

AUTOSAR MCAL R4.0.3

User's Manual

FLS Driver Component Ver.1.0.3
Generation Tool User's Manual

Target Device:
RH850/P1x

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Abbreviations and Acronyms

Abbreviation / Acronym	Description
AUTOSAR	AUTomotive Open System ARchitecture
BSWMDT	Basic Software Module Description Template
DEM/Dem	Diagnostic Event Manager
ECU	Electronic Control Unit
FLS	FLash Driver
id	Identifier
MCAL	Microcontroller Abstraction Layer
MCU	MicroController Unit
XML	eXtensible Mark-up Language

Definitions

Terminology	Description
BSWMDT File	This file is the template for the Basic Software Module Description.
Configuration XML File	This file contains the setting of command line options.
ECU Configuration Description File	Input file to FLS Driver Generation Tool. It is generated by ECU Configuration Editor.
SI.No	Serial Number.
Translation XML File	This file contains the translation and device specific header file path.

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Chapter 1 Introduction

The FLS Software component provides the service for initializing the whole FLS structure of the microcontroller.

The FLS Software Component comprises of two sections as Embedded Software and the Generation Tool to achieve scalability and configurability.

The document describes the features of the FLS Software Generation Tool. FLS Software Generation Tool is a command line tool that extracts information from ECU Configuration Description File and generates FLS Software C Header files and Source Files (Fls_Cbk.h, Fls_Cfg.h, fcl_cfg.h, fdl_descriptor.h, fcl_descriptor.h and Fls_PBcfg.c).

This document contains information on the options, input and output files of the FLS Software Generation Tool. In addition, this manual covers a step-by-step procedure for the usage of tool.

ECU Configuration Description File contains information about FLS configuration.

1.1 Document Overview

This user manual is organized as given in the table below:

Section	Contents
Section 1 (Introduction)	Provides an introduction to the document and explains how information is organized in this manual.
Section 2 (Reference)	Provides a list of documents referred while developing this document.
Section 3 (FLS Driver Generation Tool Overview)	Provides the component overview of FLS Driver.
Section 4 (Input Files)	Provides information about ECU Configuration Description File.
Section 5 (Output Files)	Explains the output files that are generated by the FLS Driver Generation Tool.
Section 6 (Precautions)	Contains precautions to be taken during configuration of ECU Configuration Description File.
Section 7 (User Configuration Validation)	Describes about user configuration validation done by the FLS Driver Generation Tool.
Section 8 (Messages)	Describes all the Error/Warning/Information messages of R4.0.3 which helps the user to understand the probable reason for the same.
Section 9 (Notes)	Provides notes to help the user to understand this document better.

Chapter 2 Reference

2.1 Reference Documents

The following table lists the documents referred to develop this document:

Sl.No.	Title	Version
1.	Specification of Flash Driver for R4.0.3 AUTOSAR_SWS_FlashDriver.pdf	3.2.0
2.	<u>P1x Parameter Definition File</u> R403_FLS_P1M_04_05.arxml	1.1.1
3.	<u>P1x Parameter Definition File</u> R403_FLS_P1M_10_to_15.arxml	1.1.1
4.	<u>P1x Parameter Definition File</u> R403_FLS_P1M_18_to_23.arxml	1.0.1

2.2 Trademark Notice

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Chapter 3 FLS Driver Generation Tool Overview

FLS Driver Generation Tool overview is shown below.

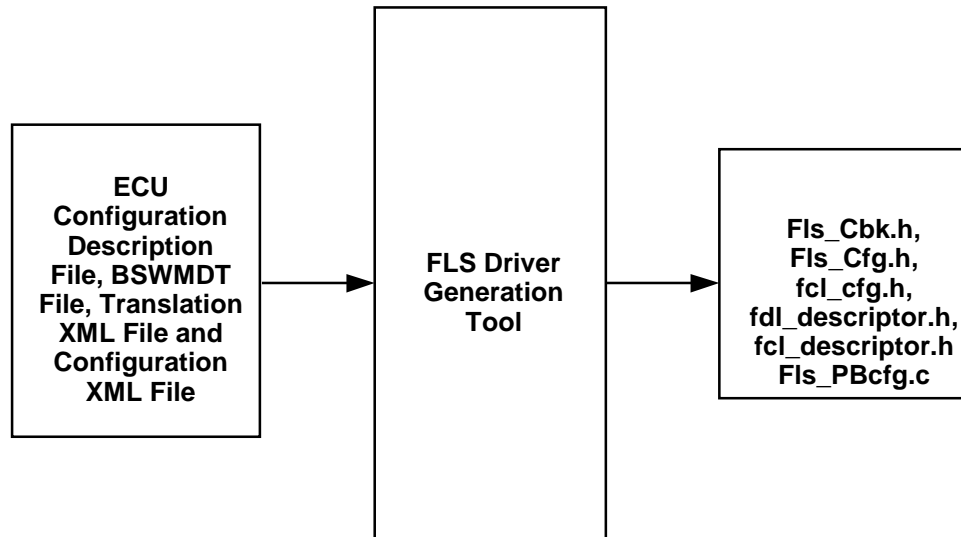


Figure 3-1 Overview of FLS Driver Generation Tool

FLS Driver Generation Tool is a command line tool that extracts, analyzes the configuration details provided in the input file and validates correctness of the data and provides scalability and configurability for FLS Driver module. It accepts ECU Configuration Description File(s), BSWMDT File, Translation XML File and Configuration XML File as input and displays appropriate context sensitive error messages for wrong input and exits. Tool creates the Log file Fls.log) that contains the list of Error/Warning/Information messages in the output directory.

For the error free input file, the tool generates the following output files:

If FLS Driver is configured for Data Flash then generation tool will generate Fls_Cfg.h, Fls_Cbk.h, Fls_PBcfg.c and fdl_descriptor.h files.

If FLS Driver is configured for Code Flash then generation tool will generate Fls_Cfg.h, Fls_Cbk.h, Fls_PBcfg.c, fcl_Cfg.h and fcl_descriptor.h files.

Fls_Cfg.h, Fls_Cbk.h, fcl_cfg.h, fdl_descriptor.h, fcl_descriptor.h will be compiled and linked with FLS Driver Component. Fls_PBcfg.c will be compiled and linked separately from the other C Source files and placed in flash.

ECU Configuration Description File can be created or edited using ECU Configuration Editor.

Remark

- In case of errors the generation tool returns a 1, in case of no errors the generation tool returns a 0.
- FLS Driver Generation Tool uses “Common Published Information” from FLS module specific BSWMDT File. FLS module specific BSWMDT File should not be updated manually since it is “Static Configuration” file.

Chapter 4 Input Files

FLS Driver Generation Tool accepts ECU Configuration Description File(s), BSWMDT File, Translation XML File and Configuration XML File as input. FLS Driver Generation Tool needs information about FLS Driver module. Hence ECU Configuration Description File should contain configuration of

FLS Driver module. Generation Tool ignores any other AUTOSAR component configured in the ECU Configuration Description File. ECU Configuration Description File can be generated using configuration editor.

ECU Configuration Description File must comply with AUTOSAR standard ECU Configuration Description File format.

Remark The detailed explanation about the parameters and containers are found in Parameter Definition File mentioned in the Reference Documents section.

Chapter 5 Output Files

FLS Driver Generation Tool generates configuration details in C Header and C Source files (Fls_Cbk.h, Fls_Cfg.h, fcl_cfg.h, fdl_descriptor.h, fcl_descriptor.h, Fls_PBcfg.c).

The content of each output file is given in the table below:

Table 5-1 Output Files Description

Output File	Details
Fls_Cbk.h	This file contains call-back functions prototype declarations.
Fls_Cfg.h	This file contains pre-compile time parameters.
Fls_PBcfg.c	This file contains post-build time parameters.
fdl_descriptor.h	This file contains FDL run-time configuration descriptor variable related defines. This file will be generated, if the FLS configured as Data Flash.
fcl_cfg.h	This file contains pre-compile time parameters related to FCL Library. This file will be generated, if the FLS configured as Code Flash.
fcl_descriptor.h	This file pre-compile time parameters related to FCL descriptor. This file will be generated, if the FLS configured as Code Flash.

Remark Output files generated by FLS Driver Generation Tool should not be modified or edited manually.

Chapter 6 Precautions

- ECU Configuration Description File and BSWMDT File must comply with AUTOSAR standard for R4.0.3 ECU Configuration Description File and BSWMDT File respectively.
- The input file must contain FLS Driver module.
- Default Translation XML File (Fls_X1x.trxml) should be present in same location of Fls_X1x.exe when the variant specific trxml file is not given as input in command line.
- Default Configuration XML File (Fls_X1x.cfgxml) must be present in same location of Fls_X1x.exe.
- If Translation XML File is not provided on the command line, Fls_X1x.trxml which is present in same location of Fls_X1x.exe is considered as 'default' Translation XML File.
- If Configuration XML File is not provided on the command line, Fls_X1x.cfgxml which is present in same location of Fls_X1x.exe is considered as 'default' Configuration XML File.
- Translation XML File should contain the file extension '.trxml'.
- Configuration XML File should contain the file extension '.cfgxml'.
- All the function names and the string values configured should follow C syntax for variables. It can only contain alphanumeric characters and "_". It should start with an alphabet.
- If the output files generated by FLS Driver Generation Tool are modified externally, then they may not produce the expected results or may lead to error/warning/Information messages.
- Short Name for a container should be unique within a name space.
- An error free ECU Configuration Description File generated from configuration editor has to be provided as input to the FLS Driver Generation Tool. Otherwise Tool may not produce the expected results or may lead to errors/warnings/information messages.
- User has to make sure that the respective device specific configuration file is used otherwise Tool may not produce the expected results or may lead to errors/warnings/information messages.
- The description file should always be generated using AUTOSAR specified configuration editor and it should not be edited manually.

Remark Please refer the FLS Component User Manual for deviations from AUTOSAR specifications, if any.

Chapter 7 User Configuration Validation

This section provides help to analyze the error, warning and information messages displayed during the execution of FLS Driver Generation Tool. It ensures conformance of input file with syntax and semantics. It also performs validation on the input file for correctness of the data.

For more details on list of Error/Warning/Information messages that are displayed as a result of input file(s) validation, refer Chapter 8 “*Messages*”.

The Generation Tool displays error or warning or information when the user has configured incorrect inputs. The format of Error/Warning/Information message is as shown below.

- ERR/WRN/INF<mid><xxx>: <Error/Warning/Information Message>.

where,

<mid>: 092- FLS Driver Module id (092) for user configuration checks.

000 - for command line checks.

<xxx>: 001-999 - Message id.

- File Name: Name of the file in which the error has occurred.
- Path: Absolute path of the container in which the parameter is present.

‘File Name’ and ‘Path’ need not be present for all Error/Warning/Information messages.

Chapter 8 Messages

The messages help to identify the syntax or semantic errors in the ECU Configuration Description File. Hence it ensures validity and correctness of the information available in the ECU Configuration Description File.

The following section gives the list of error, warning and information messages displayed by the Generation Tool.

8.1 Error Messages

ERR092001: Number of fields is not same for the entity 'Structure Name'.

This error occurs, if the number of fields is not same in the structure that is to be generated in the output file.

ERR092002: Field 'Field Name' is empty in the entity 'Structure Name'.

This error occurs, if the structure fields that are to be generated in the output file are empty.

ERR092003: 'FLS Driver / MCU Driver' Component is not present in the input file(s).

This error occurs, if FLS Driver or MCU Driver component is not present in the input ECU Configuration Description File(s).

ERR092004: The parameter 'parameter name' in the container 'container name' should be configured.

This error occurs, if any of the mandatory configuration parameter(s) mentioned below is (are) not configured in ECU Configuration Description File.

The list of mandatory parameters with respect to container is listed below:

Parameter Name	Container Name
FlsCancelApi	FlsGeneral
FlsCompareApi	
FlsDevErrorDetect	
FlsGetJobResultApi	
FlsGetStatusApi	
FlsSetModeApi	
FlsVersionInfoApi	
FlsVersionCheckExternalModules	
FlsCriticalSectionProtection	
FlsDeviceName	
FlsAccess	

Parameter Name	Container Name
FlsVirtualBoundaryAddress	
FlsTimeoutMonitoring	FlsGeneral
FlsUseInterrupts	
FlsEraseTime	
FlsReadTime	FlsPublishedInformation
FlsWriteTime	
FlsCancelTime	
FlsErasedValue	
FlsBlankCheckTime	
FlsSuspendTime	
FlsCallCycle	FlsConfigSet
FlsMaxReadNormalMode	
FlsMaxWriteNormalMode	
FlsMaxEraseNormalMode	FlsSector
FlsSectorIndex	
FlsSectorOption	
FlsNumberOfSectors	
FlsPageSize	
FlsSectorSize	
FlsSectorStartaddress	FlsDataFlash
FlsBlankCheck	
FlsDFBaseAddress	
FlsDFBlockSize	
FlsDFTotalBlocks	
FlsDFTotalSize	
FlsFdlCpuFrequency	
FlsBlankCheckApi	
FlsReadImmediateApi	
FlsSuspendApi	
FlsResumeApi	FlsCodeFlash
FlsCFTotalSize	
FlsCFSmallBlockBaseAddress	
FlsCFNormalBlockBaseAddress	
FlsCFSmallBlockSize	
FlsCFNormalBlockSize	
FlsCFTotalSmallBlocks	
FlsCFTotalNormalBlocks	
FlsFclRamAddress	
FlsCommandExecutionMode	
FlsFclCpuFrequency	
FlsCFEraseTime	
FlsCFWriteTime	
FlsCFCancelTime	
FlsMaxCFReadNormalMode	
FlsMaxCFWriteNormalMode	
FlsMaxCFEraseNormalMode	
FlsCFReadTime	

Parameter Name	Container Name
FLS_E_READ_FAILED	FlsDemEventParameterRefs
FLS_E_WRITE_FAILED	
FLS_E_READ_FAILED_DED	
FLS_E_ERASE_FAILED	
FLS_E_COMPARE_FAILED	

Remark

- The container FlsCodeFlash its parameters are mandatory only when the parameter FlsAccess is configured as FLS_CODEFLASH_ACCESS.
- The container FlsDataFlash its parameters are mandatory only when the parameter FlsAccess is configured as FLS_DATAFLASH_ACCESS.

ERR092007: The value configured for the parameter 'parameter name' should follow C syntax <[a-zA-Z][a-zA-Z0-9_]>.

This error occurs, if the value of configuration parameters mentioned in below table does not adhere to C syntax as if the value contains characters other than (a-z, A-Z, 0-9 or “_”). The parameter value should always start with an alphabet.

Parameter Name	Container Name
FlsJobEndNotification	FlsConfigSet
FlsJobErrorNotification	
FlsEccSedNotification	FlsDataFlash
FlsEccDedNotification	

ERR092012: The reference path <reference value> provided for the parameter 'parameter name' within the container 'FlsDemEventParameterRefs' is incorrect.

This error occurs, if the reference path <reference value> provided for the following parameters within the container 'FlsDemEventParameterRefs' is incorrect.

Parameter Name	Container Name
FLS_E_COMPARE_FAILED	FlsDemEventParameterRefs
FLS_E_ERASE_FAILED	
FLS_E_READ_FAILED	
FLS_E_WRITE_FAILED	
FLS_E_READ_FAILED_DED	

ERR092014: The value configured for the parameter 'parameter name' in the container 'FlsSector' should be unique within an 'FlsConfigSet'.

This error occurs, if the value configured for the following parameters in the container FlsSector is not unique within an FlsConfigSet.

Parameter Name	Container Name
----------------	----------------

FlsSectorIndex	FlsSector
FlsSectorOption	

ERR092015: The value configured for the parameter 'parameter name' in the container 'FlsSector' should be <actual value>, since the sector is configured as <value of FlsSectorOption>.

This error occurs, if the value configured for the following parameters in the container FlsSector is not as per below table.

FlsSectorOption	FlsNumberOfSector	FlsSectorSize
FLS_DF_SECTOR	512	64
FLS_CF_SMALL_BLK_SECTOR	8	8192
FLS_CF_NORMAL_BLK_SECTOR	14	32768

ERR092017: The value configured for the parameter 'parameter name' in the container 'container name' should be same for the FlsSectorIndex <value of FlsSectorIndex> across the multiple configuration set of 'FlsConfigSet'.

This error occurs, if the value configured for the following parameters in the respective container is not same for the FlsSectorIndex across the multiple configuration set of FlsConfigSet.

Parameter Name	Container Name
FlsSectorOption	FlsSector
FlsSectorSize	
FlsNumberOfSectors	
FlsSectorStartaddress	

ERR092018: The values configured for the parameters 'FlsEccSedNotification' and 'FlsEccDedNotification' in the container 'FlsDataFlash' and the values configured for the parameters 'FlsJobEndNotification' and 'FlsJobErrorNotification' in any of the 'FlsConfigSet' container should be unique.

This error occurs, if the values configured for the parameters 'FlsEccSedNotification' and 'FlsEccDedNotification' in the container 'FlsDataFlash' and the values configured for the parameters 'FlsJobEndNotification' and 'FlsJobErrorNotification' in any of the 'FlsConfigSet' container is not unique. For example, the following table shows the conditions when the error message occurs.

Container : FlsDataFlash		Container : FlsConfigSet	
FlsEccSedNotification	FlsEccDedNotification	FlsJobEndNotification	FlsJobErrorNotification
EccSedNotification	EccSedNotification	EccSedNotification	EccSedNotification

EccSedNotification	EccSedNotification	-	-
-	-	EccSedNotification	EccSedNotification
-	EccSedNotification	-	EccSedNotification

ERR092019: The value configured for the parameter 'parameter name' in the container 'FlsDemEventParameterRefs' should be same across the multiple configuration set of 'FlsConfigSet'.

This error occurs, if the value configured for the following parameters in the container FlsDemEventParameterRefs is not same across the multiple configuration set of FlsConfigSet.

Parameter Name	Container Name
FLS_E_COMPARE_FAILED	FlsDemEventParameterRefs
FLS_E_ERASE_FAILED	
FLS_E_READ_FAILED	
FLS_E_WRITE_FAILED	

ERR092020: The value configured for the parameter 'FlsSectorIndex' in the container 'FlsSector' should be same across the multiple configuration set of 'FlsConfigSet'.

This error occurs, if the value configured for the parameter FlsSectorIndex in the container FlsSector is not same across the multiple configuration set of FlsConfigSet.

ERR092021: The sub-container 'FlsDataFlash' and its parameters should be configured in 'FlsGeneral' container, since the parameter 'FlsAccess' in 'FlsGeneral' container is configured as <FLS_DATAFLASH_ACCESS>.

This error occurs, if the sub-container FlsDataFlash and its parameters is not configured in FlsGeneral container and the parameter FlsAccess in FlsGeneral container is configured as FLS_DATAFLASH_ACCESS.

ERR092022: The sub-container 'FlsCodeFlash' and its parameters should be configured in 'FlsGeneral' container, since the parameter 'FlsAccess' in 'FlsGeneral' container is configured as <FLS_CODEFLASH_ACCESS>.

This error occurs, if the sub-container FlsCodeFlash and its parameters is not configured in FlsGeneral container and the parameter FlsAccess in FlsGeneral container is configured as FLS_CODEFLASH_ACCESS.

ERR092023: The reference path of MCU <configured value of FlsFdlCpuFrequency> provided for the parameter 'FlsFdlCpuFrequency' in the container 'FlsDataFlash' is incorrect.

This error occurs, if the reference path of MCU provided for the parameter FlsFdlCpuFrequency in the container FlsDataFlash is incorrect.

ERR092024: The 'FlsSector' container should be configured with parameter 'FlsSectorOption' as 'FLS_DF_SECTOR', since the parameter 'FlsAccess' in 'FlsGeneral' container is configured as

<FLS_DATAFLASH_ACCESS>.

This error occurs, if the FlsSector container is not configured with parameter FlsSectorOption as FLS_DF_SECTOR and the parameter Flacks in FlsGeneral container is configured as FLS_DATAFLASH_ACCESS.

ERR092025: The 'FlsSector' container should be configured with parameter 'FlsSectorOption' as 'FLS_CF_NORMAL_BLK_SECTOR', since the parameter 'FlsAccess' in 'FlsGeneral' container is configured as <FLS_CODEFLASH_ACCESS>.

This error occurs, if the FlsSector container is not configured with parameter FlsSectorOption as FLS_CF_NORMAL_BLK_SECTOR and the parameter FlsAccess in FlsGeneral container is configured as FLS_CODEFLASH_ACCESS.

ERR092026: The 'FlsSector' container should be configured with parameter 'FlsSectorOption' as 'FLS_CF_SMALL_BLK_SECTOR', since the parameter 'FlsAccess' in 'FlsGeneral' container is configured as <FLS_CODEFLASH_ACCESS>.

This error occurs, if the FlsSector container is not configured with parameter FlsSectorOption as FLS_CF_SMALL_BLK_SECTOR and the parameter FlsAccess in FlsGeneral container is configured as FLS_CODEFLASH_ACCESS.

ERR092028: The value configured for the parameter 'FlsSectorStartaddress' should be within the range of <range of value> for the <configured value of FlsSectorOption>.

This error occurs, if the value configured for the parameter FlsSectorStartaddress is not within the below range.

FlsSectorOption	Range of value for FlsSectorStartaddress
FLS_DF_SECTOR	0 to (value configured for FlsVirtualBoundaryAddress - 1)
FLS_CF_SMALL_BLK_SECTOR	(value configured for FlsVirtualBoundaryAddress) to (value configured for FlsVirtualBoundaryAddress + value configured for FlsCFSmallBlockSize)
FLS_CF_NORMAL_BLK_SECTOR	(value configured for FlsVirtualBoundaryAddress + value configured for FlsCFSmallBlockSize + 1) to (value configured for FlsVirtualBoundaryAddress + value configured for FlsCFTotalSize)

ERR092029: The value configured for the parameter 'FlsTotalSize' should be (FlsNumberOfSectors * FlsSectorSize) since the parameter 'FlsAccess' in

'FlsGeneral' container is configured as <FLS_DATAFLASH_ACCESS>.

This error occurs, if the FlsGeneral container is not configured with parameter FlsTotalSize as FlsDFTotalSize and the parameter FlsAccess in FlsGeneral container is configured as FlsDataFlash.

ERR092030: The 'FlsGeneral' container should be configured with parameter "FlsTotalSize" as 'FlsCFTotalSize', since the parameter 'FlsAccess' in 'FlsGeneral' container is configured as <FlsCodeFlash>.

This error occurs, if the FlsGeneral container is not configured with parameter FlsTotalSize as FlsCFTotalSize and the parameter FlsAccess in FlsGeneral container is configured as FlsCodeFlash.

ERR092031: The 'FlsGeneral' container should be configured with parameter "FlsTotalSize" as sum of 'FlsCFTotalSize' and ' FlsDFTotalSize' , since the parameter 'FlsAccess' in 'FlsGeneral' container is configured as <FLS_DATA_CODE_FLASH_ACCESS >.

This error occurs, if the FlsGeneral container is not configured with parameter FlsTotalSize as sum of FlsDFTotalSize and FlsCFTotalSize and the parameter FlsAccess in FlsGeneral container is configured as FLS_DATA_CODE_FLASH_ACCESS.

8.2 Warning Messages

None

8.3 Information Messages

INF092001: The parameter 'parameter name' in the container 'FlsConfigSet' is not configured.

This information occurs, if the parameters FlsJobEndNotification or FlsJobErrorNotification in the container FlsConfigSet are not configured.

INF092002: The sub-container 'FlsCodeFlash' and its parameters in 'FlsGeneral' container are not considered for the implementation, since the parameter 'FlsAccess' in the 'FlsGeneral' container is configured as <FLS_DATAFLASH_ACCESS>.

This information occurs, if the sub-container FlsCodeFlash and its parameters in FlsGeneral container are configured and the parameter FlsAccess in the FlsGeneral container is configured as FLS_DATAFLASH_ACCESS.

INF092003: The sub-container 'FlsDataFlash' and its parameters in 'FlsGeneral' container are not considered for the implementation, since the parameter 'FlsAccess' in the 'FlsGeneral' container is configured as <FLS_CODEFLASH_ACCESS>.

This information occurs, if the sub-container FlsDataFlash and its parameters in FlsGeneral container are configured and the parameter FlsAccess in the FlsGeneral container is configured as FLS_CODEFLASH_ACCESS.

INF092004: The container 'FlsSector' having the short name <short name of FlsSector container> and its parameters are not considered for the implementation, since the parameter 'FlsSectorOption' for this sector is configured as <configured value of FlsSectorOption> and the parameter 'FlsAccess' in the 'FlsGeneral' container is configured as <FLS_DATAFLASH_ACCESS>.

This information occurs, if the container FlsSector with the parameter FlsSectorOption is configured as FLS_CF_SMALL_BLK_SECTOR or FLS_CF_NORMAL_BLK_SECTOR and the parameter FlsAccess in the FlsGeneral container is configured as FLS_DATAFLASH_ACCESS.

INF092005: The container 'FlsSector' having the short name <short name of FlsSector container> and its parameters are not considered for the implementation, since the parameter 'FlsSectorOption' for this sector is configured as <FLS_DF_SECTOR> and the parameter 'FlsAccess' in the 'FlsGeneral' container is configured as <FLS_CODEFLASH_ACCESS>.

This information occurs, if the container FlsSector with the parameter FlsSectorOption for this container is configured as FLS_DF_SECTOR and the parameter FlsAccess in the FlsGeneral container is configured as FLS_CODEFLASH_ACCESS.

Chapter 9 Notes

“Generation Tool” and “Tool” terminologies are used interchangeably to refer FLS Driver Generation Tool.

Revision History

Sl.No.	Description	Version	Date
1.	Initial Version	1.0.0	29-Oct-2013
2.	Following changes are made: <ul style="list-style-type: none"> Error messages ERR092010, ERR092018, ERR092029, ERR092030 and ERR092031 are added. Error message ERR092007 is updated. 	1.0.1	28-Jan-2014
3.	Following changes are made: <ul style="list-style-type: none"> FlsUseInterrupts parameter is added in FlsGeneral container in error message ERR092004 in section 8.1. Error Messages. FlsSuspendTime parameter is added in FlsPublishedInformation container in error message ERR092004 in section 8.1.1. Error Messages. FlsBlankCheckApi, FlsReadImmediateApi, FlsSuspendApi and FlsResumeApi parameters are added in FlsDataFlash container in error message ERR092004 in section 8.1.1. Error Messages. Error messages ERR092008, ERR092009 and ERR092010 are deleted and error message ERR092018 is updated in section 8.1 Error Messages. 	1.0.2	2-Sep-2014
4	The following changes are made: <ul style="list-style-type: none"> Pdf name and version are updated in Section 2.1 Added parameters FlsCancelTime and FlsCFCancelTime in the list of mandatory parameters in Section 8.1. The description of error ERR092029 is updated in Section 8.1. Updated version number and copyright year. 	1.0.3	24-Apr-2015

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SALES OFFICES

Renesas Electronics Corporation

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Refer to "http://www.renesas.com/" for the latest and detailed information.

Renesas Electronics America Inc.

2880 Scott Boulevard Santa Clara, CA 95050-2554, U.S.A.
Tel: +1-408-588-6000, Fax: +1-408-588-6130

Renesas Electronics Canada Limited

1101 Nicholson Road, Newmarket, Ontario L3Y 9C3, Canada
Tel: +1-905-898-5441, Fax: +1-905-898-3220

Renesas Electronics Europe Limited

Dukes Meadow, Millboard Road, Bourne End, Buckinghamshire, SL8 5FH, U.K.
Tel: +44-1628-585-100, Fax: +44-1628-585-900

Renesas Electronics Europe GmbH

Arcadiastrasse 10, 40472 Düsseldorf, Germany
Tel: +49-211-65030, Fax: +49-211-6503-1327

Renesas Electronics (China) Co., Ltd.

7th Floor, Quantum Plaza, No.27 ZhiChunLu Haidian District, Beijing 100083, P.R.China
Tel: +86-10-8235-1155, Fax: +86-10-8235-7679

Renesas Electronics (Shanghai) Co., Ltd.

Unit 204, 205, AZIA Center, No.1233 Lujiazui Ring Rd., Pudong District, Shanghai 200120, China
Tel: +86-21-5877-1818, Fax: +86-21-6887-7858 / -7898

Renesas Electronics Hong Kong Limited

Unit 1601-1613, 16/F., Tower 2, Grand Century Place, 193 Prince Edward Road West, Mongkok, Kowloon, Hong Kong
Tel: +852-2886-9318, Fax: +852 2886-9022/9044

Renesas Electronics Taiwan Co., Ltd.

7F, No. 363 Fu Shing North Road Taipei, Taiwan
Tel: +886-2-8175-9600, Fax: +886 2-8175-9670

Renesas Electronics Singapore Pte. Ltd.

1 HarbourFront Avenue, #05-10, Keppel Bay Tower, Singapore 098632
Tel: +65-6213-0200, Fax: +65-6278-8001

Renesas Electronics Malaysia Sdn.Bhd.

Unit 906, Block B, Menara Amcorp, Amcorp Trade Centre, No. 18, Jln Persiaran Barat, 46050 Petaling Jaya, Selangor Darul Ehsan, Malaysia
Tel: +60-3-7955-9390, Fax: +60-3-7955-9510

Renesas Electronics Korea Co., Ltd.

11F., Samik Laved' or Bldg., 720-2 Yeoksam-Dong, Kangnam-Ku, Seoul 135-080, Korea
Tel: +82-2-558-3737, Fax: +82-2-558-5141

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