

# Release Notes CodingGeneric

Project BMW AUTOSAR Core 4 Rel. 3 and adaptive BMW AUTOSAR Core Rel. 1  
 Author BMW AG  
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 Version 5.2.1  
 Status Release  
 Hotline +49 89 382 - 32233 (classic) / +49 89 382 - 22522 (adaptive)  
 Contact bac@bmw.de (classic) / abac@bmw.de (adaptive)  
<https://asc.bmw.com/jira/browse/BSUP> (extern)  
<https://asc.bmwgroup.net/jira/browse/BSUP> (intern)

## Revision History

Version	Date	Issues
5.2.1	2017-12-14	BAC-6660, BAC-6704, BAC-6585, BAC-6736, BAC-6192
5.2.0	2017-11-09	BAC-6434, BAC-6350
5.1.0	2017-10-12	BAC-6402
5.0.1	2017-09-14	BAC-6302, BAC-6239, BAC-6224, BAC-6073, BAC-6003, BAC-5170
5.0.0	2017-06-29	

### Company

Bayerische  
Motoren Werke  
Aktiengesellschaft

### Postal address

BMW AG  
80788 München

### Office address

Forschungs- und  
Innovationszentrum  
(FIZ)  
Hufelandstr. 1  
80937 München

### Telephone

Switchboard  
+49 89 382-0

### Internet

[www.bmwgroup.com](http://www.bmwgroup.com)

## 1 Module Description

The Coding system consists of a Coding module that is part of the ECU application and the Coder. Almost in the same manner as the Bootloader programs the ROM of an ECU, the Coding module codes the NV memory of an ECU with vehicle specific data derived from the vehicle description document e.g. type key, extra equipment, country specifics, year of model/construction stage, additional comments or service upgrade options.

## 2 Revisions and Modifications

### Revision 5.2.1 [Released]

Item	Description
CR ID:	BAC-6660
CR Headline:	Correct Misra- and Metric-violations
Description of Issues:	Correct Misra- and Metric-violations and compiler warnings.
Description of Changes:	Correct Misra- and Metric-violations and compiler warnings.
Changed Files:	generate/include/Coding_Cfg.h.pgen doc/CodingGeneric_RequirementsTable.pdf template/include/Coding_MemMap.h.sample generate/src/Coding_Function.c.pgen generate/include/Coding_Version.h.pgen generate/include/Coding_Function.h.pgen generate/src/Coding_Cfg.c.pgen include/Coding_CryptoAdapter.h generate/pageinclude/Coding_Functions.pgen generate/pageinclude/Coding_Function_Types.pgen src/Coding.c include/Coding.h
Compatibility:	

Item	Description
CR ID:	BAC-6704
CR Headline:	Activation of signature verification (RSA)
Description of Issues:	Changed Coding adapter to fit to the provided Crypto-Lib (RSA).
Description of Changes:	Changed Coding adapter to fit to the provided Crypto-Lib (RSA).
Changed Files:	generate/pageinclude/Coding_Functions.pgen generate/src/Coding_Function.c.pgen
Compatibility:	

Item	Description
CR ID:	BAC-6585
CR Headline:	Rework Coding_paramdef.arxml

Description of Issues:	Add missing configuration parameters, provide human readable Coding function value input field and support tool based implementation type range check.
Description of Changes:	Added missing configuration parameters 'lowerlimit' and 'upperlimit'. Use choice container for supported implementation data types. Updated PAGE include files to convert human readable Coding function values to Coding internal machine code.
Changed Files:	generate/pageinclude/Coding_Function_Types.pgen cfgdesc/Coding_paramdef.arxml generate/pageinclude/Coding_Functions.pgen
Compatibility:	

Item	Description
CR ID:	BAC-6736
CR Headline:	Fix optional production error CEUD compile error
Description of Issues:	Deactivation of optional production error leads to compile error.
Description of Changes:	Add missing preprocessor directives.
Changed Files:	src/Coding.c
Compatibility:	

Item	Description
CR ID:	BAC-6192
CR Headline:	Identical function names in different coding areas lead to generation of duplicate event names
Description of Issues:	Add Coding configuration plausibility check.
Description of Changes:	Check uniqueness of all Coding function names in Coding configuration.
Changed Files:	generate/pageinclude/Coding_Functions.pgen
Compatibility:	

## Revision 5.2.0 [Released]

Item	Description
CR ID:	BAC-6434
CR Headline:	Schema of paramdefs, paramconfs and SWCDen should be AUTOSAR_4-3-0_STRICT_COMPACT.xsd
Description of Issues:	Schema of parameter definition files and SWCDs should be conform to AUTOSAR_4-3-0_STRICT_COMPACT.xsd.
Description of Changes:	Adapted parameter definition files and SWCDs to schema AUTOSAR_4-3-0_STRICT_COMPACT.
Changed Files:	cfgdesc/Coding_paramdef.arxml
Compatibility:	

Item	Description
CR ID:	BAC-6350

CR Headline:	RoutineSignal Arrays must be configured with VARIABLE_LENGTH
Description of Issues:	Routine signal arrays must be configured with VARIABLE_LENGTH.
Description of Changes:	Coding generic has to support an additional function parameter 'dataLength' and Coding adapter has to support configuration with VARIABLE_LENGTH.
Changed Files:	src/Coding.c include/Coding.h
Compatibility:	

### Revision 5.1.0 [Released]

Item	Description
CR ID:	BAC-6402
CR Headline:	Activation of signature verification
Description of Issues:	Customize the function calls according to specification. Support the provided Crypto-Lib.
Description of Changes:	Removed unnecessary function call from Coding module. Changed Coding adapter to fit to the provided Crypto-Lib on one side and to fulfill the specification requirements on the other side.
Changed Files:	generate/include/Coding_Cfg.h.pgen cfgdesc/Coding_paramdef.arxml include/Coding_CryptoAdapter.h generate/pageinclude/Coding_Functions.pgen generate/pageinclude/Coding_Function_Types.pgen src/Coding.c
Compatibility:	

### Revision 5.0.1 [Released]

Item	Description
CR ID:	BAC-6302
CR Headline:	Add look up table for type conversion
Description of Issues:	Provide look up table (adaptive platform and ara implementation data types) for PAGE.
Description of Changes:	Added look up table for adaptive platform and ara implementation data types in page include file.
Changed Files:	generate/pageinclude/Coding_Functions.pgen
Compatibility:	

Item	Description
CR ID:	BAC-6239
CR Headline:	Improve requirements traceability
Description of Issues:	Improve generation of documents.
Description of Changes:	Replace special character and add reference information.

Changed Files:	doc/Coding_RequirementsTable.pdf
Compatibility:	

Item	Description
CR ID:	BAC-6224
CR Headline:	PublishedInformation of BMW modules is not modeled according to ASR4.2.2
Description of Issues:	Removed deprecated ImplementationConfigClass from PublishedInformation and added ValueConfigClass instead.
Description of Changes:	File content was updated.
Changed Files:	cfgdesc/Coding_paramdef.arxml
Compatibility:	

Item	Description
CR ID:	BAC-6073
CR Headline:	Stop timeout monitoring during module shutdown
Description of Issues:	Stop timeout monitoring (Coding data qualification) during shutdown.
Description of Changes:	Added call: Coding_Timer_CancelTimer() in Coding_Shutdown() (sync branch) and in Coding_NvMFinishedCallbackWriteCodingData() (async branch).
Changed Files:	src/Coding.c
Compatibility:	

Item	Description
CR ID:	BAC-6003
CR Headline:	Transformation rule must respect signedness of nvRam type
Description of Issues:	The Coding transformation rule mechanism does not consider that the Coding data are stored in an uint8 array when the user application requests a sint8 Coding value.
Description of Changes:	Add missing type cast when Coding data are extracted from uint8 array.
Changed Files:	generate/src/Coding_Function.c.pgen
Compatibility:	

Item	Description
CR ID:	BAC-5170
CR Headline:	Modules paramdef violates TPS_ECUC_06004
Description of Issues:	AdminData filed in ECU configuration parameter definition is required.
Description of Changes:	Added missing AdminData field.
Changed Files:	cfgdesc/Coding_paramdef.arxml
Compatibility:	

## Revision 5.0.0 [Released]

Item	Description
CR ID:	
CR Headline:	Initial Release for SP2021
Description of Issues:	Initial Release for SP2021
Description of Changes:	Initial Release for SP2021
Changed Files:	
Compatibility:	