

3rdParty MCAL Integration

Release Notes

Renesas RH850/P1x

Version 1.1.80

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Status	Released

Document Information

History

Author	Date	Version	Remarks
Roland Suess	2015-10-05	1.0.0	Integration of Renesas package AUTOSAR_RH850_P1x_MCAL_E4.03
Andrej Gazvoda	2015-10-21	1.0.1	Integration of Renesas package AUTOSAR_RH850_P1x_MCAL_Ver4.00.04
Andrej Gazvoda	2015-10-21	1.0.2	Mantis_0026358_HotFix_20150226
Andrej Gazvoda	2016-07-21	1.1.0	Integration of Renesas package AUTOSAR_RH850_P1x_MCAL_Ver4.01.00
Andrej Gazvoda	2016-08-19	1.1.80	Integration of Renesas package AUTOSAR_RH850_P1x_MCAL_Ver4.01.01_Pre_ Release_CW32 Special Release for Nexteer

Reference Documents

No.	Source	Title	Version
[1]	Vector	TechnicalReference_3rdParty-MCAL-Integration.pdf	1.02.00

Scope of the Document

This document contains information about the integration of 3rd Party MCAL into Vector software stack.

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1 MCAL Integration

1.1 Type of Integration

Comfort Integration

Vector tool DaVinci Configurator 5 is used for configuration

- > as comfort editor for Mcu component
- > as generic editor for other MCAL modules

Recommended workflow:

Generation and changes in configuration are done in DaVinci Configurator.

1.2 MCAL Location within SIP

The 3rd Party MCAL can be found in `.\ThirdParty\Mcal_Rh850P1x\Supply`. Please refer to chapter 'First Steps' in document `TechnicalReference_3rdParty-MCAL-Integration.pdf` [1].

1.3 Supported µController

This integration supports the Renesas RH850P1M target with the following devices:

R7F701304
R7F701305
R7F701310
R7F701311
R7F701312
R7F701313
R7F701314
R7F701315
R7F701318
R7F701319
R7F701320
R7F701321
R7F701322
R7F701323
R7F701364
R7F701365
R7F701362
R7F701363
R7F701366
R7F701367.

1.4 Used MCAL Packages

> AUTOSAR_RH850_P1x_MCAL_Ver4.01.01_Pre_Release_CW32

1.5 Configuration Tools

DaVinci Configurator 5

1.6 Supported Compilers

GreenHills (MULTI 6.1.4) and Compiler 2013.5.5

2 Vector Comment

Please consider the attached `TechnicalReference_3rdParty-MCAL-Integration.pdf` [1] for further information regarding Vector integration and setup of a project.

2.1 Known Issues

2.1.1 McuDemEventParameterRefs

For the case that parameters `MCU_E_WRITE_TIMEOUT_FAILURE` and `MCU_E_CLOCK_FAILURE` are configured with the same `DemEventParameter`, the following error message appears:

```
ERR101042: The value for the parameters 'MCU_E_WRITE_TIMEOUT_FAILURE' and  
<MCU_E_CLOCK_FAILURE> present in the container  
'McuDemEventParameterRefs' should be unique.  
Path: /ActiveEcuC/Mcu/McuModuleConfiguration/McuDemEventParameterRefs
```

In fact, the values *should not be* unique.

2.1.2 SpiDemEventParameterRefs

For the case that parameters `SPI_E_HARDWARE_ERROR` and `SPI_E_DATA_TX_TIMEOUT_FAILURE` are configured with the same `DemEventParameter`, the following error message appears:

```
ERR083093: The reference path  
</ActiveEcuC/Dem/DemConfigSet/DemEventParameter>  
configured for the parameters 'SPI_E_HARDWARE_ERROR' and  
'SPI_E_DATA_TX_TIMEOUT_FAILURE' in the container  
'SpiDemEventParameterRefs' should be unique.  
Path: /ActiveEcuC/Spi/SpiDriver/SpiDemEventParameterRefs
```

In fact, the values *should not be* unique.

2.1.3 McuClockReferencePoint

Multiplicity of container `McuClockReferencePoint` in the Mcu description files `R403_MCU_P1M_04_05.arxml` `R403_MCU_P1M_10_to_15_18_to_23.arxml` was wrong.



Caution

You have to patch the description files in your Mcal package before you start the `3rdPartyMcalIntegrationHelperTool`. The necessary patches are already done [here](#):

3 Glossary and Abbreviations

3.1 Glossary

Term	Description
3 rd party components / MCAL	BSW modules not provided by Vector. Vector may have integrated the software within the SIP but does not take over any responsibility regarding functionality of these modules.
DaVinci Configurator	Configuration and generation tool for Vector MICROSAR components

Table 3-1 Glossary

3.2 Abbreviations

Abbreviation	Description
MCAL	Microcontroller Abstraction Layer
AUTOSAR	Automotive Open System Architecture
SIP	Software Integration Package (as provided by Vector)

Table 3-2 Abbreviations

4 Contact

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