**Integration Manual**

**For**

**Adc0 Cfg And Use**

**VERSION: 3.0**

**DATE: 09-Jun-2016**

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**Location:** The official version of this document is stored in the Nexteer Configuration Management System.

**Revision History**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Author** | **Version** | **Date** |
| 1 | Initial version | Selva Sengottaiyan | 1.0 | 4-May-2015 |
| 2 | Updated for design rev. 2.0.0 | Rijvi | 2.0 | 05-Feb-2016 |
| 3 | Updated fro design rev 2.1.0 | Avinash James | 3.0 | 09-Jun-2016 |

**Table of Contents**

[1 Abbrevations And Acronyms 4](#_Toc453239547)

[2 References 5](#_Toc453239548)

[3 Dependencies 6](#_Toc453239549)

[3.1 SWCs 6](#_Toc453239550)

[3.2 Global Functions(Non RTE) to be provided to Integration Project 6](#_Toc453239551)

[4 Configuration REQUIREMeNTS 7](#_Toc453239552)

[4.1 Build Time Config 7](#_Toc453239553)

[4.2 Configuration Files to be provided by Integration Project 7](#_Toc453239554)

[4.3 Da Vinci Parameter Configuration Changes 7](#_Toc453239555)

[4.4 DaVinci Interrupt Configuration Changes 7](#_Toc453239556)

[4.5 Manual Configuration Changes 7](#_Toc453239557)

[5 Integration DATAFLOW REQUIREMENTS 8](#_Toc453239558)

[5.1 Required Global Data Inputs 8](#_Toc453239559)

[5.2 Required Global Data Outputs 8](#_Toc453239560)

[5.3 Specific Include Path present 8](#_Toc453239561)

[6 Runnable Scheduling 9](#_Toc453239562)

[7 Memory Map REQUIREMENTS 10](#_Toc453239563)

[7.1 Mapping 10](#_Toc453239564)

[7.2 Usage 10](#_Toc453239565)

[7.3 NvM Blocks 10](#_Toc453239566)

[8 Compiler Settings 11](#_Toc453239567)

[8.1 Preprocessor MACRO 11](#_Toc453239568)

[8.2 Optimization Settings 11](#_Toc453239569)

[1 Appendix 12](#_Toc453239570)

# Abbrevations And Acronyms

|  |  |
| --- | --- |
| **Abbreviation** | **Description** |
| DFD | Design functional diagram |
| MDD | Module design Document |
|  | <ADD more to the table if applicable> |
|  |  |
|  |  |

# References

This section lists the title & version of all the documents that are referred for development of this document

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Title** | **Version** |
| <1> | FDD – CM300A Adc0CfgAndUse | See synergy sub project version |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

# Dependencies

## SWCs

|  |  |
| --- | --- |
| **Module** | **Required Feature** |
| **MotCtrlMgr** | Generated struct type declarations for the Motor Control loop / RTE interface data; macros for access of Motor Control loop data |

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

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

# Adc0CfgAndUsePer1 : To be called ever other motor control ISR loop and updates the start and end pointers of ADC diagnostics and scan group 1Configuration REQUIREMeNTS

## Build Time Config

|  |  |  |
| --- | --- | --- |
| **Modules** | **Notes** |  |
| None |  |  |

## Configuration Files to be provided by Integration Project

Yes

## Da Vinci Parameter Configuration Changes

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Notes** | **SWC** |
| Refer the . m file in the design |  |  |

## DaVinci Interrupt Configuration Changes

|  |  |  |  |
| --- | --- | --- | --- |
| **ISR Name** | **VIM #** | **Priority Dependency** | **Notes** |
| **N/A** |  |  |  |

## Manual Configuration Changes

|  |  |  |
| --- | --- | --- |
| **Constant** | **Notes** | **SWC** |
| **N/A** |  |  |

# Integration DATAFLOW REQUIREMENTS

## Required Global Data Inputs

Refer DataDict.m file

## Required Global Data Outputs

Refer DataDict.m file

## Specific Include Path present

Yes

# Runnable Scheduling

This section specifies the required runnable scheduling.

|  |  |  |
| --- | --- | --- |
| **Init** | **Scheduling Requirements** | **Trigger** |
| Adc0CfgAndUseInit1 | None | RTE/Init |

|  |  |  |
| --- | --- | --- |
| **Runnable** | **Scheduling Requirements** | **Trigger** |
| **Adc0CfgAndUsePer1** | None | Non RTE/2xMotor Control ISR rate |

# Memory Map REQUIREMENTS

## Mapping

|  |  |  |
| --- | --- | --- |
| **Memory Section** | **Contents** | **Notes** |
| **CDD\_Adc0CfgAndUse\_MotCtrl\_START\_SEC** |  |  |
|  |  |  |

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

## Usage

|  |  |  |
| --- | --- | --- |
| **Feature** | **RAM** | **ROM** |
| **None** |  |  |

Table : ARM Cortex R4 Memory Usage

## NvM Blocks

\*See DataDict.m

# Compiler Settings

## Preprocessor MACRO

None

## Optimization Settings

None

# Appendix

*None*