an duplicate of RS_TIMEX_00009.
		Requirements on ADC Driver	4.0.1	modified	- Editorial changes
		General Requirements on Basic Software Modules	4.1.0	modified	- Revised the management of interfaces and the corresponding types into a dedicated header file for one module - Deleted a redundant requirement - Editorial changes
		Requirements on CAN	4.2.0	modified	- Corrected requirement for: "Do not send WUF as First Message on the Bus after BusOff" - Editorial changes
		Requirements on Communication	3.3.0	modified	- Removed TP-restriction for dynamic length I-PDUs
		Requirements on Core Test	1.4.0	modified	- Editorial changes - Renamed "RS_BSWAndRTEFeatures" into "RS_Features"
		Requirements on Crypto Service Manager	1.1.1	modified	- Editorial changes
		Requirements on Debugging in AUTOSAR	1.2.0	modified	- Updated reference to RS feature document - Editorial changes
		Requirements on Diagnostic Log and Trace	1.2.0	modified	- Renamed "RS_BSWAndRTEFeatures" into "RS_Features" - Editorial changes
		Requirements on Ethernet Support in AUTOSAR	2.1.0	modified	- Added support for ISO 13400-2 - Updated Document Traceability - Editorial changes
		Requirements on Flash Driver	2.1.1	modified	- Editorial changes
		Requirements on Flash Test	1.1.1	modified	- Editorial changes
		Requirements on FlexRay	4.0.1	modified	- Removed non-implementable runtime checks - Editorial changes
		Requirements on Free Running Timer	1.1.1	modified	- Editorial changes
		Requirements on Function Inhibition Manager	1.3.1	modified	- Editorial changes
		Requirements on Gateway	2.3.1	modified	- Editorial changes
		Requirements on GPT Driver	2.3.1	modified	- Editorial changes

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Requirements on ICU Driver	2.1.1	modified	- Editorial changes
		Requirements on I/O Hardware Abstraction	2.0.1	modified	- Editorial changes
		Requirements on Libraries	2.3.0	modified	- Editorial changes - Reduced the scope of SRS_LIBS_08535: only provide the current element
		Requirements on LIN	1.5.0	modified	- Added [SRS_Lin_01592] Transmission of functional requests by LinTp - Changed [SRS_Lin_01534] LinTp support for half-duplex physical connections
		Requirements on MCU Driver	3.1.1	modified	- Editorial changes
		Requirements on Memory Hardware Abstraction Layer	1.1.1	modified	- Editorial changes
		Requirements on Memory Services	3.1.1	modified	- Editorial changes
		Requirements on Mode Management	3.1.0	modified	- Editorial changes
		Requirements on Network Management	4.1.0	modified	- Added requirement SRS_Nm_02537 - Added requirement SRS_Nm_02536 - Removed implementation hint from the description of SRS_NM0045
		Requirements on OCU Driver	1.0.1	modified	- Editorial changes
		Requirements on Operating System	3.1.1	modified	- Editorial changes
		Requirements on PWM Driver	3.0.1	modified	- Editorial changes
		Requirements on RAM Test	2.0.1	modified	- Editorial changes
		Requirements on Runtime Environment	2.3.1	modified	- Removed requirement [SRS_Rte_00125]
		Requirements on BSW Modules for SAE J1939	1.0.1	modified	- Editorial changes - Removed chapter(s) on change documentation
		Requirements on a Transport Layer for SAE J1939		removed	- Merged into Requirements on BSW Modules for SAE J1939
		Requirements on SPI Handler/Driver	2.1.1	modified	- Editorial changes
		Requirements on Synchronized Time-Base Manager	1.1.1	modified	- Editorial changes
		Requirements on Time Service	1.0.1	modified	- Editorial changes
		Requirements on TTCAN	1.2.0	modified	- Adopted new RS_Feature document name - Editorial changes
		Requirements on Module XCP	1.2.1	modified	- Editorial changes
		Specification of ADC Driver	5.1.0	modified	- Editorial changes - Removed chapter(s) on change documentation

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Bit Handling Routines	3.1.0	modified	<ul style="list-style-type: none"> - Improve description of how to map functions to C-files - Improve the definition of error classification - Editorial changes
		General Specification of Basic Software Modules	1.1.0	modified	<ul style="list-style-type: none"> - Moved declarations of MainFunctions and BswModuleClientServerEntrys from the module header files to RTE/BswScheduler - Modified the Published Information definitions - Added the NULL pointer checking mechanism description - Removed the "Fixed cyclic", "Variable cyclic" and "On pre condition" from the Scheduled Functions description - Editorial changes
		Specification of Basic Software Mode Manager	1.4.0	modified	<ul style="list-style-type: none"> - Removal of several requirements from Pretended Networking chapter - Addition of new configuration parameters to several Sd related Bswm Actions - Addition of new BswM Mode Request: BswMCanSMIcomIndication - Addition of new BswM Action: BswMRteModeRequest - Editorial changes
		Specification of CAN Driver	4.2.0	modified	<ul style="list-style-type: none"> - Removed the 'Timing' row from the API table(s) of chapter 'Scheduled Functions' - Modified range of Can_IdType and CAN_CHANGE_BAUDRATE_SUPPORT to CAN_CHANGE_BAUDRATE_API - Editorial changes - Removed chapter(s) on change documentation
		Specification of CAN Interface	6.1.0	modified	<ul style="list-style-type: none"> - Restricted PDU mode changes - Removed critical section handling description in chapter 9 - Set CanIfInitRefCfgSet obsolete - Pretended Networking section - Small improvements
		Specification of CAN Network Management	3.5.0	modified	<ul style="list-style-type: none"> - Fixed Message Cycle Time Offset Handling - Corrected Active Wakeup Handling - Editorial changes - Removed chapter(s) on change documentation

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of CAN State Manager	3.1.0	modified	<ul style="list-style-type: none"> - Dependency to DCM module removed - Mileading timing row removed in CanSM_MainFunction - Improvement for include file structure - Editorial changes - Removed chapter(s) on change documentation
		Specification of CAN Transceiver Driver	3.2.0	modified	<ul style="list-style-type: none"> - Removed 'Timing' row from scheduled funtions API table. - Editorial changes - Removed chapter(s) on change documentation
		Specification of CAN Transport Layer	5.1.0	modified	<ul style="list-style-type: none"> - Replace NTFRSLT_OK/NTFRSLT_<other> E_OK/E_NOT_OK - Handling of unexpected arrival of N-PDU table clarification. - Editorial changes - Removed chapter(s) on change documentation
		Specification of Communication	5.1.0	modified	<ul style="list-style-type: none"> - Removed TP-restriction for dynamic length I-PDUs - Added parameter to globally enable or disable the cancellation support - Many bug fixes, clarifications and harmonization with the other COM-Stack modules - Editorial changes - Removed chapter(s) on change documentation
		Specification of Communication Manager	4.2.0	modified	<ul style="list-style-type: none"> - Introduced modeling of Service Interfaces in Chapt. 8 - Repair the reset after forcing NO_COM Feature - Editorial changes - Removed chapter(s) on change documentation
		Specification of Communication Stack Types	4.1.0	modified	<ul style="list-style-type: none"> - Removed the published information - Editorial changes - Removed chapter(s) on change documentation
		Specification of Compiler Abstraction	3.3.1	modified	<ul style="list-style-type: none"> - Editorial changes
		Specification of Core Test	2.1.0	modified	<ul style="list-style-type: none"> - Removed timing attribute of requirement SWS_CorTst_00067 - Editorial changes - Removed chapter(s) on change documentation
		Specification of CRC Routines	4.4.0	modified	<ul style="list-style-type: none"> - Editorial changes - Removed chapter(s) on change documentation

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Crypto Abstraction Library	1.4.0	modified	<ul style="list-style-type: none"> Error fixing and consistency improvements Editorial changes
		Specification of Crypto Service Manager	2.1.0	modified	<ul style="list-style-type: none"> Error fixing and consistency improvements Editorial changes Removed chapter(s) on change documentation
		Specification of Debugging in AUTOSAR	1.4.0	modified	<ul style="list-style-type: none"> Added OS interfaces Removed Timing row from the scheduled function Editorial changes Removed chapter(s) on change documentation
		Specification of Development Error Tracer	3.4.0	modified	<ul style="list-style-type: none"> Structural but non-functional improvements in document structure and creation Editorial changes Removed chapter(s) on change documentation
		Specification of Diagnostic Communication Manager	5.1.0	modified	<ul style="list-style-type: none"> Created API tables for service interfaces Provided synchronous and asynchronous APIs for DataServices callouts Harmonization for the length parameter interpretation all over RDBI, WDBI and RC services to be in bytes Editorial changes Removed chapter(s) on change documentation
		Specification of Diagnostic Event Manager	5.1.0	modified	<ul style="list-style-type: none"> Added API table for service interfaces Clarification of event combination Editorial changes Removed chapter(s) on change documentation
		Specification of Diagnostic Log and Trace	1.3.1	modified	<ul style="list-style-type: none"> Minor corrections Editorial changes Removed chapter(s) on change documentation
		Specification of Diagnostic over IP	1.1.0	modified	<ul style="list-style-type: none"> Formalization of Service Interfaces Revised return values of Service Interfaces Editorial changes
		Specification of DIO Driver	2.7.0	modified	<ul style="list-style-type: none"> Formalization of Service Interfaces Revised return values of Service Interfaces Editorial changes Removed chapter(s) on change documentation
		Specification of SW-C End-to-End Communication Protection Library	3.1.0	modified	<ul style="list-style-type: none"> Correction in E2E variant 1C Various minor corrections Editorial changes

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of ECU State Manager	4.1.0	modified	<ul style="list-style-type: none"> - Added API table for service interfaces - Fixed traceability topics - General clean-up of requirements (reviewed different interfaces, operations, descriptions and figures). - Editorial changes
		Specification of ECU State Manager with fixed state machine	1.4.0	modified	<ul style="list-style-type: none"> - Changed behavior of EcuM_KillAllRUNRequests - Added API to kill POST_RUN requests - Reworked error classification - Editorial changes - Removed chapter(s) on change documentation
		Specification of EEPROM Abstraction	3.1.0	modified	<ul style="list-style-type: none"> - Timing requirement removed from module's main function - "const" qualifier Added to prototype of function Ea_Write - New configuration parameter EaMainFunctionPeriod - Fls_GetStatus returns MEMIF_UNINIT if module is not initialized - Editorial changes - Removed chapter(s) on change documentation
		Specification of EEPROM Driver	3.4.0	modified	<ul style="list-style-type: none"> - Removed the 'Timing' row from the Eep_MainFunction API table - Editorial changes - Removed chapter(s) on change documentation
		Specification of Extended Fixed Point Routines	2.2.0	modified	<ul style="list-style-type: none"> - Deprecated: Efx_DeadTime function - Removed: Requirements for Efx_SlewRate, Efx_RampCalc and Efx_RampCalcJump functions - Added: SWS_Efx_00837 for Efx_RampCalc function - Modified: - Descriptions of Efx_RampCalc and Efx_RampSetParam - Requirements for Efx_RampCalc and Efx_RampCalcJump functions. - Syntax for variants of Efx_SlewRate, Efx_Div and Efx_MovingAverage functions. - Resolution of the in-parameter for Efx_Arcsin and Efx_Arccos functions. - Name "underflow" to "negative overflow" throughout the document - Editorial changes

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Ethernet Driver	1.4.0	modified	<ul style="list-style-type: none"> - Introduction of Eth_GeneralTypes.h - Support of API deviation for asynchronous implementation - Changes in API of EthIf_ProvideTxBuffer and EthIf_SetPhysAddr - Editorial changes - Removed chapter(s) on change documentation
		Specification of Ethernet Interface	2.1.0	modified	<ul style="list-style-type: none"> - Introduction of Eth_GeneralTypes.h - Support of API deviation for asynchronous implementation - Changes in API of EthIf_ProvideTxBuffer and EthIf_SetPhysAddr - Editorial changes - Removed chapter(s) on change documentation
		Specification of Ethernet State Manager	2.1.0	modified	<ul style="list-style-type: none"> - Optimization of full com request - Standardization of internal state names - Asynchronous behavior of several interfaces - Several clarifications and corrections - Editorial changes - Removed chapter(s) on change documentation
		Specification of Ethernet Transceiver Driver	1.4.0	modified	<ul style="list-style-type: none"> - Introduction of Eth_GeneralTypes.h - Support of API deviation for asynchronous implementation - Editorial changes - Removed chapter(s) on change documentation
		Specification of Flash Driver	4.1.0	modified	<ul style="list-style-type: none"> - Timing requirement removed from module's main function - Fls_GetStatus returns MEMIF_UNINIT if module is not initialized - Editorial changes - Removed chapter(s) on change documentation
		Specification of Flash EEPROM Emulation	3.1.0	modified	<ul style="list-style-type: none"> - Timing requirement removed from module's main function - "const" qualifier added to prototype of function Fee_Write - New configuration parameter FeeMainFunctionPeriod - Editorial changes - Removed chapter(s) on change documentation

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Flash Test	2.1.0	modified	<ul style="list-style-type: none"> - SWS_FlsTst_00066: VARIABLE_CYCLIC_OR_ON_PRE CONDITION in table removed - Editorial changes - Removed chapter(s) on change documentation
		Specification of FlexRay AUTOSAR Transport Layer	3.2.0	modified	<ul style="list-style-type: none"> - Retry of FrIf_Transmit mechanism has been removed in case this API returns E_NOT_OK - Removed FRARTP prefix for fields of FrTp frames and used camel case notation consistently for EcuC parameters - Removed NotifResultType from ComStackTypes and replaced by Std_ReturnType in the APIs - Removed the 'Timing' row from the API table(s) of chapter 'Scheduled Functions' - Editorial changes - Removed chapter(s) on change documentation
		Specification of FlexRay Driver	2.6.1	modified	<ul style="list-style-type: none"> - Added new DET error FR_E_INV_FRAMELIST_SIZE - Editorial changes - Removed chapter(s) on change documentation
		Specification of FlexRay Interface	3.5.0	modified	<ul style="list-style-type: none"> - Minor corrections - Editorial changes - Removed chapter(s) on change documentation
		Specification of FlexRay ISO Transport Layer	5.1.0	modified	<ul style="list-style-type: none"> - Removed requirement SWS_FrTp_01166 - Removed chapter 8.2.1, 8.2.1.1 - Removed chapter 7.5.4.2 - Modified SWS_FrTp_01149 - Added new requirement describing the layout of BC parameter - Editorial changes - Removed chapter(s) on change documentation
		Specification of FlexRay Network Management	5.1.0	modified	<ul style="list-style-type: none"> - Revised configuration parameter related to Partial Networking - Fix file inclusion in Chapter 5 - Fix Mandatory Interfaces - Revised Passive Startup requirements - Editorial changes - Removed chapter(s) on change documentation

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		Name	Version	State	Comment
		Specification of FlexRay State Manager	2.4.0	modified	<ul style="list-style-type: none"> - Added immediate handling of NoCom requests in normal passive mode or key slot only mode - Editorial changes - Removed chapter(s) on change documentation
		Specification of FlexRay Transceiver Driver	1.7.0	modified	<ul style="list-style-type: none"> - Simplified schedule to pre compile fixed cyclic - Reduced run time configuration checks - Editorial changes - Removed chapter(s) on change documentation
		Specification of Function Inhibition Manager	2.4.0	modified	<ul style="list-style-type: none"> - Change containers FiMFID and FiMInhibitionConfiguration - Editorial changes - Removed chapter(s) on change documentation
		Specification of GPT Driver	3.3.1	modified	<ul style="list-style-type: none"> - Editorial changes
		Specification of ICU Driver	4.4.0	modified	<ul style="list-style-type: none"> - ICU00354 - Check for a valid notification interval rephrased - ICU078 - Removed the sentence "This is done by the hardware." from the note. - ICU295 - Removed ICU_ACTIVE_TIME from the range of enumeration Icu_SignalMeasurementProperty Type - Editorial changes - Removed chapter(s) on change documentation
		Specification of Floating Point Interpolation Routines	1.4.0	modified	<ul style="list-style-type: none"> - Corrected array-out-of-bounds for Ifl_IpoMap function - Editorial changes
		Specification of Fixed Point Interpolation Routines	1.4.0	modified	<ul style="list-style-type: none"> - Corrections made for IntMap_s16u8_s8 function in Record Layout Table of SWS_Ifx_00186 - Corrected array-out-of-bounds for Ifx_IpoMap function - Editorial changes
		Specification of I/O Hardware Abstraction	4.1.0	modified	<ul style="list-style-type: none"> - Editorial changes - Removed chapter(s) on change documentation
		Specification of I-PDU Multiplexer	2.4.0	modified	<ul style="list-style-type: none"> - Revised configuration structure of dynamic and static segments to enforce layout constraints already by the configuration structure - Few bug fixes and clarifications - Editorial changes - Removed chapter(s) on change documentation

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of LIN Driver	2.1.0	modified	<ul style="list-style-type: none"> - Removed outdated SWS_Lin_00109, SWS_Lin_00136 and SWS_Lin_00132. - Import of SWS_Lin_184 from R3.2.2 - Wake-up LIN Functionality updated - New API Lin_WakeupInternal added. See chapter 8.3.2.5 - Added the following type definition (with SWS item ID) to chapter 8: <ul style="list-style-type: none"> - Lin_FrameCsModelType - Lin_FrameDType - Lin_FramePidType - Lin_FrameResponseType - Lin_PduType - Lin_StatusType - Editorial changes - Removed chapter(s) on change documentation
		Specification of LIN Interface	4.2.0	modified	<ul style="list-style-type: none"> - Added the parallel handling for physical and functional request of LINTP - Changed the wakeup handling by LIN bus - Removed the type NotifResultType - Editorial changes - Removed chapter(s) on change documentation
		Specification of LIN Network Management	2.1.2	modified	<ul style="list-style-type: none"> - Editorial changes - Removed chapter(s) on change documentation
		Specification of LIN State Manager	1.5.0	modified	<ul style="list-style-type: none"> - Minor bug fixes - Editorial changes - Removed chapter(s) on change documentation
		Specification of LIN Transceiver Driver	1.4.0	modified	<ul style="list-style-type: none"> - Added intimation to LinIf for wakeup by transceiver - Modified header file structure and mandatory interfaces - Removed SWS_LinTrcv_00160 - Editorial changes
		Specification of MCU Driver	3.4.0	modified	<ul style="list-style-type: none"> - Mcu_GetResetReason and Mcu_GetResetRawValue return the same value if called multiple times - RAM sector multiplicity corrected - McuClockSettingId and McuMode range corrected - Editorial changes - Removed chapter(s) on change documentation

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of Memory Abstraction Interface	2.1.0	modified	<ul style="list-style-type: none"> - "const" qualifier added to prototype of function MemIf_Write - Superfluous include files removed from include file structure - Description for return type of function MemIf_GetJobResult changed - Range of parameter MemIf_NumberOfDevices changed - Editorial changes - Removed chapter(s) on change documentation
		Specification of Memory Mapping	1.6.0	modified	<ul style="list-style-type: none"> - Clarify usage of default section
		Specification of Floating Point Math Routines	1.4.0	modified	<ul style="list-style-type: none"> - Deprecated: Mfl_DeadTime function - Removed: SWS_Mfl_00197 from Mfl_Hypot function - Added: SWS_Mfl_00835 for Mfl_RampCalc function, a note for Mfl_RampGetSwitchPos function - Modified: Description for Mfl_RampSetParam function, Parameter (in) definition for Mfl_RateLimiter_f32 - Editorial changes
		Specification of Fixed Point Math Routines	1.2.2	modified	<ul style="list-style-type: none"> - Corrections and removals of duplicate functions - Editorial changes
		Specification of Network Management Interface	3.2.0	modified	<ul style="list-style-type: none"> - Remove DEM usage - Correct multiplicity and dependency of configuration parameter - Corrections on RemoteSleepIndication feature - Corrections on MainFunction and coordinated shutdown - Formal correction on REQ Tags - Editorial changes - Removed chapter(s) on change documentation
		Specification of NVRAM Manager	3.4.0	modified	<ul style="list-style-type: none"> - Added NvMRamBlockHeaderInclude and NvMMainFunctionPeriod configuration parameters - Corrected bugs for NvMWriteVerificationDataSize and NvMNvramBlockIdentifier parameters - Other small clarifications in requirement - Editorial changes - Removed chapter(s) on change documentation

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		Specification of OCU Driver	1.1.0	modified	<ul style="list-style-type: none"> - Minor update of the document structure - Editorial changes - Removed chapter(s) on change documentation
		Specification of Operating System	5.2.0	modified	<ul style="list-style-type: none"> - Clarification on E_OS_NESTING_DEADLOCK - Update of table 2 - Corrected multiplicity of ECUC_Os_00393 - Minor updates/clarification of descriptions - Editorial changes - Removed chapter(s) on change documentation
		Specification of PDU Router	4.1.0	modified	<ul style="list-style-type: none"> - Revised list of optional interfaces - Deleted handling of misconfigured PDUs during run-time. - Deleted NotifyResultType - Added error handling after destination abort in case of gatewaying. - Editorial changes - Removed chapter(s) on change documentation
		Specification of Platform Types	2.6.0	modified	<ul style="list-style-type: none"> - Types uint64 and sint64 added - Editorial changes - Removed chapter(s) on change documentation
		Specification of Port Driver	3.3.1	modified	<ul style="list-style-type: none"> - Editorial changes - Removed chapter(s) on change documentation
		Specification of PWM Driver	3.1.0	modified	<ul style="list-style-type: none"> - Updated requirements related to PwmPowerStateAsynchTransitionMode - Updated Scheduled Functions chapter - Editorial changes - Removed chapter(s) on change documentation
		Specification of RAM Test	2.1.0	modified	<ul style="list-style-type: none"> - Removed timing attribute of requirement SWS_RamTst_00110 - Editorial changes - Removed chapter(s) on change documentation
		Specification of RTE Software	3.4.0	modified	<ul style="list-style-type: none"> - Various fixes and clarifications
		Specification of a Diagnostic Communication Manager for SAE J1939	1.1.0	modified	<ul style="list-style-type: none"> - Introduction of formal descriptions of service interfaces - Configuration of further DMx messages - Revised DEM interface - Editorial changes

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		Name	Version	State	Comment
		Specification of Network Management for SAE J1939	1.1.0	modified	<ul style="list-style-type: none"> - Additional development errors for function parameter checks - Editorial changes - Removed chapter(s) on change documentation
		Specification of a Request Manager for SAE J1939	1.1.0	modified	<ul style="list-style-type: none"> - Additional development error for function parameter checks - Clarification of Request timeout and state handling - Formal description of service ports - Separate configuration of received and transmitted PGNs - Editorial changes - Removed chapter(s) on change documentation
		Specification of a Transport Layer for SAE J1939	1.4.0	modified	<ul style="list-style-type: none"> - NotifResultType replaced by StdReturnType - Additional development errors for protocol problems - Connection parameters moved to channel configuration - Editorial changes - Removed chapter(s) on change documentation
		Specification of Service Discovery	1.1.0	modified	<ul style="list-style-type: none"> - No major changes have been made - Editorial changes - Removed chapter(s) on change documentation
		Specification of Socket Adaptor	2.1.0	modified	<ul style="list-style-type: none"> - TP API: NotifResultType replaced by Std_ReturnType - Clarifications and corrections of requirements and sequence charts - Editorial changes - Removed chapter(s) on change documentation
		Specification of SPI Handler/Driver	4.1.0	modified	<ul style="list-style-type: none"> - ECUC_Spi_00242 (added) - ECUC_Spi_00240 (added) - SWS_Spi_00189 (modified) - Editorial changes - Removed chapter(s) on change documentation
		Specification of Standard Types	1.4.9	modified	<ul style="list-style-type: none"> - Editorial changes - Removed chapter(s) on change documentation

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		Specification of Synchronized Time-Base Manager	2.2.0	modified	<ul style="list-style-type: none"> - Parameter StbMMainFunctionPeriod added - Requirements StbM_0030 and 00035 removed - Restructuring of and clarification w.r.t. Service Interface related chapters - Parameters StbMFlexRayClusterRef / StbMTtcanClusterRef set to obsolete - Editorial changes - Removed chapter(s) on change documentation
		Specification of TCP/IP Stack	1.1.0	modified	<ul style="list-style-type: none"> - Added control functions for ARP - Clarifications and corrections of requirements - Editorial changes - Removed chapter(s) on change documentation
		Specification of Time Service	1.0.1	modified	<ul style="list-style-type: none"> - Editorial changes
		Specification of TTCAN Driver	1.4.0	modified	<ul style="list-style-type: none"> - Removed timing in SWS_TtCan_00113 - Editorial changes
		Specification of TTCAN Interface	1.2.2	modified	<ul style="list-style-type: none"> - Editorial changes
		Specification of UDP Network Management	3.1.0	modified	<ul style="list-style-type: none"> - Revised Spontaneous Transmission - Editorial changes - Removed chapter(s) on change documentation
		Specification of Watchdog Driver	3.1.0	modified	<ul style="list-style-type: none"> - Shift Dem_ReportErrorStatus from mandatory to optional interfaces - Editorial changes - Removed chapter(s) on change documentation
		Specification of Watchdog Interface	2.6.2	modified	<ul style="list-style-type: none"> - Editorial changes - Removed chapter(s) on change documentation
		Specification of Watchdog Manager	2.4.0	modified	<ul style="list-style-type: none"> - Minor fixes (mode switching, dependencies to other modules) - Quality corrections in the document (e.g. formatting of requirements) - Editorial changes - Removed chapter(s) on change documentation
		Specification of Module XCP	2.2.0	modified	<ul style="list-style-type: none"> - Minor corrections - Editorial changes - Removed chapter(s) on change documentation
		Basic Software Module Description Template	2.4.0	modified	<ul style="list-style-type: none"> - Added support for indexing of array elements - Various fixes and clarifications - Editorial changes

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		Specification of ECU Configuration	3.4.0	modified	<ul style="list-style-type: none"> - Support unidirectional CDD communication - Adapted range of parameter MetaDataLength - Harmonization with TR_Methodology - Added "origin" attribute to the EcucContainerDef - Adapted CDD configuration to allow the configuration of the CDD interface type (IF/TP) - Adapted the upper limit of PduLength parameter - Stereotyped EcucChoiceReferenceDef.destination and EcucSymbolicNameReferenceDef.destination with atpUriDef
		Specification of ECU Resource Template	2.3.1	modified	- Layout update
		AUTOSAR Feature Model Exchange Format	1.0.1	modified	- Editorial changes
		Generic Structure Template	3.4.0	modified	<ul style="list-style-type: none"> - Editorial changes - Extension of formula language
		Software Component Template	4.4.0	modified	- Various fixes and clarifications
		Standardization Template	1.2.1	modified	<ul style="list-style-type: none"> - Editorial changes including Tagged specification items - Extension of blueprinting to Further AUTOSAR classes

Date	Rev.	Document		Description	
		Name	Version	State	Comment
		System Template	4.4.0	modified	<ul style="list-style-type: none"> - Set CanNmCluster.nmChannelActive, FlexrayArTpChannel.timeFrIf and FlexrayArTpChannel.maxFrIf to deprecated - Added SoAd Pdu Collection attributes to SocketConnection - Added SoAdRoutingGroup.eventGroupControlType - Introduced SocketAddress.multicastConnector - Clarified usage of ISignal.dataTypePolicy - Described the handling of ComSpecs during flattening - Introduced new Pdu types: GeneralPurposePdu and GeneralPurposeIPdu - Made RootSwCompositionPrototype.calibrationParameterValueSet "atpSplitable" - Made RootSwCompositionPrototype.flatMap "atpSplitable" - Added new Ethernet addressing attributes to SocketConnection to help to derive the Ecu Configurations for the Server and the Clients
		Specification of Timing Extensions	2.1.0	modified	<ul style="list-style-type: none"> - Clarified the semantics of jitter and removed ambiguities in the description of the Periodic Event Triggering Constraint. - Added AUTOSAR constraints in order to ensure specification of consistent Execution Order Constraints. - Added capability to specify logical successor relationships between runnable entities and groups of runnable entities. - Changed the prefix of timing functions from "RTE" to "TIMEX" in order to be consistent with the AUTOSAR standard definitions. - Clarified the use of event types in the various timing views defined in the specification.
		Collection of constraints on AUTOSAR M1 models	1.1.0	modified	<ul style="list-style-type: none"> - Updated constraints according to changes in SWS and TPS documents

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		Name	Version	State	Comment
		Methodology	3.1.0	modified	- Harmonization between ECU Configuration specification and AUTOSAR Methodology
		Specification of Predefined Names in AUTOSAR	1.2.0	modified	- Harmonization of keywords with List of Basic Software Modules
		Model Persistence Rules for XML	2.6.0	modified	- Added tabular overview of default configuration of schema generator (Table 4-2)
15-Mar-13	1	Virtual Functional Bus	3.0.0	added	
		Layered Software Architecture	3.3.0	added	
		List of Basic Software Modules	1.7.0	added	
		General Requirements on Basic Software Modules	4.0.0	added	
		Requirements on Free Running Timer	1.1.0	added	
		Specification of Development Error Tracer	3.3.0	added	
		Specification of Platform Types	2.5.1	added	
		Specification of Standard Types	1.4.0	added	
		Specification of Communication Stack Types	4.0.0	added	
		Specification of Memory Mapping	1.5.0	added	
		Specification of Compiler Abstraction	3.3.0	added	
		Modeling Guidelines of Basic Software EA UML Model	1.3.1	added	
		Basic Software UML Model	3.3.0	added	
		Requirements on Interaction with Behavioral Models	1.0.6	added	
		Specification of Interaction with Behavioral Models	1.0.7	added	
		Requirements on Interoperability of AUTOSAR Tools	1.1.0	added	
		Specification of Interoperability of AUTOSAR Tools	2.2.0	added	
		Specification of ECU Resource Template	2.3.0	added	
		Requirements on Runtime Environment	2.3.0	added	
		Specification of RTE Software	3.3.0	added	
		Requirements on LIN	1.4.0	added	
		Specification of LIN Interface	4.1.0	added	
		Specification of LIN Driver	2.0.0	added	
		Requirements on CAN	4.1.0	added	
		Specification of CAN Transport Layer	5.0.0	added	

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		Name	Version	State	Comment
		Specification of CAN Interface	6.0.0	added	
		Specification of CAN Driver	4.1.0	added	
		Specification of CAN Transceiver Driver	3.1.0	added	
		Requirements on Communication	3.2.0	added	
		Specification of Communication	5.0.0	added	
		Requirements on I-PDU Multiplexer	1.1.0	added	
		Specification of I-PDU Multiplexer	2.3.0	added	
		Requirements on Network Management	4.0.0	added	
		Specification of Network Management Interface	3.1.0	added	
		Specification of FlexRay Network Management	5.0.0	added	
		Specification of CAN Network Management	3.4.0	added	
		Requirements on Function Inhibition Manager	1.3.0	added	
		Specification of Function Inhibition Manager	2.3.0	added	
		Requirements on Diagnostic	3.0.0	added	
		Specification of Diagnostic Communication Manager	5.0.0	added	
		Specification of Diagnostic Event Manager	5.0.0	added	
		Requirements on FlexRay	4.0.0	added	
		Specification of FlexRay Interface	4.0.0	added	
		Specification of FlexRay Driver	2.6.0	added	
		Specification of FlexRay Transceiver Driver	1.6.0	added	
		Requirements on Gateway	2.3.0	added	
		Specification of PDU Router	4.0.0	added	
		Requirements on Memory Services	3.1.0	added	
		Specification of NVRAM Manager	3.3.0	added	
		Specification of CRC Routines	4.3.0	added	
		Requirements on Mode Management	3.0.0	added	
		Specification of ECU State Manager	4.0.0	added	
		Specification of Communication Manager	4.1.0	added	
		Specification of Watchdog Manager	2.3.0	added	
		Requirements on Operating System	3.1.0	added	

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		Specification of Operating System	5.1.0	added	
		General Requirements on SPAL	2.3.0	added	
		Requirements on SPI Handler/Driver	2.1.0	added	
		Specification of SPI Handler/Driver	4.0.0	added	
		Requirements on ICU Driver	2.1.0	added	
		Specification of ICU Driver	4.3.0	added	
		Requirements on ADC Driver	4.0.0	added	
		Specification of ADC Driver	5.0.0	added	
		Requirements on I/O Hardware Abstraction	2.0.0	added	
		Specification of I/O Hardware Abstraction	4.0.0	added	
		Requirements on RAM Test	2.0.0	added	
		Specification of RAM Test	2.0.0	added	
		Requirements on PWM Driver	3.0.0	added	
		Specification of PWM Driver	3.0.0	added	
		Requirements on GPT Driver	2.3.0	added	
		Specification of GPT Driver	3.3.0	added	
		Requirements on DIO Driver	2.2.0	added	
		Specification of DIO Driver	2.6.0	added	
		Requirements on Watchdog Driver	2.2.0	added	
		Specification of Watchdog Driver	3.0.0	added	
		Specification of Watchdog Interface	2.6.0	added	
		Requirements on Port Driver	2.1.0	added	
		Specification of Port Driver	3.3.0	added	
		Requirements on MCU Driver	3.1.0	added	
		Specification of MCU Driver	3.3.0	added	
		Requirements on EEPROM Driver	2.1.0	added	
		Specification of EEPROM Driver	3.3.0	added	
		Requirements on Flash Driver	2.1.0	added	
		Specification of Flash Driver	4.0.0	added	
		Requirements on Memory Hardware Abstraction Layer	1.1.0	added	
		Specification of Memory Abstraction Interface	2.0.0	added	
		Specification of Flash EEPROM Emulation	3.0.0	added	
		Specification of EEPROM Abstraction	3.0.0	added	
		Main Requirements	3.1.0	added	
		Glossary	2.5.0	added	
		SW-C and System Modeling Guide	4.0.0	added	

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		Table of Application Interfaces	3.0.0	added	
		Technical Safety Concept Status Report	1.2.0	added	
		Requirements on Software Component Template	2.2.0	added	
		Software Component Template	4.3.0	added	
		System Template	4.3.0	added	
		Model Persistence Rules for XML	2.5.0	added	
		Generic Structure Template	3.3.0	added	
		Meta Model	4.3.0	added	
		Meta Model-generated XML Schema	4.3.0	added	
		Requirements on ECU Configuration	2.1.1	added	
		Specification of ECU Configuration	3.3.0	added	
		Requirements on Basic Software Module Description Template	1.2.0	added	
		Basic Software Module Description Template	2.3.0	added	
		Methodology	3.0.0	added	
		Requirements on System Template	3.2.0	added	
		Requirements on ECU Resource Template	1.0.1	added	
		Specification of CAN State Manager	3.0.0	added	
		Specification of FlexRay State Manager	2.3.0	added	
		Specification of LIN State Manager	1.4.0	added	
		Specification of LIN Transceiver Driver	1.3.0	added	
		Requirements on Core Test	1.3.0	added	
		Specification of Core Test	2.0.0	added	
		Requirements on Flash Test	1.1.0	added	
		Specification of Flash Test	2.0.0	added	
		Requirements on SW-C and System Modeling	2.0.0	added	
		Explanation of Application Interfaces of the Body and Comfort Domain	2.1.0	added	
		Explanation of Application Interfaces of the Powertrain Domain	3.0.0	added	
		Explanation of Application Interfaces of the Chassis Domain	2.0.0	added	

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		Explanation of Application Interfaces of Occupant and Pedestrian Safety Systems Domain	2.0.0	added	
		Explanation of Application Interfaces of the HMI, Multimedia and Telematics Domain	1.0.1	added	
		Specification of ECU Configuration Parameters (XML)	4.3.0	added	
		Feature Specification of the BSW Architecture and the RTE	1.2.0	added	
		Specification of LIN Network Management	2.1.0	added	
		Explanation of Interrupt Handling within AUTOSAR	1.0.3	added	
		Specification of Basic Software Mode Manager	1.3.0	added	
		Requirements on Libraries	2.2.0	added	
		Specification of Debugging in AUTOSAR	1.3.0	added	
		Requirements on Debugging in AUTOSAR	1.1.0	added	
		Requirements on Diagnostic Log and Trace	1.1.0	added	
		Specification of Diagnostic Log and Trace	1.3.0	added	
		Requirements on Methodology	1.2.0	added	
		Description of the AUTOSAR standard errors	1.1.0	added	
		Explanation of Error Handling on Application Level	1.0.1	added	
		Specification of Fixed Point Math Routines	1.2.1	added	
		Specification of Fixed Point Interpolation Routines	1.3.0	added	
		Specification of Floating Point Math Routines	1.3.0	added	
		Specification of Floating Point Interpolation Routines	1.3.0	added	
		Specification of Bit Handling Routines	3.0.0	added	
		Specification of Extended Fixed Point Routines	2.1.0	added	
		Specification of Crypto Service Manager	2.0.0	added	
		Requirements on Timing Extensions	1.1.0	added	
		Specification of Timing Extensions	2.0.0	added	
		Specification of Module XCP	2.1.0	added	

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		Specification of UDP Network Management	3.0.0	added	
		Specification of Ethernet State Manager	2.0.0	added	
		Specification of Socket Adaptor	2.0.0	added	
		Specification of Ethernet Interface	2.0.0	added	
		Specification of Diagnostic over IP	1.0.0	added	
		Requirements on Ethernet Support in AUTOSAR	2.0.0	added	
		Requirements on Synchronized Time-Base Manager	1.1.0	added	
		Specification of Synchronized Time-Base Manager	2.1.0	added	
		Specification of a Transport Layer for SAE J1939	1.3.0	added	
		Requirements on Crypto Service Manager	1.1.0	added	
		Specification of SW-C End-to-End Communication Protection Library	3.0.0	added	
		Requirements on Module XCP	1.2.0	added	
		Specification of Ethernet Driver	1.3.0	added	
		Specification of Ethernet Transceiver Driver	1.3.0	added	
		Specification of TTCAN Driver	1.3.0	added	
		Specification of TTCAN Interface	1.2.0	added	
		Specification of Crypto Abstraction Library	1.3.0	added	
		Guide to Mode Management	2.0.0	added	
		Requirements on TTCAN	1.1.0	added	
		Application Interfaces User Guide	1.2.0	added	
		XML Specification of Application Interfaces	2.0.0	added	
		Specification of ECU State Manager with fixed state machine	1.3.0	added	
		Release Overview and Revision History	1.0.0	added	
		Standardization Template	1.1.0	added	
		Requirements on Standardization Template	1.1.0	added	
		Unique Names for Documentation, Measurement and Calibration: Modeling and Naming Aspects including Automatic Generation	2.0.0	added	

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		General Specification of Basic Software Modules	1.0.0	added	
		Specification of FlexRay ISO Transport Layer	5.0.0	added	
		Project Objectives	3.1.0	added	
		Specification of Predefined Names in AUTOSAR	1.1.0	added	
		Specification of FlexRay AUTOSAR Transport Layer	3.1.0	added	
		Utilization of Crypto Services	1.0.0	added	
		AUTOSAR Miscellaneous Support Files	1.0.0	added	
		General Requirements on Methodology and Templates	1.0.0	added	
		AUTOSAR Feature Model Exchange Format Requirements	1.0.0	added	
		AUTOSAR Feature Model Exchange Format	1.0.0	added	
		Specification of a Diagnostic Communication Manager for SAE J1939	1.0.0	added	
		Specification of a Request Manager for SAE J1939	1.0.0	added	
		Specification of Network Management for SAE J1939	1.0.0	added	
		Requirements on BSW Modules for SAE J1939	1.0.0	added	
		Requirements on OCU Driver	1.0.0	added	
		Specification of OCU Driver	1.0.0	added	
		Specification of Service Discovery	1.0.0	added	
		Specification of TCP/IP Stack	1.0.0	added	
		Collection of blueprints for AUTOSAR M1 models	1.0.0	added	
		Complex Driver design and integration guideline	1.0.0	added	
		Requirements on Time Service	1.0.0	added	
		Specification of Time Service	1.0.0	added	
		Guide to Multi-Core Systems	1.0.0	added	
		Collection of constraints on AUTOSAR M1 models	1.0.0	added	
		Standardized M1 Models used for the Definition of AUTOSAR	1.0.0	added	
		Example for a Serialization Protocol (SOME/IP)	1.0.0	added	
		Application Interface Examples	1.0.0	added	