# SDD Review Document

## Summary

|  |  |
| --- | --- |
| **Date** | 02/09/2021 |
| **Effort** | 1 hour |
| **Room/Location** | Viritual |
| **Review Status** | Open |
| **Review name** | SDD\_Template\_ADC.doc |
| **Method** | WT |
| **Release** | 1.0 |
| **Responsible** | Marco Antonio Mares Mejia |
| **Project** | Door Control Module |
| **Reason of Review** | Initial Release |

## Comment List/

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Reference** | **Comments / Actions** | **Classification (E)rror/Risk / (R)emark** | **Responsible person/Planned date for completion** | **Completion(Name/Date)** |
| 1 | Header and/ Footer Page Information | No information is included in the Top Header and Bottom Footer of the pages. This is necessary in order to increasy document readibility. | Risk | Daniel Ramirez / 06/09/2021 |  |
| 2 | Functional Decomposition | ADC shall read the value directly from the Window. Block Diagram specifies that ADC values are to be read from CAN Signal, this is no implied in requirements specification. CAN Signal is used to report Anti Pinch event. | Risk | Daniel Ramirez / 06/09/2021 |  |
| 3 | Functions Description | Descriptions for ADC Component’s Function are too general. Is recommended to wide the description in order to avoid misconceptions. | Remark | Daniel Ramirez / 06/09/2021 |  |
| 4 | Requirements Allocation | SDD document only allocates DCU\_SWC\_108 requirement, but also requirements DCU\_SWC\_107, DCU\_SWC\_109 and DCU\_SWC\_110 define Anti Pinch functionality. It is necessary to allocate the missing requirements in order to increase traceability. | Risk | Daniel Ramirez / 06/09/2021 |  |
| 5 | Function uint\_16 ADC\_GET\_ANTIPINCH\_VALUE () | The State Chart of this Function mentions the states but doesn’t include Guards for the States. Guards are necessary in order to know when the machine will transition from one state to another and define the operations and outputs generated. | Risk | Daniel Ramirez / 06/09/2021 |  |
| 6 |  |  |  |  |  |
| … |  |  |  |  |  |

## Check List

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Description | OK / NOK / NR | Comment | Responsible person /  Planned date for completion | Status |
| 1 | Does the design comply to the SW architecture? (interfaces, scheduling...) | OK |  |  | Closed |
| 2 | Are all requirements allocated to Desing elements? | NOK | Only one of the four requirement s that controls Anti Pinch Operation are traced into SDD. | Daniel Ramirez /  06/09/2021 | Open |
| 3 | Are all operations described in an adequate detail and with the adequate notation? | NOK | State Charts doesn’t include Guards and description for Functions are too general. | Daniel Ramirez /  06/09/2021 | Open |
| 4 | Is the coupling level between SW parts (internal or externals) reduced to the minimum?  Is the justification of all global data written in the design document? | OK |  |  | Closed |
| 5 | Is each data owned by one unit?  If a data is public (for read and/or for write operations), is its access made using a method provided by the owner?  (if a method is provided for read and write operations on the same pubilc data, the data has to be private) | OK |  |  | Closed |
| 6 | How are the variables initialized? If not initialized, is the reason explained? | NR | Software Requirements document doesn’t include a specific initialization method. |  | Closed |
| 7 | Is the mechanism to initialise the functionality (when needed) described?  (eg: function calls, data acquisition …) | NR |  |  | Closed |
| 8 | In case of global variable (shared or not shared) used in reentrance function (reentrance raised by an ISR), is there a mechanism to avoid data modification during its treatment? | NR | No method is mentioned in SW Requirements. |  | Closed |
| 9 | Are Tasks, ISRs and event notification function kept as short as possible? | OK |  |  | Closed |
| 10 | Is the state variable only used in one single module?  (If the state variable needs to be visible from another module (to be avoided), indicate it in the design and use the mechanism of read copy on that variable). | OK |  |  | Closed |
| 11 | Is the event memorization (ex: flag) consumed at the end of each reccurence of a state machine?  Otherwise, the risk is to use an obsolete event (ex: event memorization consumption conditionned by a state transition). | NOK | Variable memorization is not described in any Function. |  | Open |
| 12 | In case of asynchronous reception of the same event by several objects (ex: state machine, C function called periodicly…), has each object its own memorization mechanism (ex: separate flags). | NR | This component mainly describes only one event. |  | Close |