**Module Design Document**

**For**

**McuCoreCfgAndDiagc**

**08-Nov-2017**

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# Introduction

## Purpose

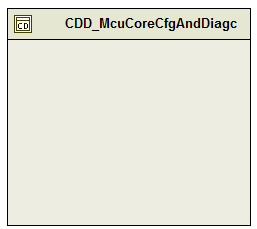
Module design document for McuCoreCfgAndDiagc SWC.

# McuCoreCfgAndDiagc & High-Level Description

Refer FDD description.

# Design details of software module

## Graphical representation of McuCoreCfgAndDiagc



## Data Flow Diagram

### Component level DFD

Refer FDD

### Function level DFD

Refer FDD

# Constant Data Dictionary

## Program (fixed) Constants

### Embedded Constants

#### Local Constants

|  |  |  |  |
| --- | --- | --- | --- |
| Constant Name | Resolution | Units | Value |
| FIEBISTCTRLCIRCTRFERRMASK\_CNT\_U32 | 1 | Cnt | 0x00080000U |

# Software Component Implementation

## Sub-Module Functions

## Init: McuCoreCfgAndDiagcInit1

## Design Rationale

None

## Init: McuCoreCfgAndDiagcInit2

## Design Rationale

Empty RTE Init function for software memory map.

## Per: <Component Name>\_Per<n>

## Design Rationale

N/A

## Server Runables

## <Server Runable Name>

## Design Rationale

N/A

## Interrupt Functions

## Interrupt Function Name

None.

## Design Rationale

N/A

## Module Internal (Local) Functions

None

## GLOBAL Function/Macro Definitions

None

# Known Limitations with Design

None.

# UNIT TEST CONSIDERATION

Register file definitions are in the P1Xc/include folder of AR202A since this component is designed for P1X-c micro.

Abbreviations and Acronyms

| **Abbreviation or Acronym** | **Description** |
| --- | --- |
|  |  |
|  |  |

Glossary

**Note**: Terms and definitions from the source “Nexteer Automotive” take precedence over all other definitions of the same term. Terms and definitions from the source “Nexteer Automotive” are formulated from multiple sources, including the following:

* ISO 9000
* ISO/IEC 12207
* ISO/IEC 15504
* Automotive SPICE® Process Reference Model (PRM)
* Automotive SPICE® Process Assessment Model (PAM)
* ISO/IEC 15288
* ISO 26262
* IEEE Standards
* SWEBOK
* PMBOK
* Existing Nexteer Automotive documentation

| **Term** | **Definition** | **Source** |
| --- | --- | --- |
| MDD | Module Design Document |  |
| DFD | Data Flow Diagram |  |

References

| **Ref. #** | **Title** | **Version** |
| --- | --- | --- |
| 1 | AUTOSAR Specification of Memory Mapping | v1.3.0 R4.0 Rev 2 |
| 2 | MDD Guideline EA4 01.00.01.docx | EA4 01.00.01 |
| 3 | EA4 Software Naming Conventions 01.01.00.docx | 01.01.00 |
| 4 | Software Design and Coding Standards 2.1.doc | 2.1 |
| 5 | FDD : CM106B\_McuCoreCfgAndDiagc\_Design | See Synergy Subproject Version |