**Module Design Document**

**For**

**‘PwrDiscnct’**

**VERSION: 1.0**

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**Revision History**

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| 1 | Initial Version | Sankardu Varadapureddi | 1.0 | 09-Apr-2015 |
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# Abbrevations And Acronyms

|  |  |
| --- | --- |
| Abbreviation | Description |
| DFD | Design functional diagram |
| MDD | Module design Document |
| FDD | Functional Design Document |

# References

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

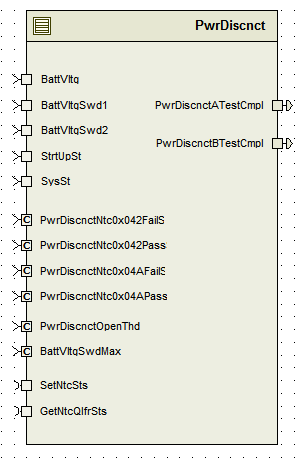
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| --- | --- | --- |
| Sr. No. | Title | Version |
| 1 | MDD Guidelines | Process 3.06.00 |
| 2 | Software Naming Conventions | Process 3.06.00 |
| 3 | Software Design and Coding standards | Process 3.06.00 |
| 4 | FDD - ES003A\_PwrDiscnct\_Design | See Synergy sub project version |
|  |  |  |

# Power Disconnect High-Level Description

*This function will verify that the PowerDisconnect is not stuck closed at init once per Ignition Cycle.*

# Design details of software module

## Graphical representation of POWER DISCONNECT



## Data Flow Diagram

*Refer FDD*

## Module level DFD

*Refer FDD*

## Sub-Module level DFD

*Refer FDD*

## COMPONENT FLOW DIAGRAM

*Refer FDD*

# Variable Data Dictionary

## User defined typedef definition/declaration

*<This section documents any user types uniquely used for the module.>*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Typedef Name | Element Name | User Defined Type | Legal Range  (min) | Legal Range  (max) |
| None |  |  |  |  |
|  |  |  |  |  |

## Variable definition for enumerated types

|  |  |  |
| --- | --- | --- |
| Enum Name | Element Name | Value |
| None |  |  |

# Constant Data Dictionary

## Program(fixed) Constants

## Embedded Constants

## Local

|  |  |  |  |
| --- | --- | --- | --- |
| Constant Name | Resolution | Units | Value |
| None |  |  |  |

## Global

|  |
| --- |
| Constant Name |
|  |

## Module specific Lookup Tables Constants

|  |  |  |  |
| --- | --- | --- | --- |
| Constant Name | Resolution | Value | Software Segment |
| None |  |  |  |

# Software Module Implementation

## Sub-Module Functions

## Initialization Functions

*None*

## PERIODIC FUNCTIONS

## Per: PwrDiscnctPer1

## Design Rationale

*Design follows implemenetation in FDD.*

## Store Module Inputs to Local copies

*Refer to FDD*

## (Processing of function)………

*Refer to FDD (Block ‘PwrDiscnct’)*

## Store Local copy of outputs into Module Outputs

*Refer to FDD*

## Interrupt Functions

*None*

## Serial Communication Functions

None

## Local Function/Macro Definitions

None

## GLObAL Function/Macro Definitions

None

## Tranisition FUNCTIONS

None

# Known Limitations With Design

None

# UNIT TEST CONSIDERATION

# Appendix

*None*