Release Notes for RENESAS RH850/P1M-C

RENESAS_SW-AUTOSAR-P1M-C: MCAL Ver4.02.01.D

Beta Quality

1.1   Purpose

To deliver AUTOSAR R4.0.3 MCAL software for P1M-C Ver4.02.01.D release using the following inputs.

Device Manual: r01uh0517ej0121-rh850p1x-c_Open.pdf

Device File: DF-RH850P1x-C-EE_V121_1.zip

Operating Precautions: R01TU0087ED0103_RH850P1M-C.pdf

Modules supported: DIO and PORT

1.2   Package information

Product	RH850/P1x-C
Variant	P1M-C
Product Release Version	Ver4.02.01.D
AUTOSAR Specification Version	R4.0.3
Device tested on	R7F701372
Devices supported	R7F701373, R7F701374
Release Date	30-June-2017

1.3   Tools

1.3.1   GHS

Tool	Version	Options
Green Hills Multi	multi_616 Compiler: 2015.1.7 Executor Version: V2.21.00.06	X1X/common_platform/generic/compiler/4.0.3/ghs/make/ghs_rh850_r4.0.3_defs.mak

	850eserv2 Version: V2.030	

1.3.2 Configuration code generator

Tool	Version	Options
ECU Spectrum	4.0.14	-

1.3.3 Additional software

Tool	Version	Options
AMDC	1.0.13	-
MCAL Gen	2.06.03	-
QAC source code Analyser	8.1.1-R	-

1.4 Generic Information

1.4.1 Release Target

Processor	R7F701373, R7F701374
Module	Generic
Getting Started Document for P1x-C MCAL Driver	R20UT3828EJ0101-AUTOSAR.pdf – V1.0.3
AUTOSAR Modules Overview	R20UT3827EJ0101-AUTOSAR.pdf – V1.0.3
Date	30-June-2017

1.4.2 Release Items

Filename	Version	Change Description
Common Files		
ComStack_Types.h	1.0.0	No change for release Ver4.02.01.D
Std_Types.h	1.0.1	No change for release Ver4.02.01.D
Platform_Types.h	1.0.0	No change for release Ver4.02.01.D
rh850_Types.h	1.0.1	No change for release Ver4.02.01.D
Compiler Files		
MemMap.h	1.0.4	Following changes are made in Ver4.02.01.D: 1. As per ARDAAAF-2059,

PREFIX and INIT POLICY are modified for the

memory sections of RAMTST module.

2. As per ARDAAAF-2175, Removed unwanted memory section

   RAMTST_START_SEC_CODE_FAST and added memory section

   RAMTST_59_RENESAS_START_SEC_APPL_CODE for RAMTST

   module.

3. As per ARDAAAF-2053, NOININT sections are changed as

   NO_INIT and FR_59_RENESAS_START_SEC_DBTOC_DATA_

   UNSPECIFIED has been changed as FR_59_RENESAS_START_

   SEC_DBTOC_DATA_UNSPECIFIED.

4. As per ARDAAAF-2177, following sections are removed

   FR_59_RENESAS_START_SEC_VAR_NO_INIT_BOOLEAN

   FR_59_RENESAS_STOP_SEC_VAR_NO_INIT_BOOLEAN

   FR_59_RENESAS_START_SEC_VAR_FAST_BOOLEAN

   FR_59_RENESAS_STOP_SEC_VAR_FAST_BOOLEAN

   FR_59_RENESAS_START_SEC_VAR_8

   FR_59_RENESAS_STOP_SEC_VAR_8

   FR_59_RENESAS_START_SEC_VAR_NO_INIT_8

   FR_59_RENESAS_STOP_SEC_VAR_NO_INIT_8

   FR_59_RENESAS_START_SEC_VAR_FAST_8

   FR_59_RENESAS_STOP_SEC_VAR_FAST_8

   FR_59_RENESAS_START_SEC_VAR_16

   FR_59_RENESAS_STOP_SEC_VAR_16

   FR_59_RENESAS_START_SEC_VAR_FAST_16

   FR_59_RENESAS_STOP_SEC_VAR_FAST_16

   FR_59_RENESAS_START_SEC_VAR_32

   FR_59_RENESAS_STOP_SEC_VAR_32

   FR_59_RENESAS_START_SEC_VAR_FAST_32

   FR_59_RENESAS_STOP_SEC_VAR_FAST_32

   FR_59_RENESAS_START_SEC_VAR_NO_INIT_UNSPECIFIED

   FR_59_RENESAS_STOP_SEC_VAR_NO_INIT_UNSPECIFIED

   FR_59_RENESAS_START_SEC_VAR_POWER_ON_INIT_UNSP ECIFIED

   FR_59_RENESAS_STOP_SEC_VAR_POWER_ON_INIT_UNSPE CIFIED

		FR_59_RENESAS_START_SEC_VAR_FAST_UNSPECIFIED
		FR_59_RENESAS_STOP_SEC_VAR_FAST_UNSPECIFIED
		FR_59_RENESAS_START_SEC_CONFIG_VAR_NO_INIT_UNSPECIFIED
		FR_59_RENESAS_STOP_SEC_CONFIG_VAR_NO_INIT_UNSPECIFIED
		FR_59_RENESAS_START_SEC_CONST_BOOLEAN
		FR_59_RENESAS_STOP_SEC_CONST_BOOLEAN
		FR_59_RENESAS_START_SEC_CONST_8
		FR_59_RENESAS_STOP_SEC_CONST_8
		FR_59_RENESAS_START_SEC_CONST_16
		FR_59_RENESAS_STOP_SEC_CONST_16
		FR_59_RENESAS_START_SEC_CONFIG_CONST_UNSPECIFIED
		FR_59_RENESAS_STOP_SEC_CONFIG_CONST_UNSPECIFIED
		FR_59_RENESAS_START_SEC_DBTOC_CONFIG_CONST_UNSPECIFIED
		FR_59_RENESAS_STOP_SEC_DBTOC_CONFIG_CONST_UNSPECIFIED
		FR_59_RENESAS_START_SEC_CODE
		FR_59_RENESAS_STOP_SEC_CODE
		FR_59_RENESAS_START_SEC_STATIC_CODE
		FR_59_RENESAS_STOP_SEC_STATIC_CODE
		FR_59_RENESAS_START_SEC_CODE_FAST
		FR_59_RENESAS_STOP_SEC_CODE_FAST
	5.	As per ARDAAAF-2050, NOINIT sections are changed as NO_INIT, PREFIX are added, ETH_59_RENESAS_START_SEC_DBTOC_DATA_UNSPECIFIED has been changed as ETH_59_RENESAS_START_SEC_DATA_ UNSPECIFIED, ETH_59_START_SEC_APPL_CODE to ETH_59_RENESAS_START_SEC_CODE_FAST and following ROM memory tag updated: ETH_PUBLIC_CODE_ROM ETH_PRIVATE_CODE_ROM ETH_BUFFER_CODE_ROM

		6. As per ARDAAAF-2174, following sections are removed
		ETH_59_START_SEC_VAR_NOINIT_BOOLEAN
		ETH_59_START_SEC_VAR_FAST_BOOLEAN
		ETH_59_START_SEC_VAR_8
		ETH_59_START_SEC_VAR_FAST_8
		ETH_59_START_SEC_VAR_NOINIT_16
		ETH_59_START_SEC_VAR_FAST_16
		ETH_59_START_SEC_VAR_NOINIT_32
		ETH_59_START_SEC_VAR_FAST_32
		ETH_59_START_SEC_CONFIG_VAR_NOINIT_UNSPECIFIED
		ETH_59_START_SEC_CONST_BOOLEAN
		ETH_59_START_SEC_CONST_8
		ETH_59_START_SEC_CONST_16
		ETH_59_START_SEC_CONST_32
		ETH_59_START_SEC_SCHEDULER_CODE
		ETH_59_STOP_SEC_VAR_NOINIT_BOOLEAN
		ETH_59_STOP_SEC_VAR_FAST_BOOLEAN
		ETH_59_STOP_SEC_VAR_8
		ETH_59_STOP_SEC_VAR_FAST_8
		ETH_59_STOP_SEC_VAR_NOINIT_16
		ETH_59_STOP_SEC_VAR_FAST_16
		ETH_59_STOP_SEC_VAR_NOINIT_32
		ETH_59_STOP_SEC_VAR_FAST_32
		ETH_59_STOP_SEC_CONFIG_VAR_NOINIT_UNSPECIFIED
		ETH_59_STOP_SEC_CONST_BOOLEAN
		ETH_59_STOP_SEC_CONST_8
		ETH_59_STOP_SEC_CONST_16
		ETH_59_STOP_SEC_CONST_32
		ETH_59_STOP_SEC_SCHEDULER_CODE
		7. As per ARDAAAF-2178, following sections are removed
		FLSTST_START_SEC_VAR_BOOLEAN
		FLSTST_START_SEC_VAR_NOINIT_BOOLEAN
		FLSTST_START_SEC_VAR_FAST_BOOLEAN
		FLSTST_START_SEC_VAR_8
		FLSTST_START_SEC_VAR_NOINIT_8

		FLSTST_START_SEC_VAR_FAST_8
		FLSTST_START_SEC_VAR_16
		FLSTST_START_SEC_VAR_NOINIT_16
		FLSTST_START_SEC_VAR_FAST_16
		FLSTST_START_SEC_VAR_NOINIT_32
		FLSTST_START_SEC_VAR_FAST_32
		FLSTST_START_SEC_VAR_FAST_UNSPECIFIED
		FLSTST_START_SEC_CONFIG_VAR_NOINIT_UNSPECIFIED
		FLSTST_START_SEC_SCHEDULER_CODE
		FLSTST_START_SEC_BUFFER_CODE
		FLSTST_STOP_SEC_VAR_BOOLEAN
		FLSTST_STOP_SEC_VAR_NOINIT_BOOLEAN
		FLSTST_STOP_SEC_VAR_FAST_BOOLEAN
		FLSTST_STOP_SEC_VAR_8
		FLSTST_STOP_SEC_VAR_NOINIT_8
		FLSTST_STOP_SEC_VAR_FAST_8
		FLSTST_STOP_SEC_VAR_16
		FLSTST_STOP_SEC_VAR_NOINIT_16
		FLSTST_STOP_SEC_VAR_FAST_16
		FLSTST_STOP_SEC_VAR_NOINIT_32
		FLSTST_STOP_SEC_VAR_FAST_32
		FLSTST_STOP_SEC_VAR_FAST_UNSPECIFIED
		FLSTST_STOP_SEC_CONFIG_VAR_NOINIT_UNSPECIFIED
		FLSTST_STOP_SEC_SCHEDULER_CODE
		FLSTST_STOP_SEC_BUFFER_CODE

8. As per ARDAAAF-2052,

   PREFIX and INIT POLICY are modified for the

   memory sections of FLSTST module.

9. As per ARDAAAF-2055,

   PREFIX and INIT POLICY are modified for the

   memory sections of LIN module.

10. As per ARDAAAF-2176,

    LIN_START_SEC_DBTOC_DATA_UNSPECIFIED

    LIN_STOP_SEC_DBTOC_DATA_UNSPECIFIED was removed.

11. As per ARDAAAF-2473,

		SPI_59_RENESAS_START_SEC_PUBLIC_CODE, SPI_59_RENESAS_START_SEC_PRIVATE_CODE and SPI_59_RENESAS_START_SEC_CODE_FAST were updated.
Compiler.h	1.0.1	No change for release Ver4.02.01.D
Compiler_Cfg.h	1.0.2	No change for release Ver4.02.01.D
Common Stubs	-	Stub files required to run the sample application of the driver.
Getting Started MCAL Driver User Manual		
R20UT3828EJ0101-AUTOSAR.pdf	1.0.3	No change for release Ver4.02.01.D
Module Overview User Manual		
R20UT3827EJ0101-AUTOSAR.pdf	1.0.3	No change for release Ver4.02.01.D

1.4.3   Fixed Issues

ID	Description
NA	Please refer to the Fixed issues list as shared from Renesas Ref. P1xC_FixedIssues_Ver4.02.01.D.xlsx

1.4.4   Known Issues

ID	Description
NA	Please refer to the Known issues list as shared from Renesas Ref. P1xC_OpenMarket_KnownIssues_CW26_2017.xlsx

1.5　Module Index

DIO

PORT

2 DIO

2.1 Target Info

Processor	R7F701373, R7F701374.
Module	DIO
Software Version	1.0.4
Embedded User Manual	R20UT3639EJ0102-AUTOSAR.pdf – V1.0.4
Tool User Manual	R20UT3640EJ0102-AUTOSAR.pdf – V1.0.4
Date	30-June-2017

2.2 Release Items

File	Version	Change Description
Configuration Files		
R403_DIO_P1X-C_73.arxml	1.0.1	1. As per ARDAAAF-2241, DioChannelId and DioPortOffset ranges corrected. 2. As per ARDAAAF-2475, updated description for DioMaskedWritePortApi and DioPortName
R403_DIO_P1X-C_74.arxml	1.0.1	1. As per ARDAAAF-2241, DioChannelId and DioPortOffset ranges corrected. 2. As per ARDAAAF-2475, updated description for DioMaskedWritePortApi and DioPortName
Generation Files		
R403_DIO_P1x-C_BSWMDT.arxml	1.0.4	SW-PATCH-VERSION is updated.
Source Files		
Dio.c	2.0.2	1. As per ARDAAAF-2475, a. Added access direction(Read/Write) for global variables in the function banner of all API's. b. Added one space between if and opening parenthesis and added a space after comma in the argument list of the macro DIO_CHECK_WRITE_VERIFY_RUNTIME inside the Dio_FlipChannel API to correct the style format. c. Corrected the alignment in Dio_WritePort API and in revision history banner. d. Renamed Dio_SpConfigPtr to Dio_GpConfigPtr. e. Requirement IDs EAAR_PN0061_FR_0018 and EAAR_PN0061_FR_0020 renamed as per new MRS tag 1.7.

		f. Unwanted QAC messages removed. 2. As per ARDAAAF-2510, UT Tag "DIO_UT_001" added for the uncovered parts of the code.
Dio_Ram.c	1.0.4	As per ARDAAAF-2475, a. Updated the QAC justification message for Msg(2:3211). b. Corrected the alignment in revision history banner. c. Renamed Dio_SpConfigPtr to Dio_GpConfigPtr.
Dio_Version.c	1.0.3	As per ARDAAAF-2475, Corrected the alignment in revision history banner.
Dio.h	1.0.4	As per ARDAAAF-2475, Corrected the alignment in revision history banner.
Dio_Debug.h	1.0.3	As per ARDAAAF-2475, Corrected the alignment in revision history banner.
Dio_RegWrite.h	1.0.2	As per ARDAAAF-2475, a. Unused macro DIO_WV_DISABLE is removed. b. Added one space after if condition to correct the style format. c. Corrected the alignment of revision history banner.
Dio_PBTypes.h	1.0.4	As per ARDAAAF-2475, a. Added one space after the closing brace of structure inside the union Dio_PortData. b. Corrected the alignment in revision history banner.
Dio_Ram.h	1.0.3	As per ARDAAAF-2475, a. Corrected the alignment in revision history banner. b. Renamed Dio_SpConfigPtr to Dio_GpConfigPtr.
Dio_Version.h	1.0.3	As per ARDAAAF-2475, Corrected the alignment in revision history banner.
Dio_Hardware_c	1.0.4	As per ARDAAAF-2475, a. Updated the QAC justification message for Msg(2:3211). b. Corrected the alignment in revision history banner.
Dio_Hardware_h	1.0.4	As per ARDAAAF-2475, Corrected the alignment in revision history banner.
Dio_Cfg_h	1.0.4	1. As per ARDAAAF-2414, unwanted macros DIO_MAXNOOFPORT, DIO_MAXNOOFCHANNEL, and DIO_INVALID_CHANNEL_GROUP are removed. 2. As per ARDAAAF-2475, a. Corrected the alignment in revision history banner. b. Removed the unused macro DIO_PNOT_OFFSET_NONJTAG.
Dio_Cbk_h	1.0.2	As per ARDAAAF-2475, Corrected the alignment in revision history banner.

Dio_Lcfg_c	1.0.3	As per ARDAAAF-2475, a. Updated the QAC justification message for Msg(2:3211). b. Corrected the alignment in revision history banner.	
Dio_PBcfg_c	1.0.4	1. As per ARDAAAF-2414, unwanted macro DIO_INVALID_CHANNEL_GROUP are removed. 2. As per ARDAAAF-2475, a. Updated the QAC justification message for Msg(2:3211). b. Corrected the alignment in revision history banner.	
Dio_Validate	1.0.3	As per ARDAAAF-2475, a. Corrected the alignment in revision history banner. b. Corrected the description of error message ERR_59_120_023.	
Sample Application Files			
App_DIO_P1x-C_Sample.c	1.0.2	No change for release Ver4.02.01.D.	
App_DIO_Device_Sample.h	1.0.2	No change for release Ver4.02.01.D.	
User Manual Files			
R20UT3639EJ0102-AUTOSAR.pdf	1.0.4	The following changes are made: 1. Path of the PDF and Sample Application is updated in section 13.2. 2. Updated section 13.3 with latest memory consumption, stack depth and throughput details. 3. Updated the R number of the Tool User Manual in Chapter 3 and Chapter 9. 4. Software version in the chapter 14 is updated.	
R20UT3640EJ0102-AUTOSAR.pdf	1.0.4	1. Updated Table 8 1 to change the parameter type and parameter range of the parameter DioWriteVerify'. 2. Updated R number of the Component User Manual in Chapter 6	

2.3   Fixed Issues

ID	Description
NA	Please refer to the Fixed issues list as shared from Renesas Ref. P1xC_FixedIssues_Ver4.02.01.D.xlsx

2.4   Known Issues

ID	Description
NA	Please refer to the Known issues list as shared from Renesas

Ref. P1xC_OpenMarket_KnownIssues_CW26_2017.xlsx |

3 PORT

3.1   Target Info

Processor	R7F701373, R7F701374.
Module	PORT
Software Version	1.0.4
Embedded User Manual	R20UT3653EJ0101-AUTOSAR.pdf – V1.0.4
Tool User Manual	R20UT3654EJ0101-AUTOSAR.pdf – V1.0.4
Date	30-June-2017

3.2   Release Items

File	Version	Change Description
Configuration Files		
R403_PORT_P1X-C_73.arxml	1.0.2	No change for release Ver4.02.01.D
R403_PORT_P1X-C_74.arxml	1.0.1	No change for release Ver4.02.01.D.
Generation Files		
R403_PORT_P1x-C_BSWMDT.arxml	1.0.4	Following change made 1. SW-VERSION tag is updated.
Source Files		
Port.c	1.0.4	As part of ARDAAAF-2484, following changes are made: 1. Alignment and Spacing updated as per coding guidelines. 2. LucReturnValue is initialized in Port_SetPinDirection, Port_SetPinMode, Port_SetPinDefaultMode, Port_SetPinDefaultDirection. 3. LulPortDirectionLucMid, LucDnfaIndex, LucNoOfRegs, LucFclaIndex, LucFclaCTLindex initialized with PORT_ZERO. 4. MISRA warning (4:2962) removed. 5. Lucsize variable name changed to LucSize.
Port_Ram.c	1.0.3	No change for release Ver4.02.01.D.
Port_Version.c	1.0.2	No change for release Ver4.02.01.D
Port.h	1.0.4	As part of ARDAAAF-2484, following change made: 1. Alignment and spacing corrected..

Port_Debug.h	1.0.1	No change for release Ver4.02.01.D
Port_PBTypes.h	1.0.4	As part of ARDAAAF-2484, following changes are made: 1. Unused macros removed. 2. Alignment and spacing corrected. 3. Filter switch added for Port_GstFCLARegs and Port_GstDNFARegs. 4. Removed array index from Port_HardwareReg array.
Port_Ram.h	1.0.3	No change for release Ver4.02.01.D
Port_Types.h	1.0.3	As part of ARDAAAF-2484, following change made: 1.PORT_ESDD_UD_113 added for Port_Pin_Direction union
Port_Version.h	1.0.1	No change for release Ver4.02.01.D
Port_RegWrite.h	1.0.2	As part of ARDAAAF-2484, following change made: 1. Spelling of replaced corrected in Msg(4:3453).
CommonHelper	0.0.3	No change for release Ver4.02.01.D
Port_Hardware_c	1.0.2	No change for release Ver4.02.01.D
Port_Hardware_h	1.0.2	No change for release Ver4.02.01.D
Port_Cfg_h	1.0.3	No change for release Ver4.02.01.D
Port_Cbk_h	1.0.1	No change for release Ver4.02.01.D
Port_PBcfg_c	1.0.3	No change for release Ver4.02.01.D
Port_Validate	1.0.3	No change for release Ver4.02.01.D
config.xml	-	No change for release Ver4.02.01.D
Sample Application Files		
App_PORT_P1x-C_Sample.c	2.0.0	No change for release Ver4.02.01.D
App_PORT_Device_Sample.h	2.0.0	No change for release Ver4.02.01.D
User Manual Files		
R20UT3653EJ0102-AUTOSAR.pdf	1.0.4	Following changes are made 1. Memory and Throughput details updated in chapter 13. 2. R-Number updated.
R20UT3654EJ0102-AUTOSAR.pdf	1.0.4	Following changes are made 1. R-Number updated.

3.3   Fixed Issues

ID	Description

NA	Please refer to the Fixed issues list as shared from Renesas
	Ref. P1xC_FixedIssues_Ver4.02.01.D.xlsx

3.4   Known Issues

ID	Description
NA	Please refer to the Known issues list as shared from Renesas
	Ref. P1xC_OpenMarket_KnownIssues_CW26_2017.xlsx