Integration Manual - BVDIAG

Table of Contents

[1 Dependencies 2](#_Toc357692818)

[1.1 SWCs 2](#_Toc357692819)

[1.2 Functions to be provided to Integration Project 2](#_Toc357692820)

[2 Configuration 3](#_Toc357692821)

[2.1 Build Time Config 3](#_Toc357692822)

[2.2 Configuration Files to be provided by Integration Project 3](#_Toc357692823)

[2.2.1 Da Vinci Config generation 3](#_Toc357692824)

[2.2.2 Manual Configuration Changes 3](#_Toc357692825)

[3 Integration 4](#_Toc357692826)

[3.1 Required Global Data Inputs 4](#_Toc357692827)

[3.2 Optional Global Data Inputs 4](#_Toc357692828)

[3.3 Specific Include Path present 4](#_Toc357692829)

[4 Runnable Scheduling 5](#_Toc357692830)

[5 Memory Mapping 6](#_Toc357692831)

[5.1 Mapping 6](#_Toc357692832)

[5.2 Usage 6](#_Toc357692833)

[5.3 NvM Blocks 6](#_Toc357692834)

[6 Compiler Settings 6](#_Toc357692835)

[6.1 Preprocessor MACRO 6](#_Toc357692836)

[6.2 Optimization Settings 6](#_Toc357692837)

[7 Revision Control Log 7](#_Toc357692838)

# Dependencies

## SWCs

|  |  |
| --- | --- |
| Module | Required Feature |
| <None> |  |

Note : Referencing the external components should be avoided in most cases. Only in unavoidable circumstance external components should be refered. Developer should track the references.

## Global Functions(Non RTE) to be provided to Integration Project

< None>

# Configuration

## Build Time Config

|  |  |  |
| --- | --- | --- |
| Modules | Notes |  |
| <None> |  |  |

## Configuration Files to be provided by Integration Project

Ap\_BVDiag\_Cfg.h for checkpoint enables

### Da Vinci Parameter Configuration Changes

|  |  |  |
| --- | --- | --- |
| Parameter | Notes | SWC |
| B1\_BATTVOLTDIAG | This parameter will be turned ON only if customer requires $B1 NTC  STD\_ON : Enables NTC $B1 logic  STD\_Off : Disables NTC $B1 logic |  |

### DaVinci Interrupt Configuration Changes

|  |  |  |  |
| --- | --- | --- | --- |
| ISR Name | VIM # | Priority Dependency | Notes |
| <None> |  |  |  |

### Manual Configuration Changes

|  |  |  |
| --- | --- | --- |
| Constant | Notes | SWC |
| <None> |  |  |

# Integration

## Required Global Data Inputs

Batt\_Volt\_f32 from SER

CCLMSAActive\_Cnt\_lgc (Note : Only required for BMW as per its SER)

## Required Global Data Outputs

Sets BatteryVoltage Diagnostics

## Specific Include Path present

No

# Runnable Scheduling

This section specifies the required runnable scheduling.

|  |  |  |
| --- | --- | --- |
| Init | Scheduling Requirements | Trigger |
| None | None | Init |

|  |  |  |
| --- | --- | --- |
| Runnable | Scheduling Requirements | Trigger |
| BVDiag\_Per1 |  | 10ms |

**.**

# Memory Mapping

## Mapping

|  |  |  |
| --- | --- | --- |
| Memory Section | Contents | Notes |
| BVDIAG\_START\_SEC\_VAR\_CLEARED\_32 |  |  |

\* Each …START\_SEC… constant is terminated by a …STOP\_SEC… constant as specified in the AUTOSAR Memory Mapping requirements.

## Usage

|  |  |  |
| --- | --- | --- |
| Feature | RAM | ROM |
| <Memmap usuage info> |  |  |

Table 1: ARM Cortex R4 Memory Usage

## Non RTE NvM Blocks

|  |
| --- |
| Block Name |
| <None > |

Note : Size of the NVM block if configured in developer

## RTE NvM Blocks

|  |
| --- |
| Block Name |
| None |

Note : Size of the NVM block if configured in developer

# Compiler Settings

## Preprocessor MACRO

<Define all the preprocessor Macros needed and conditions when needed>.

## Optimization Settings

<Define Optimization levels that are needed and conditions when needed>.

# Revision Control Log

|  |  |  |  |
| --- | --- | --- | --- |
| **Rev #** | **Change Description** | **Date** | **Author** |
| 1 | Initial version | 13-Sep-13 | NRAR |