**Module Design Document**

**For**

**ClkCfgAndMon**

**21-Nov-2017**

**Prepared By:**

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| **Description** | **Author** | **Version** | **Date** |
| Initial Version | Shruthi Raghavan | 1.0 | 21-Nov-2017 |

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# Introduction

## Purpose

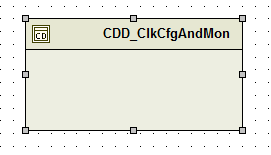
Module Design Document for CM109B (ClkCfgAndMon) Implementation. See design for details.

# ClkCfgAndMon & High-Level Description

Refer FDD document.

# Design details of software module

## Graphical representation of <Component Name>



## 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 |
| - | - | - | - |

# Software Component Implementation

## Sub-Module Functions

## Init: ClkCfgAndMonInit0

## Design Rationale

*Non-RTE Init implemented as per FDD document directions.*

## Init: ClkCfgAndMonInit1

## Design Rationale

RTE Init for MemMap – Empty.

## Periodic

None

## Server Runables

None

## Interrupt Functions

None

## Module Internal (Local) Functions

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Function Name** | - | Type | Min | Max |
| **Arguments Passed** | - | - | - | - |

## 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

| **#** | **Title** | **Version** |
| --- | --- | --- |
| 1 | AUTOSAR Specification of Memory Mapping | See Process 04.04.02 |
| 2 | MDD Guideline | See Process 04.04.02 |
| 3 | [Software Naming Conventions.doc](http://misagweb01.nexteer.com/eRoomReq/Files/erooms8/NextGeneration/0_fc55f/Software%20Naming%20Conventions%2003x(In%20Work).doc) | See Process 04.04.02 |
| 4 | Software Design and Coding Standards.doc | See Process 04.04.02 |
| 5 | FDD : CM109B\_ClkCfgAndMon\_Design | See Synergy Subproject Version |