PPP/Auto Save Feature – Feature Implementation Specification

<<Feature>>

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# Introduction

## Document Purpose

The Feature Implementation Specification (FIS) specifies the deployment of the logical functions of a feature to an electrical architecture. The FIS specifies all interactions between the ECUs of the electrical architecture required for the feature including the technical signals and the interfaces. It also gives interface and integration requirements, which are specific to the feature for the electrical architecture.

To get more information about the concept of feature, function and component level abstraction refer to the [Ford RE Wiki](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Engineering+for+SW+Enabled+Features).

## Document Scope

This FIS describes the deployment of the feature PPP/Auto Save to the following electrical architecture(s):

| **Electrical Architecture Name** | **Owner** | **Reference** |
| --- | --- | --- |
| FNV3 |  |  |
|  |  |  |

Table 1‑1: Electrical Architecture(s) referenced in this document

## Document Audience

The FIS is authored by Patrick Brown . All Stakeholders, i.e., all people who have a valid interest in the feature implementation should read and, if possible, review the FIS. It needs to be guaranteed, that all stakeholders have access to the currently valid version of the FIS.

### Stakeholder List

For the latest list of stakeholder of the feature and their influence refer to [Stakeholder List for Auto Save in VSEM (VDOC085550)](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=SZU9Xk_yx3NrTDAAAAAAAAAAAAA&servername=Production_Server).

## Document Organization

### Document Context

Refer to the [Specification Structure page](http://wiki.ford.com/display/RequirementsEngineering/Specification+templates) in the [Ford RE Wiki](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Engineering+for+SW+Enabled+Features) to understand how the FIS relates to other Ford Requirements Documents and Specifications.

### Document Structure

The structure of this document is explained below:

**Section 1** – Introduction – Giving an explanation how to use this document including responsibilities and the scope of the document. Additionally it contains the revision history and a list of unsettled but known issues that have to be consolidated in future versions. It explains the terminology and gives a clarification of the definitions, concepts and abbreviations used in the document.

**Section 2** – Feature Implementation Description – Giving an overview of the platform and listing assumptions, constraints or dependencies

**Section 3** – Feature Implementation Architecture – Describing 3 Architecture Views:

* Functional Architecture – Showing the logical architecture of functions
* Physical Architecture – Showing the physical architecture (first of all the E/E Architecture), which the Logical Functions get allocated to.
* Software Architecture – Showing the software architecture relevant for the feature (for features with in-house development only)
* Function Deployment – Presenting the allocation of logical functions and signals to the electrical and other components

**Section 4** – Deployment Specific Modeling –Modeling techniques providing additional detail on e.g. interface behavior

**Section 5** – Deployment Specific Requirements – Deployment specific requirements for ECUs, Network Communication, and Process

**Section 6** – List of Open Concerns

**Section 7** – Revision History

**Section 8** – Appendix - Presenting additional data mainly in a tabular form, e.g., a data dictionary

## Document Conventions

### Requirements Templates

Refer to “[How to use the Specification Templates](http://wiki.ford.com/display/RequirementsEngineering/How+to+use+the+Specification+Templates?src=contextnavpagetreemode)” on how to use the specification templates and the VBA macros to create/edit the requirements in the specifications.

The VBA macro enable the import of the specification to VSEM (refer to ["How to import specifications into VSEM as separate requirements"](http://wiki.ford.com/pages/viewpage.action?pageId=104991616&src=contextnavpagetreemode)).

#### Identification of requirements

The unique requirement ID given in the headline of any requirement follows the requirement throughout the development process. The requirement ID format follows a well-defined syntax.

All identifiers in an FIS shall be composed of 4 parts:

* A leading prefix, which indicates the type of requirement (R=Requirement, UC=Use Case, SC=Scenario, …)
* A prefix, which indicates the abstraction level (F=Feature, FNC=Function, CMP = component).
* Followed by a name, indicating the scope, which the requirement belongs to (e.g. feature or function name )
* Ending with the actual requirement number

*Example:*

*R\_CMP\_LockArbitrator\_00004* This is the fourth requirement on component level for the function Lock Arbitrator.

#### Requirements Attributes

Additionally attributes can be added to each requirement. This helps to classify requirements. A [list of available attributes](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes?src=contextnavpagetreemode) is given in the RE Wiki.

## References

### Ford Documents

The list of all Ford internal documents, which are directly related.

| **Reference** | **Title** | **Doc. ID** | **Document Location** | **Revision** |
| --- | --- | --- | --- | --- |
| VDOC080441 | Auto Save Feature Specification | VDOC080441 | [VSEM](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=zNX5hzEYx3NrTDAAAAAAAAAAAAA&servername=Production_Server) | F |
| VDOC089611 | Auto Save Functional Specification | VDOC089611 | [VSEM](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=zqsBkU6Cx3NrTDAAAAAAAAAAAAA&servername=Production_Server) | A |
| VDOC089612 | Auto Save Implementation Specification | VDOC089612 | [VSEM](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=DDgBkU6Cx3NrTDAAAAAAAAAAAAA&servername=Production_Server) | A |
| VDOC075158 | PPP Feature Document | VDOC075158 | [VSEM](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=iWYxEeXyx3NrTDAAAAAAAAAAAAA&servername=Production_Server) | B |
| VDOC085831 | PPP Functional Specifications | VDOC085831 | [VSEM](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=h$b9Xjn8x3NrTDAAAAAAAAAAAAA&servername=Production_Server) | B |
| VDOC080627 | PPP Feature Implementation | VDOC080627 | [VSEM](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=F0c5z4zQx3NrTDAAAAAAAAAAAAA&servername=Production_Server) | A |
| VDOC083702 | Classic Memory Feature Specification | VDOC083702 | [VSEM](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=iaQ9AR4Cx3NrTDAAAAAAAAAAAAA&servername=Production_Server) | F |
| VDOC088610 | Classic Memory Functional Specification | VDOC088610 | [VSEM](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=idlBBLxox3NrTDAAAAAAAAAAAAA&servername=Production_Server) | B |
| VDOC089667 | Classic Memory Implementation Spec | VDOC089667 | [VSEM](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=SNhBkV85x3NrTDAAAAAAAAAAAAA&servername=Production_Server) | A |
| VDOC041625 | Enhanced Memory Feature Specification | VDOC041625 | [VSEM](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=boRV6owSx3NrTDAAAAAAAAAAAAA&servername=Production_Server) | J |
| VDOC041626 | Enhance Memory Feature Implementation Guide (Feature Level) | VDOC041626 | [VSEM](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=rkWV6owSx3NrTDAAAAAAAAAAAAA&servername=Production_Server) | H |

### External Documents and Publications

The list of external documents could include books, reports and online sources.

## Glossary

### Definitions

| **Definition** | **Description** |
| --- | --- |
| Action State | An Action State refers to one of the states of the Auto Save algorithm. |
| Action Validation Criteria | Validation criteria for these actions |
| Activation Preconditions | The preconditions for Auto Save activation are (Feature\_Precondition\_Status):  1. The vehicle has the Auto Save feature configured ON  2. The Vehicle Mode is Normal  3. The ignition status of the vehicle is Run, Start, or Accessory or the HMI status is Extended Play  4. A software update is not occurring on the vehicle  5. A technician has not placed the vehicle in diagnostics mode |
| Adjustment Repository | An Adjustment Repository is a storage area for adjustment classifications within each Auto Save Subdomain. The Adjustment Repository consists of a table that includes each axis in the subdomain, indexed by 'Axis ID', and the classification of the adjustment for that axis. |
| Adjustment Time Constant | Configurable parameter that indicates how long the Auto Save algorithm will wait for a position adjustment when in a gear other than reverse.  Currently defined as 10 seconds. |
| AHU | Audio Head Unit |
| AHUD | Advanced Heads-Up Display |
| Antropometric Translation | An enhancement to Personal and Portable Profiles, Anthropometric Translation is an algorithm that can translate user positions from one vehicle to another. |
| APIM | Accessory Protocol Interface Module |
| Auto Save Domain | The Auto Save Domain consists of commodities capable of modifying and retaining Positional Adjustments. These commodities include:  1) Driver Seat, including Multi-Contour Lumbar Support  2) Side Mirrors, including Reverse Tilt Control  3) Foot Pedals  4) Steering Column  5) HUD, including Brightness Control  6) Passenger Seat, including Multi-Contour Lumbar Support |
| Axis Controller | An Axis Controller is an ECU or part of an ECU that can read the current position of an axis and the saved position of an axis. It is responsible for executing much of the processing of Auto Save's Monitor/Compare Functional Group. |
| Axis ID | The Axis ID is an integer that identifies each axis in the Auto Save Domain. It is unique to every axis. |
| Axis Sensor | An Axis Sensor is used to measure the position of an axis (for common adjustments); or to indicate that changes have occurred to an axis (for rare adjustments). |
| BCM | Body Control Module |
| BCS-PS Interface | The interface by which the Body Control System informs the Pedal System that settings have been retained. |
| BCS-SS Interface | The interface by which the Body Control System informs the Seat System that settings have been retained. |
| BCS-SWS Interface | The interface by which the Body Control System informs the Steering Wheel System that settings have been retained. |
| BCS-VDS Interface | The interface by which the Body Control System informs the Vehicle Door System that settings have been retained. |
| Body Control System | The Body Control System is responsible for changing profiles and updating settings on the vehicle. Auto Save requests profile changes and settings retentions from it. |
| CAN | Controller Area Network |
| CAPM | Column and Pedal Module |
| CGEA | Common Global Electrical Architecture |
| Classic Memory | The traditional means of saving positional settings to memory. Utilizes two or three memory buttons that the user uses to save and recall positional settings. |
| Classified Adjustments Repository | The Classified Adjustments Repository is a special Adjustment Repository on the Infotainment Controller. It keeps track of the combined adjustments from every Auto Save Domain. It supplies the Auto Save algorithm with the current state of adjustments. |
| Common | Common is a type of axis. Common axes are those that are adjusted frequently. Auto Save will classify adjustments to common axes based on a threshold. |
| Conditions for Clearing | The Auto Save feature will clear information from its repositories when any of the following conditions are TRUE:  1. The value of 'Auto Save Active Status' transitions from 'Enabled Active' to 'Enabled Inactive' or 'Disabled'  2. The Profile Update Manager of Positional Settings sets the value of 'Clear Request' to 'Store\_1', 'Store\_2', 'Store\_3', or 'Store\_4'  3. The Profile Manager changes the value of 'Notification Change' to 'Recall\_1', 'Recall\_2', 'Recall\_3', or 'Recall\_4'  4. The value of 'Exit Without Saving' is 'Yes' |
| DCU | Door Control Unit |
| DDM | Driver Door Module |
| DID | Data Identifier |
| Disabled | One of the states of Auto Save Active Status. Indicates that the feature is not in operation on the vehicle. Auto Save settings will not be visible to the user when in this state. |
| Driver Actions or Others | Description of driver actions or other people |
| DSM | Driver Seat Module |
| DSP | Digital Signal Processing |
| DTC | Diagnostic Trouble Code |
| Easy Entry Easy Exit | The Easy Entry Easy Exit system modifies the position of the seat and steering wheel to enable easy ingress to and egress from the vehicle |
| ECG | Enhanced Central Gateway |
| ECU | Electronic Control Unit |
| Enabled Active | One of the states of Auto Save Active Status. Indicates that the feature is in full operation on the vehicle. Auto Save settings are visible to the user when in this state. |
| Enabled Inactive | One of the states of Auto Save Active Status. Indicates that the feature is in operation on the vehicle, but is temporarily off due to inhibition. Auto Save settings will be visible to the user when in this state. |
| Enhanced Memory | An improvement to Classic Memory, Enhanced Memory allows the user to create and name a profile, thus creating a Personal Profile. The user can link the profile to a Classic Memory button, a phone, and a key fob. |
| EOI | Element of Interest |
| EOL | End Of Line |
| FCIM | Front Control Interface Module |
| FS | Function (Group) Specification |
| FTTI | Fault Tolerance Time Interval |
| Functional Redundancies | Functional redundancy - fault tolerance |
| GAPM | Global Advance Program Marketing |
| Guest Profile | The Guest Profile is a type of Profile that is active when an unauthenticated user is in the vehicle. |
| HMI | Human Machine Interface |
| HUD | Head-Up Display |
| HUD Adjustment Repository | An Adjustment Repository for holding adjustments in the HUD Sub-Domain. |
| HUD Axis Controller | The HUD Axis Controller is the abstraction that determines how to respond to an adjustment has been made for a specific HUD Axis.  Owner: Farhan Sethi |
| HUD Axis Sensor | The HUD Axis Sensor is the abstraction that determines that an adjustment has been made for a specific HUD Axis.  Owner: Farhan Sethi |
| HUD Axis Subsystem | The HUD Axis Subsystem is the abstraction that encompasses the system and features that are responsible for executing the Automatic Saving functionality relating to a specific HUD Axis.  Owner: Farhan Sethi |
| HUD Repository Controller | The HUD Repository Controller is the abstraction that controls the HUD Adjustment Repository.  Owner: Farhan Sethi |
| HUD Repository Subsystem | The HUD Repository Subsystem is the abstraction that contains the HUD Adjustment Repository.  Owner: Farhan Sethi |
| HUD System | The HUD System is the abstraction that encompasses the system and features that are responsible for executing the Automatic Saving functionality relating to the HUD.  Owner: Farhan Sethi |
| HUD-HUDAS Interface | The interface by which the HUD System provides the HUD Axis Subsystem with the Auto Save Feature's control flows. |
| HUD-HUDRS Interface | The interface by which the HUD System provides the HUD Repository Subsystem with the Auto Save Feature's control flows. It is also the means by which the HUD Repository System reports the combined classification of all the axes in the HUD System. |
| HUD-IC Interface | The interface by which the Infotainment Controller provides the HUD System with the Auto Save Feature’s control flows. It is also the interface by which the HUD System provides the Infotainment Controller with the HUD adjustment classification. |
| HUDAS-HUDAC Interface | The interface by which the HUD Axis Subsystem provides the HUD Axis Controller with the Auto Save Feature’s control flows. It is also the means by which the HUD Axis Controller reports the current classification of its axis. |
| HUDAS-HUDASE Interface | The interface by which the HUD Axis Subsystem provides the HUD Axis Sensor with the Auto Save Feature’s control flows. |
| HUDAS-HUDRC Interface | The interface by which the HUD Repository Subsystem provides the HUD Repository Controller with the Auto Save Feature’s control flows and the adjustment classifications of every axis in the HUD System. It is also the means by which the HUD Repository Controller reports the combined classification of all the axes in the HUD System. |
| HUDAS-HUDRS Interface | The interface by which the HUD Axis Subsystem provides the HUD Repository Subsystem with the adjustment classifications of every axis in the HUD System. |
| HUDASE-HUDAC Interface | The interface by which a HUD Axis Sensor can indicate to the HUD Axis Controller than an adjustment has occurred. |
| Idle | The Idle action state is a special waiting state where the Auto Save feature waits for a position adjustment to occur. One a position adjustment occurs, the Auto Save algorithm will determine what to do to respond. |
| Ignore Time Constant | Configurable parameter that indicates how long Auto Save will inform the user that their changes will not be retained. |
| IHMIS-IC Interface | The interface by which the Infotainment Controller requests feedback from the Infotainment HMI System. It is also the interface by which the Infotainment HMI System provides the Infotainment Controller with the user's response. |
| IKT | Integrated Key Transmitter |
| Infotainment Controller | The Infotainment Controller is the entity responsible for executing the Decide Functional Group of the Auto Save feature. It receives consolidated adjustments from each Auto Save Sub-Domain and decides what retention action to take. It is assumed that the Infotainment Controller will be allocated to the ECG. |
| Infotainment HMI System | The Vehicle HMI System is responsible for interacting with the user. It requests input from the user and provides the user’s response to the Auto Save Decide System. |
| Infotainment System | The Infotainment System is the abstraction that encompasses the system and features that are responsible for executing the Automatic Saving functionality relating to driver information, as well as the bulk of the Auto Save algorithm.  Owner: Unknown |
| Inhibit Request | There are active inhibit requests (Inhibit\_Request) when one or more of the following conditions are true:  1. The Profile Positional Settings Manager (Enhanced Memory) disables the Auto Save Feature in the profile on the vehicle  2. An Easy Entry Easy Exit event is active on the vehicle  3. The profile active on the vehicle is not a user profile  4. A profile resume event is occurring on the vehicle |
| Inhibit Table | The Inhibit Table keeps track of the status of every Inhibit Request. When an Inhibit Request occurs, the Inhibit Table is updated. |
| IPC | Instrument Panel Cluster |
| IPMA | Image Processing Module A |
| IS-HUD Interface | The interface by which the Infotainment System informs the HUD System that settings have been retained. |
| IS-IC Interface | The interface by which the Infotainment System provides the Infotainment Controller with adjustment classifications and Auto Save inputs. It is also the interface by which the Infotainment Controller provides the Infotainment System with Auto Save control flows. |
| IS-IPS Interface | The interface by which the Infotainment System provides the Instrument Panel System with a notification to indicate a successful save. |
| Left Side Mirror Adjustment Repository | A version of the Side Mirror Adjustment Repository for holding adjustments in the Left Side Mirror Sub-Domain. |
| MCSM | Multi Contour Seat Module |
| Minimum Classify Parameter | Minimum Classify Parameter is a special threshold. It defines the minimum amount of adjustment that will occur before Auto Save will classify the adjustment. Adjustments less than it are not classified. Adjustments greater than or equal to it are classified. |
| Multicontour Adjustment Repository | An Adjustment Repository for holding adjustments in the Multicontour Sub-Domain. |
| OEM | Original Equipment Manufacturer |
| PAS-PAC Interface | The interface by which the Pedal Axis Subsystem provides the Pedal Axis Controller with the Auto Save Feature’s control flows. It is also the means by which the Pedal Axis Controller reports the current classification of its axis. |
| PAS-PASE Interface | The interface by which the Pedal Axis Subsystem provides the Pedal Axis Sensor with the Auto Save Feature’s control flows. |
| PAS-PRC Interface | The interface by which the Pedal Repository Subsystem provides the Pedal Repository Controller with the Auto Save Feature’s control flows and the adjustment classifications of every axis in the Pedal System. It is also the means by which the Pedal Repository Controller reports the combined classification of all the axes in the Pedal System. |
| PAS-PRS Interface | The interface by which the Pedal Axis Subsystem provides the Pedal Repository Subsystem with the adjustment classifications of every axis in the Pedal System. |
| PASE-PAC Interface | The interface by which a Pedal Axis Sensor can indicate to the Pedal Axis Controller than an adjustment has occurred. |
| PDM | Passenger Door Module |
| Pedal Adjustment Repository | An Adjustment Repository for holding adjustments in the Pedal Sub-Domain. |
| Pedal Axis Controller | The Pedal Axis Controller is the abstraction that determines how to respond to an adjustment has been made for a specific Pedal Axis.  Owner: Jonathan Iaquinto |
| Pedal Axis Sensor | The Pedal Axis Sensor is the abstraction that determines that an adjustment has been made for a specific Pedal Axis.  Owner: Jonathan Iaquinto |
| Pedal Axis Subsystem | The Pedal Axis Subsystem is the abstraction that encompasses the system and features that are responsible for executing the Automatic Saving functionality relating to a specific Pedal Axis.  Owner: Jonathan Iaquinto |
| Pedal Repository Controller | The Pedal Repository Controller is the abstraction that controls the Pedal Adjustment Repository.  Owner: Jonathan Iaquinto |
| Pedal Repository Subsystem | The Pedal Repository Subsystem is the abstraction that contains the Pedal Adjustment Repository.  Owner: Jonathan Iaquinto |
| Pedal System | The Pedal System is the abstraction that encompasses the system and features that are responsible for executing the Automatic Saving functionality relating to the pedals.  Owner: Jonathan Iaquinto |
| Personal and Portable Profiles | An extension of Enhanced Memory, Personal and Portable Profiles is a feature that can make profiles portable between vehicles and manage them in the cloud. |
| Personal Profile | A Personal Profile is an upgraded Classic Memory Profile that combines the user's soft settings and positional settings. The Enhanced Memory feature is responsible for creating and managing the user's Personal Profile. |
| Personalization Domain | TBD |
| PK | Passive Key |
| Portable Profile | A Portable Profile is an upgraded Personal Profile that is transferable between vehicles. The Personal and Portable Profiles feature is responsible for creating and managing the user's Portable Profile. |
| Position Adjustment | A position adjustment occurs when a user modifies the position of an axis included in the Auto Save Domain. |
| Profile | The profile represents the set of customizable preferences that gets applied by a vehicle preferences owner using one of the applicable features. |
| Profile Manager | Profile Manager manages the status of the profile intended to be used on a host vehicle by one of the applicable features. It is planned to be fulfilled by Enhanced Memory. |
| Prompt Time Constant | Configurable parameter that indicates how long it will take for a prompt to time out.  Currently defined as 30 seconds. |
| PS-PAS Interface | The interface by which the Pedal System provides the Pedal Axis Subsystem with the Auto Save Feature's control flows. |
| PS-PRS Interface | The interface by which the Pedal System provides the Pedal Repository Subsystem with the Auto Save Feature's control flows. It is also the means by which the Pedal Repository Subsystem reports the combined classification of all the axes in the Pedal System. |
| PSM | Passenger Seat Module |
| Rare | Rare is a type of axis. Rare axes are those that are adjusted infrequently. Auto Save will classify adjustments to rare axes based on the value of 'User Input Classify Parameter'. |
| Repository Controller | A repository controller is an ECU that holds and manages an adjustment repository for a particular sub-domain. |
| RFI | Reduced Functionality Interval |
| Right Side Mirror Adjustment Repository | A version of the Side Mirror Adjustment Repository for holding adjustments in the Right Side Mirror Sub-Domain. |
| RKE | Remote Key less Entry |
| SAS-SAC Interface | The interface by which the Seat Axis Subsystem provides the Seat Axis Controller with the Auto Save Feature’s control flows. It is also the means by which the Seat Axis Controller reports the current classification of its axis. |
| SAS-SASE Interface | The interface by which the Seat Axis Subsystem provides the Seat Axis Sensor with the Auto Save Feature’s control flows. |
| SAS-SRC Interface | The interface by which the Seat Repository Subsystem provides the Seat Repository Controller with the Auto Save Feature’s control flows and the adjustment classifications of every axis in the Seat System. It is also the means by which the Seat Repository Controller reports the combined classification of all the axes in the Seat System. |
| SAS-SRS Interface | The interface by which the Seat Axis Subsystem provides the Seat Repository Subsystem with the adjustment classifications of every axis in the Seat System. |
| SASE-SAC Interface | The interface by which a Seat Axis Sensor can indicate to the Seat Axis Controller than an adjustment has occurred. |
| Save Time Constant | Configurable parameter that indicates how long Auto Save will show the user that adjustments have been saved. |
| Save Wait Time Constant | Configurable parameter that indicates how long Auto Save will wait for confirmation that the adjustments have been saved. |
| SCCM | Steering Column Control Module |
| Seat Adjustment Repository | An Adjustment Repository for holding adjustments in the Seat Sub-Domain. |
| Seat Axis Controller | The Seat Axis Controller is the abstraction that determines how to respond to an adjustment has been made for a specific Seat Axis.  Owner: Jonathan Iaquinto |
| Seat Axis Sensor | The Seat Axis Sensor is the abstraction that determines that an adjustment has been made for a specific Seat Axis.  Owner: Jonathan Iaquinto |
| Seat Axis Subsystem | The Seat Axis Subsystem is the abstraction that encompasses the system and features that are responsible for executing the Automatic Saving functionality relating to a specific Seat Axis.  Owner: Jonathan Iaquinto |
| Seat Repository Controller | The Seat Repository Controller is the abstraction that controls the Seat Adjustment Repository or Multicontour Adjustment Repository, depending on configuration.  Owner: Jonathan Iaquinto |
| Seat Repository Subsystem | The Seat Repository Subsystem is the abstraction that contains the Seat Adjustment Repository or Multicontour Adjustment Repository, depending on configuration.  Owner: Jonathan Iaquinto |
| Seat System | The Seat System is the abstraction that encompasses the system and features that are responsible for executing the Automatic Saving functionality relating to a seat, whether it is a driver seat, passenger seat, or other seat.  Owner: Jonathan Iaquinto |
| Short Time Constant | Configurable parameter that indicates how long the Auto Save function will wait for a position adjustment when in reverse.  Currently defined as 5 seconds. |
| Side Mirror Adjustment Repository | An Adjustment Repository for holding adjustments in the Side Mirror Sub-Domain. |
| Side Mirror Axis Controller | The Side Mirror Axis Controller is the abstraction that determines how to respond to an adjustment has been made for a specific Side Mirror Axis.  Owner: Newton Filho, Ibaa Al-Hayek |
| Side Mirror Axis Sensor | The Side Mirror Axis Sensor is the abstraction that determines that an adjustment has been made for a specific Side Mirror Axis.  Owner: Newton Filho, Ibaa Al-Hayek |
| Side Mirror Axis Subsystem | The Side Mirror Axis Subsystem is the abstraction that encompasses the system and features that are responsible for executing the Automatic Saving functionality relating to a specific mirror axis.  Owner: Newton Filho, Ibaa Al-Hayek |
| Side Mirror Repository Controller | The Side Mirror Repository Controller is the abstraction that controls the Left Side Mirror Adjustment Repository or Right Side Mirror Adjustment Repository, depending on configuration.  Owner: Newton Filho, Ibaa Al-Hayek |
| Side Mirror Repository Subsystem | The Side Mirror Repository Subsystem is the abstraction that contains the Left Side Mirror Adjustment Repository or Right Side Mirror Adjustment Repository, depending on configuration.  Owner: Newton Filho, Ibaa Al-Hayek |
| Side Mirror System | The Side Mirror System is the abstraction that encompasses the system and features that are responsible for executing the Automatic Saving functionality relating to a mirror, whether it is a driver or passenger mirror.  Owner: Newton Filho, Ibaa Al-Hayek |
| SMAS-SMAC Interface | The interface by which the Side Mirror Axis Subsystem provides the Side Mirror Axis Controller with the Auto Save Feature’s control flows. It is also the means by which the Side Mirror Axis Controller reports the current classification of its axis. |
| SMAS-SMASE Interface | The interface by which the Side Mirror Axis Subsystem provides the Side Mirror Axis Sensor with the Auto Save Feature’s control flows. |
| SMAS-SMRC Interface | The interface by which the Side Mirror Repository Subsystem provides the Side Mirror Repository Controller with the Auto Save Feature’s control flows and the adjustment classifications of every axis in the Side Mirror System. It is also the means by which the Side Mirror Repository Controller reports the combined classification of all the axes in the Side Mirror System. |
| SMAS-SMRS Interface | The interface by which the Side Mirror Axis Subsystem provides the Side Mirror Repository Subsystem with the adjustment classifications of every axis in the Side Mirror System. |
| SMASE-SMAC Interface | The interface by which a Side Mirror Axis Sensor can indicate to the Side Mirror Axis Controller than an adjustment has occurred. |
| SS-SAS Interface | The interface by which the Seat System provides the Seat Axis Subsystem with the Auto Save Feature's control flows. |
| SS-SRS Interface | The interface by which the Seat System provides the Seat Repository Subsystem with the Auto Save Feature's control flows. It is also the means by which the Seat Repository Subsystem reports the combined classification of all the axes in the Seat System. |
| Steering Wheel Adjustment Repository | An Adjustment Repository for holding adjustments in the Steering Wheel Sub-Domain. |
| Steering Wheel Axis Controller | The Steering Wheel Axis Controller is the abstraction that determines how to respond to an adjustment has been made for a specific Steering Wheel Axis.  Owner: Jonathan Iaquinto |
| Steering Wheel Axis Sensor | The Steering Wheel Axis Sensor is the abstraction that determines that an adjustment has been made for a specific Steering Wheel Axis.  Owner: Jonathan Iaquinto |
| Steering Wheel Axis Subsystem | The Steering Wheel Axis Subsystem is the abstraction that encompasses the system and features that are responsible for executing the Automatic Saving functionality relating to a specific Steering Wheel Axis.  Owner: Jonathan Iaquinto |
| Steering Wheel Repository Controller | The Steering Wheel Repository Controller is the abstraction that controls the Steering Wheel Adjustment Repository.  Owner: Jonathan Iaquinto |
| Steering Wheel Repository Subsystem | The Steering Wheel Repository Subsystem is the abstraction that contains the Steering Wheel Adjustment Repository.  Owner: Jonathan Iaquinto |
| Steering Wheel System | The Steering Wheel System is the abstraction that encompasses the system and features that are responsible for executing the Automatic Saving functionality relating to the steering column.  Owner: Jonathan Iaquinto |
| Sub-Domain | A Sub-Domain is a subset of the Auto Save Domain. Each Sub-Domain consolidates its adjustments into one classification signal and sends it to the Infotainment Controller. The Sub-Domains for the Driver Profile are:  1) Driver Seat  2) Multi-Contour Lumbar Support  3) Left Side Mirror  4) Right Side Mirror  5) Foot Pedals  6) Steering Column  7) HUD |
| SWAS-SWAC Interface | The interface by which the Steering Wheel Axis Subsystem provides the Steering Wheel Axis Controller with the Auto Save Feature’s control flows. It is also the means by which the Steering Wheel Axis Controller reports the current classification of its axis. |
| SWAS-SWASE Interface | The interface by which the Steering Wheel Axis Subsystem provides the Steering Wheel Axis Sensor with the Auto Save Feature’s control flows. |
| SWAS-SWRC Interface | The interface by which the Steering Wheel Repository Subsystem provides the Steering Wheel Repository Controller with the Auto Save Feature’s control flows and the adjustment classifications of every axis in the Steering Wheel System. It is also the means by which the Steering Wheel Repository Controller reports the combined classification of all the axes in the Steering Wheel System. |
| SWAS-SWRS Interface | The interface by which the Steering Wheel Axis Subsystem provides the Steering Wheel Repository Subsystem with the adjustment classifications of every axis in the Steering Wheel System. |
| SWASE-SWAC Interface | The interface by which a Steering Wheel Axis Sensor can indicate to the Steering Wheel Axis Controller than an adjustment has occurred. |
| SWS-SWAS Interface | The interface by which the Steering Wheel System provides the Steering Wheel Axis Subsystem with the Auto Save Feature's control flows. |
| SWS-SWRS Interface | The interface by which the Steering Wheel System provides the Steering Wheel Repository Subsystem with the Auto Save Feature's control flows. It is also the means by which the Steering Wheel Repository Subsystem reports the combined classification of all the axes in the Steering Wheel System. |
| Threshold | A threshold is a parameter that Auto Save uses to classify common adjustments. There are two types of thresholds: Threshold Classify Parameter and Minimum Classify Parameter. |
| Threshold Classify Parameter | Threshold Classify Parameter is a special threshold. It defines the amount of adjustment that must occur before Auto Save considers the adjustment major. Adjustments less than it are minor. Adjustments greater than or equal to it are major. |
| Trap State | The Trap State is a state of the Auto Save Decide Function in which Auto Save has suspended retention actions for the rest of this key cycle. |
| User Profile | The User Profile is a type of Profile that is active when an authenticated user is in the vehicle. |
| UX | User Experience |
| Valet Mode | Valet Mode allows the user to lock access to the SYNC system and their personal information when a valet operates the vehicle. Valet Mode switches the profile type to Guest Profile. |
| VBS-BCS Interface | The interface by which the Vehicle Body System provides the Body Control System with the Auto Save Feature’s requests for retention. It is also the interface by which the Body Control System provides the Vehicle Body System with information about profile changes and updates. |
| VBS-IS Interface | The interface by which the Vehicle Body System provides the Infotainment System with the Auto Save Feature’s classifications and notifications from the Vehicle Body. It is also the interface by which the Infotainment System provides the Vehicle Body System with the Auto Save Feature's control flow. |
| VBS-PS Interface | The interface by which the Vehicle Body System provides the Pedal System with the Auto Save Feature’s control flows. It is also the interface by which the Pedal System provides the Vehicle Body System with the pedal adjustment classification. |
| VBS-SS Interface | The interface by which the Vehicle Body System provides the Seat System with the Auto Save Feature’s control flows. It is also the interface by which the Seat System provides the Vehicle Body System with the seat and multicontour adjustment classifications. |
| VBS-SWS Interface | The interface by which the Vehicle Body System provides the Steering Wheel System with the Auto Save Feature’s control flows. It is also the interface by which the Steering Wheel System provides the Vehicle Body System with the steering wheel adjustment classification. |
| VBS-VDS Interface | The interface by which the Vehicle Body System provides the Vehicle Door System with the Auto Save Feature’s control flows. It is also the interface by which the Vehicle Door System provides the Vehicle Body System with the left side and right side mirror adjustment classifications. |
| VDS-SMAS Interface | The interface by which the Vehicle Door System provides the Side Mirror Axis Subsystem with the Auto Save Feature's control flows. |
| VDS-SMRS Interface | The interface by which the Vehicle Door System provides the Side Mirror Repository Subsystem with the Auto Save Feature's control flows. It is also the means by which the Side Mirror Repository Subsystem reports the combined classification of all the axes in the Side Mirror System. |
| Vehicle Body System | The Vehicle Body System is the abstraction that encompasses the system and features that are responsible for executing the Automatic Saving functionality relating to cabin comfort.  Owner: Unknown |
| Vehicle Door System | The Vehicle Door System is the abstraction that encompasses the system and features that are responsible for executing the Automatic Saving functionality relating to a mirror, whether it is on a driver or passenger door.  Owner: Newton Filho, Ibaa Al-Hayek |
| Vehicle Mode | Vehicle Mode refers to the current operating mode of the vehicle. This mode can be Normal, Factory, or Transport. |
| Vehicle Preferences Owner | It's also called as Vehicle Profile Owner. Customer that owns the set of preferences that get applied to the vehicle utilizing the profiles feature. |
| Vehicle Status System | The Vehicle Status System provides the current status of the vehicle in terms of the vehicle mode, ignition status, and system time. |
| Vehicle System | The vehicle is the abstraction that encompasses the system and features that are responsible for executing the Automatic Saving functionality.  Owner: Unknown |
| VSS-IS Interface | The interface by which the Vehicle Status System provides the Infotainment System with the Inhibit Status messages. |

Table 1‑2: Definitions used in this document

### Abbreviations

*No acronyms specified.*

# Feature Implementation Overview

## Description

F002032 Auto Save Feature

This Block represents the EOI and the Feature called Auto Save. The Auto Save feature is an enhancement of Classic Memory feature, taking the role of assists the user with seamlessly and automatically saving to the user profile any positional settings changes.

This feature would also take the role of aiding the Personal and Portable Profiles feature with protecting the positional settings of unauthorized and unwanted access and saving.

## Input Requirements/Documents

|  |  |  |  |
| --- | --- | --- | --- |
| **Reference**  (Reference as listed in ch. “References”) | **Section/Requirement** | **Description** | **Derived Requirement**  (optional – reference to requirement in ch. “Feature Implementation Requirements”) |
| **Feature/Function Requirements** | | | |
| VDOC080441 | Auto Save Feature Specification | Feature Specification for Auto Save |  |
| VDOC089611 | Auto Save Functional Specification | Functional Specification for Auto Save |  |
| **Ford Engineering Standards** | | | |
|  |  |  |  |
|  |  |  |  |
| **Legal Regulations** | | | |
|  |  |  |  |
| **Industry Standards** | | | |
|  |  |  |  |
| **Other Sources** | | | |
|  |  |  |  |
|  |  |  |  |

Table 3: Input Requirements/Documents

## Lessons Learned

See lessons learned in Feature Document

## Assumptions

See assumptions in Feature Document

# Feature Implementation Architecture

## Functional Architecture

### Description

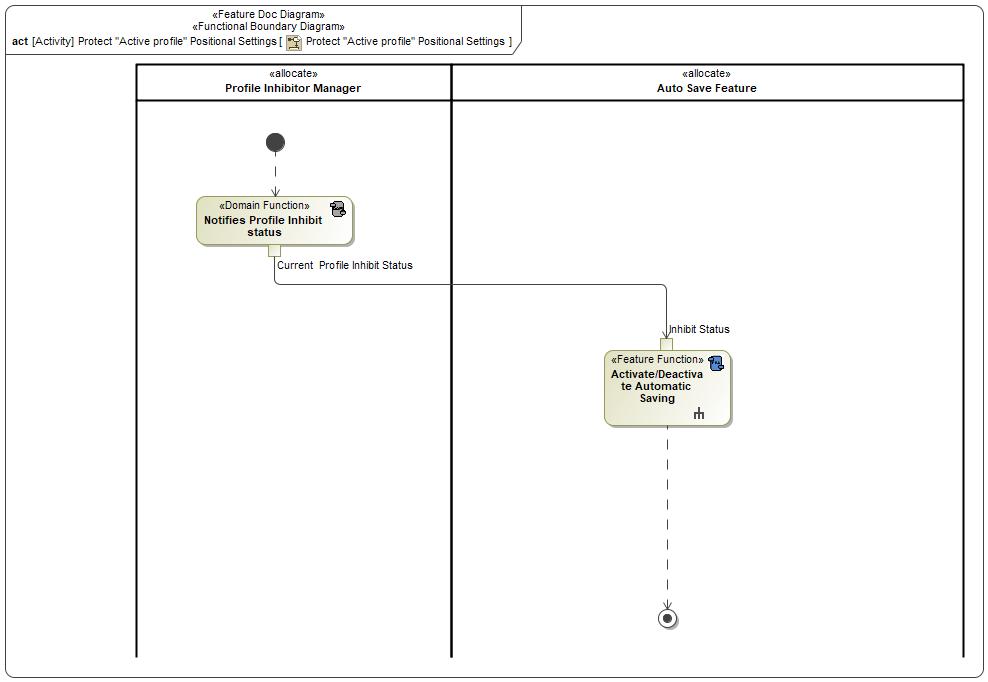


Figure 1: Protect "Active profile" Positional Settings

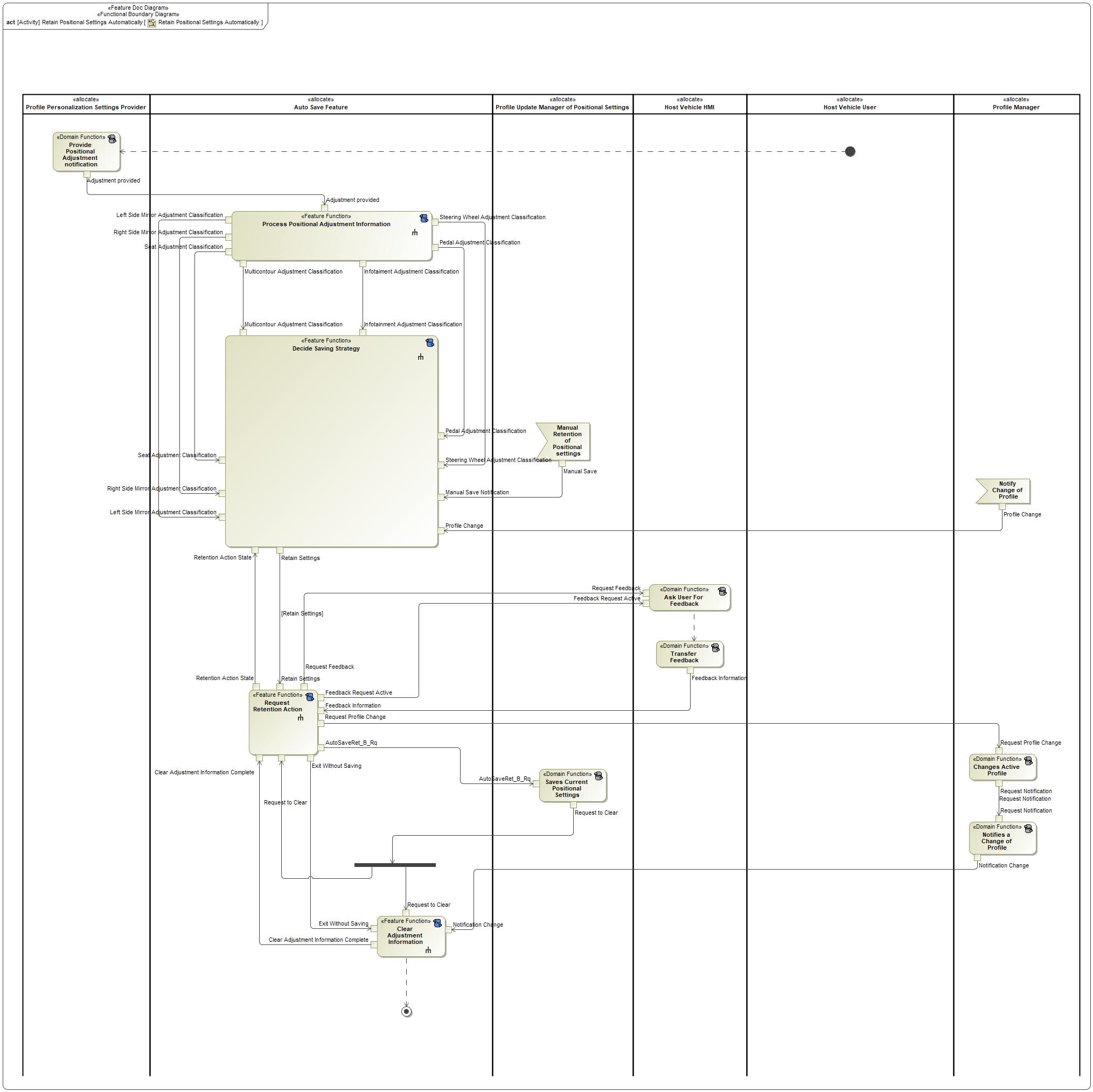


Figure 2: Retain Positional Settings Automatically

### Function List

The following functions from the [Global Feature & Function List](https://www.vsemweb.ford.com:443/tc/launchapp?-attach=true&-s=226TCSession&-o=ZmZNi0JHx3NrTDAAAAAAAAAAAAA) are referenced in this Feature Implementation Specification:

| **Function ID** | Function Name | Function Description |
| --- | --- | --- |
|  | *(activity)* Notifies Profile Inhibit status | *(activity)* DOMAIN FUNCTION - The Notify Profile Inhibit Status Functionality is the means by which an external entity informs Auto Save that its functionality should be inhibited. |
|  | *(activity)* Activate/Deactivate Automatic Saving | *(activity)* FEATURE FUNCTION - This feature function turns off and on Auto Save feature’s ability to process positional adjustments and decide what action to undertake. |

Table 4: List of Functions on Protect "Active profile" Positional Settings

| **Function ID** | Function Name | Function Description |
| --- | --- | --- |
|  | *(activity)* Clear Adjustment Information | *(activity)* FEATURE FUNCTION - The Automatic Saving Feature keeps a list of adjustments that have arrived but are not yet processed. This function clears them to allow for additional processing. |
|  | *(activity)* Process Positional Adjustment Information | *(activity)* FEATURE FUNCTION - This function receives an alert that a positional adjustment has taken place and determines the type of adjustment. |
|  | *(activity)* Transfer Feedback | *(activity)* DOMAIN FUNCTION - This function will transfer the feedback provided to the user to any entity that needs it. |
|  | *(activity)* Request Retention Action | *(activity)* FEATURE FUNCTION - This function requests that the Profile Update Manager of Positional Settings retain the current positional settings in memory. |
|  | *(activity)* Decide Saving Strategy | *(activity)* FEATURE FUNCTION - Based on the adjustments that have arrived, this function determines whether to retain settings automatically or receive feedback from the Host Vehicle User. |
|  | *(activity)* Provide Positional Adjustment notification | *(activity)* DOMAIN FUNCTION - This function informs the Automatic Saving Feature that a positional adjustment has occurred, and it must respond to it. |
|  | *(activity)* Saves Current Positional Settings | *(activity)* DOMAIN FUNCTION - This function retains the current position of the positional settings in memory. |
|  | *(activity)* Ask User For Feedback | *(activity)* DOMAIN FUNCTION - This function of Host Vehicle HMI informs the Host Vehicle User that saving options are available. |
|  | *(activity)* Changes Active Profile | *(activity)* DOMAIN FUNCTION - This function of the Profile Manager switches the active profile. More information about what happens in this function can be found in “BEHAVIOR: Change User Profile”. |
|  | *(activity)* Notifies a Change of Profile | *(activity)* DOMAIN FUNCTION - This function will alert the Automatic Saving Feature that a change of profile has begun. |

Table 5: List of Functions on Retain Positional Settings Automatically

### Signal List

|  |  |  |
| --- | --- | --- |
| **Signal Name** | **Description** | **Details** |

## Physical Architecture

### E/E Architecture

#### E/E Architecture Variants

*No E/E Architecture Variant found.*

|  |  |  |
| --- | --- | --- |
| E/E Architecture Variant Name | Variant Description | Variant Condition (optional) |
| e.g “FNV2” |  | Example:   * VOpt\_NetworkTopology = FNV2   AND   * DATGen = 2.0 |
| e.g. “CGEA Low Content” |  | Example:   * (VOpt\_NetworkTopology = CGEA13   OR  VOpt\_NetworkTopology = CGEA11)  AND   * VOpt\_ABS = None   AND   * VOpt\_PTModule = ECM |
|  |  |  |

##### E/E Architecture “Architecture Variant 1”: Physical Architecture

This E/E Architecture variant … <add some explanatory text here>



Figure 1: Internal Block Diagram of the Auto Save Feature

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Logical Signal Name | Implementation Signal Name | Type | Source ECU | Destination ECU | Notes |
| Activation Conditions | Ignition\_Status | CAN | BCM | ECG |  |
| Activation Conditions | LifeCycMde\_D\_Actl | CAN | BCM | ECG |  |
| Activation Conditions | HMI\_HMIMode\_St | CAN | BCM | ECG |  |
| Auto Save Active Status | AutoSave\_D\_Stat | CAN | ECG | DSM MCSM DDM PDM | Signal name pending approval |
| AutoSaveRet\_B\_Rq | AutoSaveRet\_B\_Rq | CAN | ECG | DSM | Signal name pending approval |
| Exit Without Saving | AutoSaveExit\_B\_Rq | CAN | ECG | DSM MCSM DDM PDM | Signal name pending approval |
| Feedback Information | AutoSaveHMPromp\_D\_Stat | Ethernet | APIM | ECG | Signal name pending approval |
| Feedback Request Active | AutoSaveHMIPromp\_B\_Rq | Ethernet | ECG | APIM | Signal name pending approval |
| Infotainment Classification | N/A | N/A | N/A | N/A | HUD not on CDX746/747 |
| Inhibit Request (1) | PPPHMIInhibit\_D\_Rq | Ethernet | APIM | ECG | Signal name pending approval |
| Inhibit Request (2) | SeatPos\_D\_Stat | CAN | DSM | ECG |  |
| Inhibit Request (3) | Profile Authentication | Internal | ECG | ECG | Signal details in progress |
| Inhibit Request (4) | RejuvActive\_Stat | TBD | APIM | ECG | Signal name pending approval |
| Inhibit Request (5) | Ssw/DttStateStat | TBD | SCMB | ECG | Signal name pending approval |
| Inhibit Request (6a) | PersNo\_D\_Actl | CAN | BCM | ECG |  |
| Inhibit Request (6b) | PersNoPos\_D\_Actl | CAN | BCM | ECG |  |
| Left Side Mirror Adjustment Classification | AutoSaveMirrorL\_D\_Stat | CAN | DDM | ECG | Signal name pending approval |
| Manual Save | Memory\_Cmd | CAN | DSM | ECG |  |
| Multicontour Adjustment Classification | AutoSaveDrvStms\_D\_Stat | CAN | MCSM | ECG | Signal name pending approval |
| Notification Change | Memory\_Cmd | CAN | DSM | ECG MCSM DDM PDM |  |
| Pedal Adjustment Classification | AutoSavePedal\_D\_Stat | CAN | DSM | ECG | Signal name pending approval |
| Profile Change | Memory\_Cmd | CAN | DSM | ECG |  |
| Request Feedback | AutoSaveHMITyp\_D\_Stat | Ethernet | ECG | APIM | Signal name pending approval |
| Request Profile Change | AutoSaveHMIPC\_B\_Rq | Ethernet | ECG | APIM | Signal name pending approval |
| Request to Clear | Memory\_Cmd | CAN | DSM | ECG MCSM DDM PDM |  |
| Right Side Mirror Adjustment Classification | AutoSaveMirrorR\_D\_Stat | CAN | PDM | ECG | Signal name pending approval |
| Seat Adjustment Classification | AutoSaveDrvSeat\_D\_Stat | CAN | DSM | ECG | Signal name pending approval |
| Steering Wheel Adjustment Classification | AutoSaveStrWhl\_D\_Stat | CAN | DSM | ECG | Signal name pending approval |

Figure 1: Logical/CAN Mapping

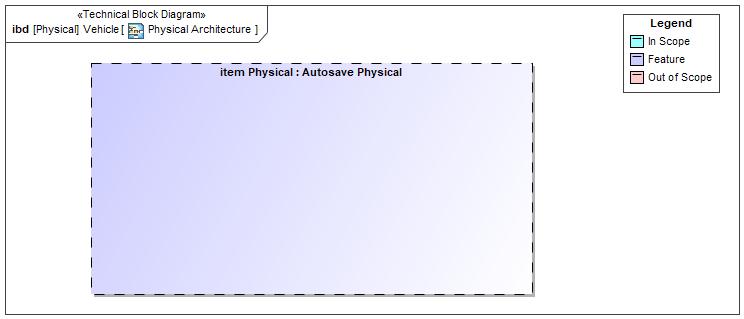


Figure 1: Physical Architecture

##### E/E Architecture “Architecture Variant 1”: Physical Architecture Structure

This E/E Architecture variant … <add some explanatory text here>

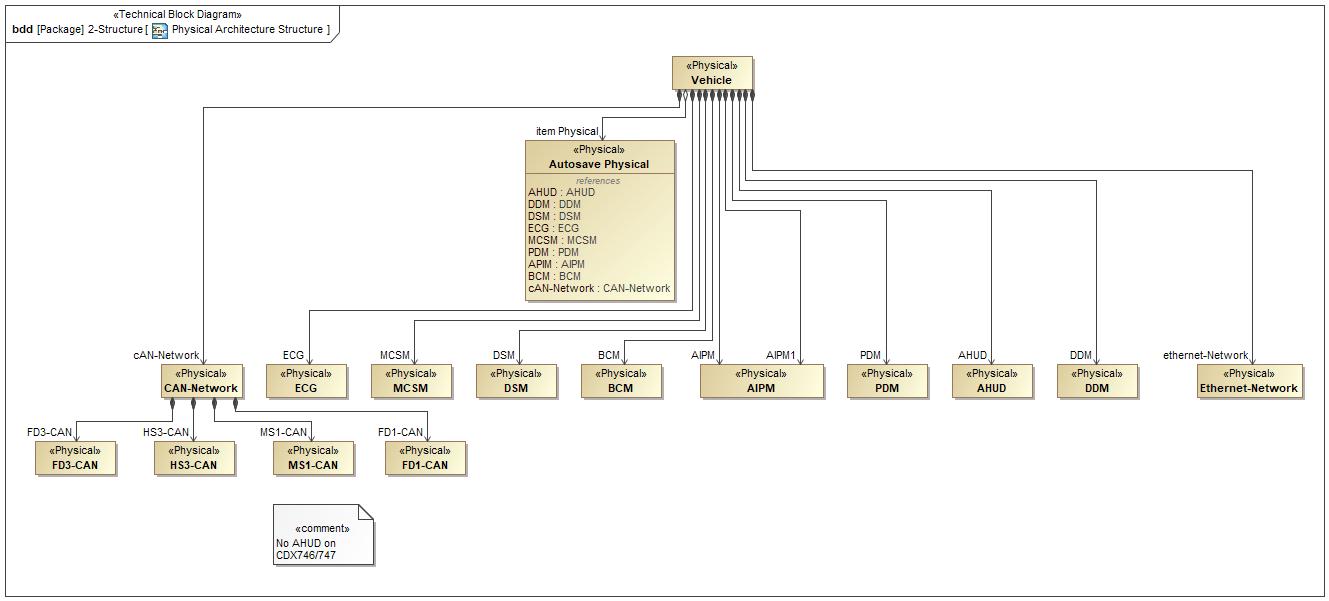


Figure 2: Physical Architecture Structure

#### E/E Components

|  |  |
| --- | --- |
| Component Name | **Description** |

Table 3‑6: Electrical Components

#### E/E Connections

*No E/E Connections found.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Connection Name | **Connection Type** | **Protocol**  Only if ‘Connection Type’ is “Network”/”RF-Digital” | **Description** | **Allocated Messages**  Only if ‘Connection Type’ is “Network”/”RF-Digital” | **Connected Nodes** |
| <Give a Connection Name>  *#Hint:*   * *For ‘Connection Type’ “Network” check with Netcom for naming conventions for busses/networks* * *For other ‘Connection Types’  use PSF naming convention of the* [*EDAS signal database in VSEM*](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=gPXpSoIbx3NrTDAAAAAAAAAAAAA&servername=Production_Server)*. You may directly link* to the VSEM entry. Refer to the “Event Notification Signal” example below”. | Choose an item. | Choose an item. | <Provide a brief description> | <Give a list of relevant messages >  *#Hint:*  *The message name should be linked.*  *E.g.*   * *for CAN signals to the VSEM CMDB (refer e.g. to* [*CGEA 1.3*](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=n0SJN9h0x3NrTDAAAAAAAAAAAAA&servername=Production_Server) *or* [*FNV2*](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=jXfpx2PHx3NrTDAAAAAAAAAAAAA&servername=Production_Server)*).* * *for SOA Service API data elements to the SOA Service API or MQTT/FTCP message in the corresponding central repository (e.g.* [*Central SW Service Catalog*](http://wiki.ford.com/display/CS/Service+Catalog)*)*   *If a message is not yet managed in VSEM or any other central repository, add a link to the section “****Error! Reference source not found.****” in the* ***Error! Reference source not found.****. In the subsections of that data dictionary chapter you may add a definition of your message.* | <Give a list of relevant nodes> |
| e..g. HS-CAN4 | Network | CAN (High Speed) | Infotainment High Speed CAN bus | … | … |
| e..g. [CELLULAR TCUB WIFI](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=WZe1wsPXx3NrTDAAAAAAAAAAAAA&servername=Production_Server%5e) | RF-Digital | WiFi (FTCP) |  | … | … |
| e.g. [https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=LjXtx$M9x3NrTDAAAAAAAAAAAAA&servername=Production\_ServerCR167·CTRL MOD. - RCM # EVENT NOTIFICATION SIGNAL 1](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=LjXtx$M9x3NrTDAAAAAAAAAAAAA&servername=Production_Server) | PMW | n/a | Event Notification Signal | n/a |  |
|  |  |  |  |  |  |

Table 3‑7: E/E Connections

#### Signal List

|  |  |  |
| --- | --- | --- |
| **Signal Name** | **Description** | **Details** |
| **InternalSignal3** |  | Satisfies:  *No reqs. satisfied* |
| **CANSignal2** |  | Satisfies:  *No reqs. satisfied* |
| **CANSignal3** |  | Satisfies:  *No reqs. satisfied* |
| **InternalSignal1** |  | Satisfies:  *No reqs. satisfied* |
| **CANSignal1** |  | Satisfies:  *No reqs. satisfied* |
| **InternalSignal2** |  | Satisfies:  *No reqs. satisfied* |

### Software Component Architecture

#### Description

This Software Component Architecture … <add some explanatory text here>

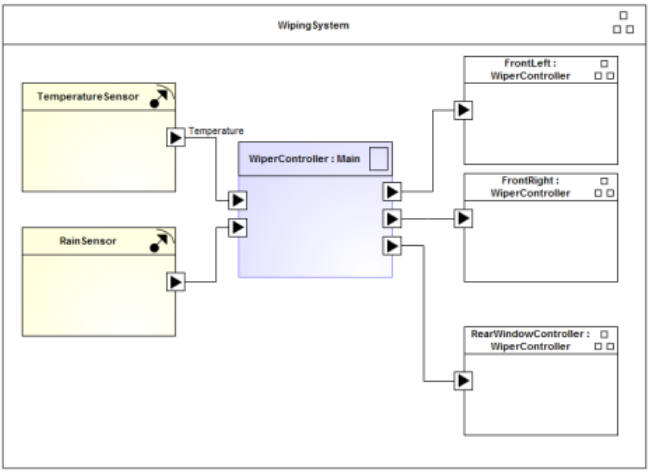


Figure 3‑3: AUTOSAR compliant SW Component Architecture

## Function Deployment

### Deployment Variants

|  |  |  |
| --- | --- | --- |
| **Deployment Variant Name** | Variant Description | Variant Condition (optional) |
| “Variant 1” (e.g. for CGEA1-3) | Some explanatory text characterizing the variant |  |
| “Variant 2” (e.g. for FNV) |  |  |
|  |  |  |
|  |  |  |

#### Deployment “Variant 1”

This deployment variant … <add some explanatory text here>



Table 3‑8: Sample Deployment Diagram

### Function Allocation

| Component | Technology Function Name | Logical Function Name |
| --- | --- | --- |
|
| Component 1 | Impl. Function (or MBSE Technology Function) 1 | (Atomic) Logical Function 1 |
| Impl. Function (or MBSE Technology Function) 2a | (Atomic) Logical Function 2 |
| Impl. Function (or MBSE Technology Function) 2b |
| Impl. Function (or MBSE Technology Function) 3 | n/a  *#Hint: Some Technology Functions might not be derived from logical functions. This can occur in an MBSE context if the technology (=Technology) function is decomposed from another technology function* |
| Component 2 | Impl. Function (or MBSE Technology Function) 4 | (Atomic) Logical Function 3 |
| Impl. Function (or MBSE Technology Function) 5 | (Atomic) Logical Function 4 |
| Impl. Function (or MBSE Technology Function) 6 | (Atomic) Logical Function 5 |
| AIPM |  |
| Feature A Physical |  |
| Autosave Physical |  |
| FD3-CAN |  |
| MCSM | MCSM Autosave Generic component function | *No logical function allocated* |  |
| MS1-CAN |  |
| Ethernet-Network |  |
| DDM | DDM Autosave Generic component function | *No logical function allocated* |
|  |
| PDM | PDM Autosave Generic Component function | *No logical function allocated* |  |
| DSM | DSM Autosave Generic component function | *No logical function allocated* |  |
| Vehicle |  |
| CAN-Network |  |
| Actuator |  |
| ECG | ECG Autosave Generic component function | *No logical function allocated* |  |
| HS3-CAN |  |
| BCM |  |
| FD1-CAN |  |
| Vehicle (Physical) |  |
| Sensor |  |
| AHUD |  |

Table 3‑9: Function Allocation Table (Basic)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Component | | Technology Function Name | TSR | |
| Name | ASIL |  | ID | ASIL |
| Component 1 |  | Impl. Function 1 | Req 1-1: “Some req name” |  |
|  |  |
| … |  |
|  |  |
| Req 1-n: “Another req name” |  |
| Impl. Function 2a | Req 2a-1 |  |
| … |  |
| Req 2a-n |  |
| Impl. Function 2b | Req 2b-1 |  |
| … |  |
| Req 2b-n |  |
| Impl. Function 6 | Req 6-1 |  |
| … |  |
| Req 6-n |  |
| n/a  *#Hint: TSRs may be directly allocated to components. This is necessary for requirements such as ASIL hardware metric values and safety measures that don’t relate to functions (ex. thermal shielding or something like a fan cover to prevent access to moving parts).* | Req x |  |
| Component 2 |  | Impl. Function 3 | Req 3-1 |  |
| … |  |
| Req 3-n |  |
| Impl. Function 4 | Req 4-1 |  |
| … |  |
|  |  |
| Req 4-n |  |
| Impl. Function 5 | Req 5-1 |  |
| … |  |
| Req 5-n |  |
| AIPM |  |  |  |
| Feature A Physical |  |  |  |
| Autosave Physical |  |  |  |
| FD3-CAN |  |  |  |
| MCSM |  | MCSM Autosave Generic component function | * MCSM - Allocate Multicontour Adjustment Repository * MCSM - Auto Save Active Status signal * MCSM - Clear Request signal * MCSM - Exit Without Saving signal * MCSM - MCS Lower Bolster - Adjustment ID * MCSM - MCS Lower Bolster - Axis Classification * MCSM - MCS Lower Bolster - Functions * MCSM - MCS Lower Bolster - Seat Axis Controller * MCSM - MCS Lower Bolster - Seat Axis Sensor * MCSM - MCS Lower Bolster - User Input Classify Parameter * MCSM - MCS Lower Bolster- Generic Adjustment * MCSM - MCS Lower Lumbar - Adjustment ID * MCSM - MCS Lower Lumbar - Axis Classification * MCSM - MCS Lower Lumbar - Functions * MCSM - MCS Lower Lumbar - Generic Adjustment * MCSM - MCS Lower Lumbar - Seat Axis Controller * MCSM - MCS Lower Lumbar - Seat Axis Sensor * MCSM - MCS Lower Lumbar - User Input Classify Parameter * MCSM - MCS Middle Lumbar - Adjustment ID * MCSM - MCS Middle Lumbar - Axis Classification * MCSM - MCS Middle Lumbar - Functions * MCSM - MCS Middle Lumbar - Generic Adjustment * MCSM - MCS Middle Lumbar - Seat Axis Controller * MCSM - MCS Middle Lumbar - Seat Axis Sensor * MCSM - MCS Middle Lumbar - User Input Classify Parameter * MCSM - MCS Upper Bolster - Adjustment ID * MCSM - MCS Upper Bolster - Functions * MCSM - MCS Upper Bolster - Axis Classification * MCSM - MCS Upper Bolster - Seat Axis Controller * MCSM - MCS Upper Bolster - Seat Axis Sensor * MCSM - MCS Upper Bolster - User Input Classify Parameter * MCSM - MCS Upper Bolster- Generic Adjustment * MCSM - MCS Upper Lumbar - Adjustment ID * MCSM - MCS Upper Lumbar - Axis Classification * MCSM - MCS Upper Lumbar - Functions * MCSM - MCS Upper Lumbar - Seat Axis Controller * MCSM - MCS Upper Lumbar - Seat Axis Sensor * MCSM - MCS Upper Lumbar - User Input Classify Parameter * MCSM - MCS Upper Lumbar- Generic Adjustment * MCSM - Multicontour Adjustment Classification signal * MCSM - Multicontour Adjustment Repository - Functions * MCSM - Multicontour Adjustment Repository - Data * MCSM - Multicontour Adjustment Repository - Seat Repository Controller * MCSM - Multicontour Adjustment Repository - Signals * MCSM - Notification Change signal * MCSM - Processing Status Delay Parameter |  |  |
| MS1-CAN |  |  |  |
| Ethernet-Network |  |  |  |
| DDM |  | DDM Autosave Generic component function | * DDM - Auto Save Active Status signal * DDM - Allocate Left Side Mirror Adjustment Repository * DDM - Clear Request signal * DDM - Driver Mirror Tilt Left/Right - Adjustment ID * DDM - Driver Mirror Tilt Left/Right - Axis Classification * DDM - Driver Mirror Tilt Left/Right - Functions * DDM - Driver Mirror Tilt Left/Right - Generic Adjustment * DDM - Driver Mirror Tilt Left/Right - Minimum Classify Parameter * DDM - Driver Mirror Tilt Left/Right - Side Mirror Axis Controller * DDM - Driver Mirror Tilt Left/Right - Side Mirror Axis Sensor * DDM - Driver Mirror Tilt Left/Right - Threshold Classify Parameter * DDM - Driver Mirror Tilt Up/Down - Adjustment ID * DDM - Driver Mirror Tilt Up/Down - Axis Classification * DDM - Driver Mirror Tilt Up/Down - Functions * DDM - Driver Mirror Tilt Up/Down - Generic Adjustment * DDM - Driver Mirror Tilt Up/Down - Minimum Classify Parameter * DDM - Driver Mirror Tilt Up/Down - Side Mirror Axis Controller * DDM - Driver Mirror Tilt Up/Down - Side Mirror Axis Sensor * DDM - Driver Mirror Tilt Up/Down - Threshold Classify Parameter * DDM - Exit Without Saving signal * DDM - Left Side Mirror Adjustment Classification signal * DDM - Left Side Mirror Adjustment Repository - Data * DDM - Left Side Mirror Adjustment Repository - Functions * DDM - Left Side Mirror Adjustment Repository - Side Mirror Repository Controller * DDM - Left Side Mirror Adjustment Repository - Signals * DDM - Notification Change signal |  |
|  |  |  |
| PDM |  | PDM Autosave Generic Component function | * PDM - Allocate Right Side Mirror Adjustment Repository * PDM - Auto Save Active Status signal * PDM - Clear Request signal * PDM - Exit Without Saving signal * PDM - Notification Change signal * PDM - Passenger Mirror Tilt Left/Right - Adjustment ID * PDM - Passenger Mirror Tilt Left/Right - Axis Classification * PDM - Passenger Mirror Tilt Left/Right - Functions * PDM - Passenger Mirror Tilt Left/Right - Generic Adjustment * PDM - Passenger Mirror Tilt Left/Right - Minimum Classify Parameter * PDM - Passenger Mirror Tilt Left/Right - Side Mirror Axis Controller * PDM - Passenger Mirror Tilt Left/Right - Side Mirror Axis Sensor * PDM - Passenger Mirror Tilt Left/Right - Threshold Classify Parameter * PDM - Passenger Mirror Tilt Up/Down - Adjustment ID * PDM - Passenger Mirror Tilt Up/Down - Axis Classification * PDM - Passenger Mirror Tilt Up/Down - Functions * PDM - Passenger Mirror Tilt Up/Down - Generic Adjustment * PDM - Passenger Mirror Tilt Up/Down - Minimum Classify Parameter * PDM - Passenger Mirror Tilt Up/Down - Side Mirror Axis Controller * PDM - Passenger Mirror Tilt Up/Down - Side Mirror Axis Sensor * PDM - Passenger Mirror Tilt Up/Down - Threshold Classify Parameter * PDM - Processing Status Delay Parameter * PDM - Right Side Mirror Adjustment Classification signal * PDM - Right Side Mirror Adjustment Repository - Data * PDM - Right Side Mirror Adjustment Repository - Functions * PDM - Right Side Mirror Adjustment Repository - Side Mirror Repository Controller * PDM - Right Side Mirror Adjustment Repository - Signals |  |  |
| DSM |  | DSM Autosave Generic component function | * DSM - Auto Save Active Status signal * DSM - Clear Request signal * DSM - Exit Without Saving signal * DSM - Notification Change signal * DSM - Pedal - Allocate Pedal Adjustment Repository * DSM - Pedal - Pedal Adjustment Classification signal * DSM - Pedal - Pedal Adjustment Repository - Data * DSM - Pedal - Pedal Adjustment Repository - Functions * DSM - Pedal - Pedal Adjustment Repository - Pedal Repository Controller * DSM - Pedal - Pedal Adjustment Repository - Signals * DSM - Pedal - Pedal Near/Far - Adjustment ID * DSM - Pedal - Pedal Near/Far - Axis Classification * DSM - Pedal - Pedal Near/Far - Functions * DSM - Pedal - Pedal Near/Far - Generic Adjustment * DSM - Pedal - Pedal Near/Far - Pedal Axis Controller * DSM - Pedal - Pedal Near/Far - Pedal Axis Sensor * DSM - Pedal - Pedal Near/Far - User Input Classify Parameter * DSM - Processing Status Delay Parameter * DSM - Seat - Allocate Seat Adjustment Repository * DSM - Seat - Seat Adjustment Classification signal * DSM - Seat - Seat Adjustment Repository - Data * DSM - Seat - Seat Adjustment Repository - Functions * DSM - Seat - Seat Adjustment Repository - Seat Repository Controller * DSM - Seat - Seat Adjustment Repository - Signals * DSM - Seat - Seat Back Lumbar - Adjustment ID * DSM - Seat - Seat Back Lumbar - Axis Classification * DSM - Seat - Seat Back Lumbar - Functions * DSM - Seat - Seat Back Lumbar - Generic Adjustment * DSM - Seat - Seat Back Lumbar - Seat Axis Controller * DSM - Seat - Seat Back Lumbar - Seat Axis Sensor * DSM - Seat - Seat Back Lumbar - User Input Classify Parameter * DSM - Seat - Seat Back Recline - Adjustment ID * DSM - Seat - Seat Back Recline - Axis Classification * DSM - Seat - Seat Back Recline - Functions * DSM - Seat - Seat Back Recline - Generic Adjustment * DSM - Seat - Seat Back Recline - Seat Axis Controller * DSM - Seat - Seat Back Recline - Seat Axis Sensor * DSM - Seat - Seat Back Recline - Threshold Classify Parameter * DSM - Seat - Seat Back Recline Track - Minimum Classify Parameter * DSM - Seat - Seat Back Upper Pivot - Adjustment ID * DSM - Seat - Seat Back Upper Pivot - Axis Classification * DSM - Seat - Seat Back Upper Pivot - Functions * DSM - Seat - Seat Back Upper Pivot - Generic Adjustment * DSM - Seat - Seat Back Upper Pivot - Seat Axis Controller * DSM - Seat - Seat Back Upper Pivot - Seat Axis Sensor * DSM - Seat - Seat Back Upper Pivot - User Input Classify Parameter * DSM - Seat - Seat Fore/Aft Track - Adjustment ID * DSM - Seat - Seat Fore/Aft Track - Axis Classification * DSM - Seat - Seat Fore/Aft Track - Functions * DSM - Seat - Seat Fore/Aft Track - Generic Adjustment * DSM - Seat - Seat Fore/Aft Track - Minimum Classify Parameter * DSM - Seat - Seat Fore/Aft Track - Seat Axis Controller * DSM - Seat - Seat Fore/Aft Track - Seat Axis Sensor * DSM - Seat - Seat Fore/Aft Track - Threshold Classify Parameter * DSM - Seat - Seat Head Rest Fore/Aft - Adjustment ID * DSM - Seat - Seat Head Rest Fore/Aft - Axis Classification * DSM - Seat - Seat Head Rest Fore/Aft - Functions * DSM - Seat - Seat Head Rest Fore/Aft - Generic Adjustment * DSM - Seat - Seat Head Rest Fore/Aft - Seat Axis Controller * DSM - Seat - Seat Head Rest Fore/Aft - Seat Axis Sensor * DSM - Seat - Seat Head Rest Fore/Aft - User Input Classify Parameter * DSM - Seat - Seat Head Rest Up/Down - Adjustment ID * DSM - Seat - Seat Head Rest Up/Down - Axis Classification * DSM - Seat - Seat Head Rest Up/Down - Functions * DSM - Seat - Seat Head Rest Up/Down - Generic Adjustment * DSM - Seat - Seat Head Rest Up/Down - Seat Axis Controller * DSM - Seat - Seat Head Rest Up/Down - Seat Axis Sensor * DSM - Seat - Seat Head Rest Up/Down - User Input Classify Parameter * DSM - Seat - Seat Left Extension - Adjustment ID * DSM - Seat - Seat Left Extension - Axis Classification * DSM - Seat - Seat Left Extension - Functions * DSM - Seat - Seat Left Extension - Generic Adjustment * DSM - Seat - Seat Left Extension - Seat Axis Controller * DSM - Seat - Seat Left Extension - Seat Axis Sensor * DSM - Seat - Seat Left Extension - User Input Classify Parameter * DSM - Seat - Seat Right Extension - Adjustment ID * DSM - Seat - Seat Right Extension - Axis Classification * DSM - Seat - Seat Right Extension - Functions * DSM - Seat - Seat Right Extension - Generic Adjustment * DSM - Seat - Seat Right Extension - Seat Axis Controller * DSM - Seat - Seat Right Extension - Seat Axis Sensor * DSM - Seat - Seat Right Extension - User Input Classify Parameter * DSM - Seat - Seat Tilt Track - Adjustment ID * DSM - Seat - Seat Tilt Track - Axis Classification * DSM - Seat - Seat Tilt Track - Functions * DSM - Seat - Seat Tilt Track - Generic Adjustment * DSM - Seat - Seat Tilt Track - Seat Axis Controller * DSM - Seat - Seat Tilt Track - Seat Axis Sensor * DSM - Seat - Seat Tilt Track - User Input Classify Parameter * DSM - Seat - Seat Up/Down Track - Adjustment ID * DSM - Seat - Seat Up/Down Track - Axis Classification * DSM - Seat - Seat Up/Down Track - Functions * DSM - Seat - Seat Up/Down Track - Generic Adjustment * DSM - Seat - Seat Up/Down Track - Minimum Classify Parameter * DSM - Seat - Seat Up/Down Track - Seat Axis Controller * DSM - Seat - Seat Up/Down Track - Seat Axis Sensor * DSM - Seat - Seat Up/Down Track - Threshold Classify Parameter * DSM - Steering Wheel - Allocate Steering Wheel Adjustment Repository * DSM - Steering Wheel - Steering Wheel Adjustment Classification signal * DSM - Steering Wheel - Steering Wheel Adjustment Repository - Data * DSM - Steering Wheel - Steering Wheel Adjustment Repository - Functions * DSM - Steering Wheel - Steering Wheel Adjustment Repository - Signals * DSM - Steering Wheel - Steering Wheel Adjustment Repository - Steering Wheel Repository Controller * DSM - Steering Wheel - Wheel Tele-In/Tele-Out - Adjustment ID * DSM - Steering Wheel - Wheel Tele-In/Tele-Out - Axis Classification * DSM - Steering Wheel - Wheel Tele-In/Tele-Out - Functions * DSM - Steering Wheel - Wheel Tele-In/Tele-Out - Generic Adjustment * DSM - Steering Wheel - Wheel Tele-In/Tele-Out - Minimum Classify Parameter * DSM - Steering Wheel - Wheel Tele-In/Tele-Out - Steering Wheel Axis Controller * DSM - Steering Wheel - Wheel Tele-In/Tele-Out - Steering Wheel Axis Sensor * DSM - Steering Wheel - Wheel Tele-In/Tele-Out - Threshold Classify Parameter * DSM - Steering Wheel - Wheel Tilt Up/Down - Adjustment ID * DSM - Steering Wheel - Wheel Tilt Up/Down - Axis Classification * DSM - Steering Wheel - Wheel Tilt Up/Down - Functions * DSM - Steering Wheel - Wheel Tilt Up/Down - Generic Adjustment * DSM - Steering Wheel - Wheel Tilt Up/Down - Minimum Classify Parameter * DSM - Steering Wheel - Wheel Tilt Up/Down - Steering Wheel Axis Controller * DSM - Steering Wheel - Wheel Tilt Up/Down - Steering Wheel Axis Sensor * DSM - Steering Wheel - Wheel Tilt Up/Down - Threshold Classify Parameter |  |  |
| Vehicle |  |  |  |
| CAN-Network |  |  |  |
| Actuator |  |  |  |
| ECG |  | ECG Autosave Generic component function | * Auto Save Data Analytics: Auto Save Exit Without Saving * Auto Save Data Analytics: Auto Save On/Off * Auto Save Data Analytics: Auto Save prompt display request * Auto Save Data Analytics: Auto Save request for change profile * Auto Save Data Analytics: Auto Save request for save * Auto Save Data Analytics: Change of profile did not occur * Auto Save Data Analytics: Easy Entry Easy Exit Inhibits Auto Save * Auto Save Data Analytics: Enhanced Memory Inhibits Auto Save * Auto Save Data Analytics: HMI - User Turns On/Off Auto Save * Auto Save Data Analytics: HMI - Prompt Response * Auto Save Data Analytics: Left Mirror - Classification of Adjustment by Auto Save * Auto Save Data Analytics: Pedal - Classification of Adjustment by Auto Save * Auto Save Data Analytics: PPP Inhibits Auto Save * Auto Save Data Analytics: Prompt not requested * Auto Save Data Analytics: Multicontour Seat - Classification of Adjustment by Auto Save * Auto Save Data Analytics: Rejuvenate Inhibits Auto Save * Auto Save Data Analytics: Right Mirror - Classification of Adjustment by Auto Save * Auto Save Data Analytics: Save not made * Auto Save Data Analytics: Seat - Classification of Adjustment by Auto Save * Auto Save Data Analytics: Steering Column - Classification of Adjustment by Auto Save * Auto Save Data Analytics: Stowable Steering Column Inhibits Auto Save * ECG - Activation - Configuration * ECG - Activation - Diagnostics Mode * ECG - Activation - HMI Mode * ECG - Activation - Igniton Status * ECG - Activation - Life Cycle Mode * ECG - Activation - Software Update Mode * ECG - Allocate Classified Adjustments Repository * ECG - Classified Adjustments Repository - Data * ECG - Clear Request signal * ECG - Exit Without Saving signal * ECG - Infotainment Adjustment Classification signal * ECG - Infotainment Controller * ECG - Inhibit Request - Easy Entry Easy Exit * ECG - Inhibit Request - Enhanced Memory 1 * ECG - Inhibit Request - Enhanced Memory 2 * ECG - Inhibit Request - PPP Authentication * ECG - Inhibit Request - PPP HMI * ECG - Inhibit Request - Rejuvenate * ECG - Inhibit Request - Stowable Steering Column * ECG - Left Side Mirror Adjustment Classification signal * ECG - Manual Save signal * ECG - Multicontour Adjustment Classification signal * ECG - Notification Change signal * ECG - Pedal Adjustment Classification signal * ECG - Profile Change signal * ECG - Right Side Mirror Adjustment Classification signal * ECG - Save Request signal * ECG - Save Time Constant * ECG - Save Wait Time Constant * ECG - Seat Adjustment Classification signal * ECG - Steering Wheel Adjustment Classification signal * ECG - Activate/Deactivate Automatic Saving - Functions * ECG - Adjustment Time Constant * ECG - Auto Save Active Status signal * ECG - Classified Adjustments Repository - Functions * ECG - Clear Adjustment Information - Functions * ECG - Decide Saving Strategy - Functions * ECG - Feedback Request Active signal * ECG - Ignore Time Constant * ECG - Prompt Time Constant * ECG - Request Feedback signal * ECG - Request Retention Action - Functions |  |  |
| HS3-CAN |  |  |  |
| BCM |  |  |  |
| FD1-CAN |  |  |  |
| Vehicle (Physical) |  |  |  |
| Sensor |  |  |  |
| AHUD |  |  |  |

Table 3‑10: Function Allocation Table (Functional Safety Extension)

# Feature Implementation Modeling

## Component Interaction Diagrams

### Scenario: “System Startup / Shutdown”

### Scenario: “Normal Operation”

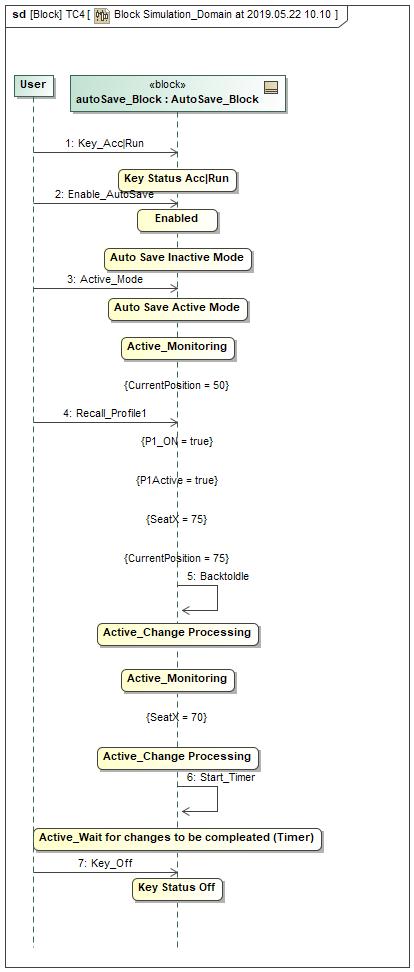


Figure 4: Block Simulation\_Domain at 2019.05.22 10.10

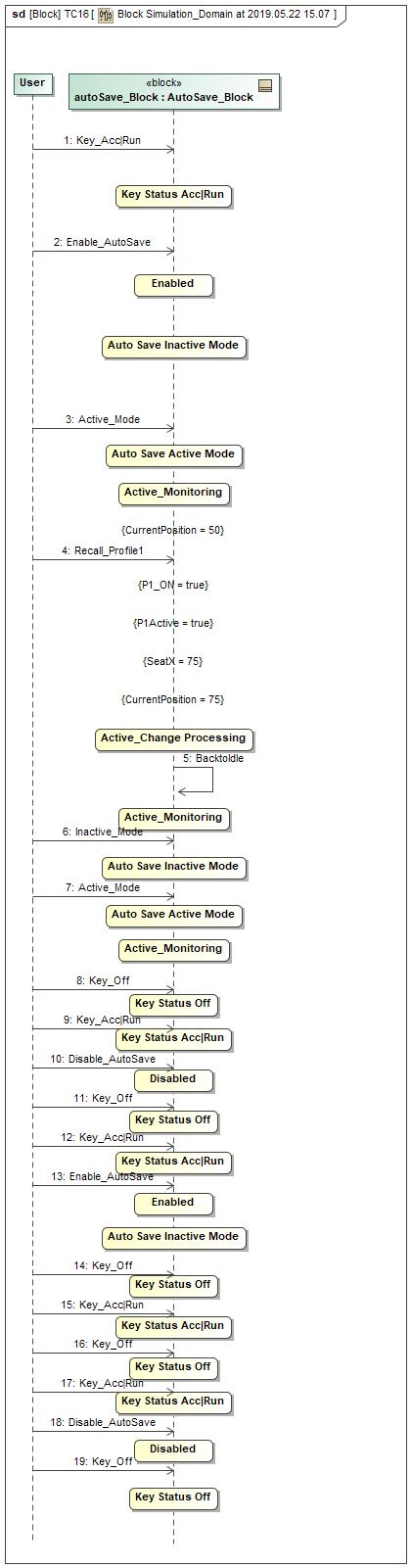


Figure 5: Block Simulation\_Domain at 2019.05.22 15.07

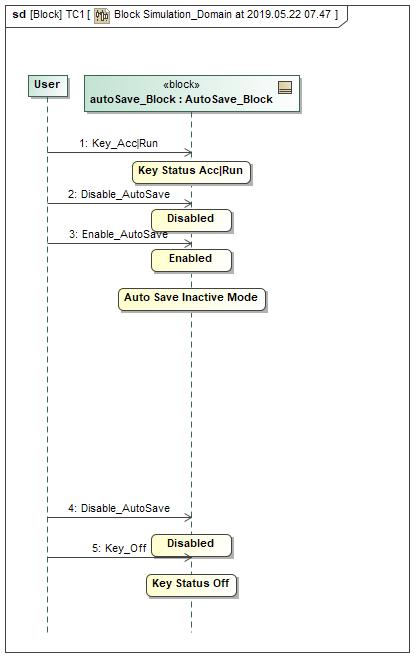


Figure 6: Block Simulation\_Domain at 2019.05.22 07.47

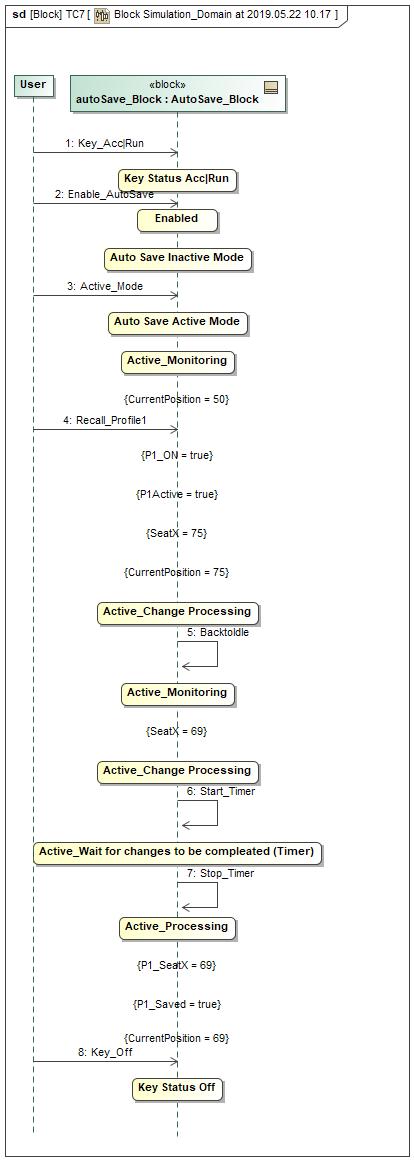


Figure 7: Block Simulation\_Domain at 2019.05.22 10.17

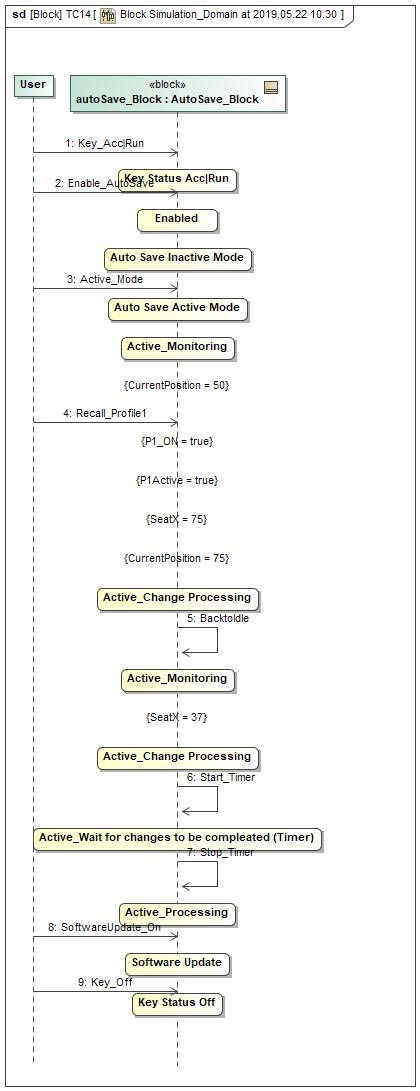


Figure 8: Block Simulation\_Domain at 2019.05.22 10.30

See Section **Error! Reference source not found.** for State Machine Diagram illustrating operation.

## Component Interface Behavior Diagrams

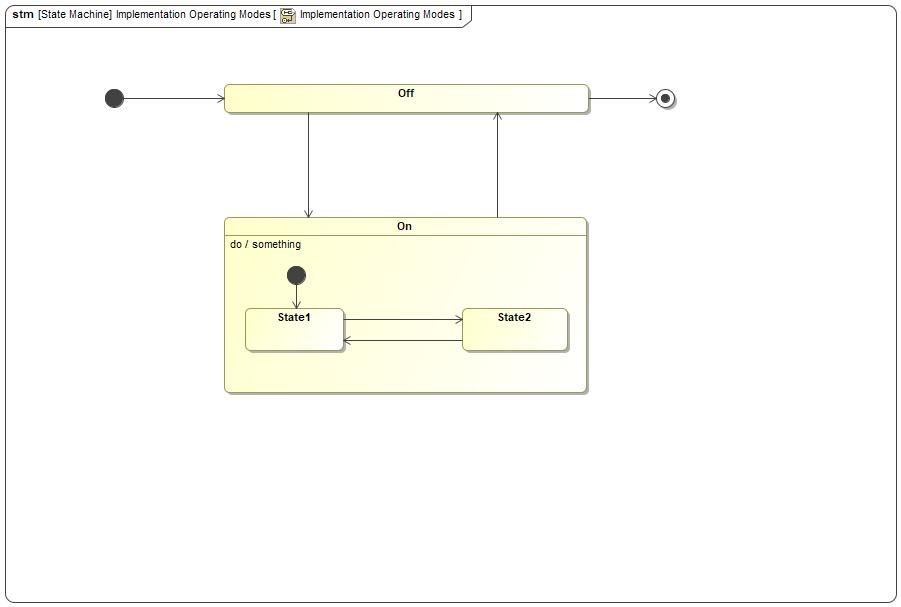


Figure 3: Implementation Operating Modes

|  |  |  |
| --- | --- | --- |
| **State** | **Description** | **Requirements Reference** (optional) |
| Off |  |  |
| On | Do behavior: something |  |
| State1 |  |  |
| State2 |  |  |

Table 11: Operation Modes and States on Implementation Operating Modes

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Transition ID** | **Source** | **Destination** | **Description** | **Requirements Reference**  (optional) |
| T1 | Off | a |  |  |
| T2 | State1 | State2 |  |  |
| T3 | On | Off |  |  |
| T4 |  |  |  |  |
| T5 | State2 | State1 |  |  |
| T6 | Off | On |  |  |
| T7 |  |  |  |  |

Table 12: Transitions between Operation Modes and States on Implementation Operating Modes

# Feature Implementation Requirements

## Functional Safety

Auto Save is a function of Personal and Portable Profiles. For the purposes of Functional Safety, its system behavior is captured under the Personal and Portable Profiles HARA, under the section “Create/Edit Vehicle Profile”. Towards that ends, Personal and Portable Profiles shall cascade all relevant FSR/TSRs required to be fulfilled by Auto Save. At the time of this authoring, the list of cascaded FSR/TSRs is as follows:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Item/Feature Name | Documentation Reference | Contact Information | # FSRs Cascaded | # TSRs Cascaded | Highest Rating Cascaded |
| PPP | [F002032](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=jxexwXN4x3NrTDAAAAAAAAAAAAA&servername=Production_Server) | Justin Bauer | 0 | 0 | QM |

### ASIL Decomposition of Technical Safety Requirements

<Place the input TSR here above the decomposition table>

| **Input TSR** | <Provide the ID of the TSR which shall be decomposed. That TSR is given above> | |
| --- | --- | --- |
| **Decomposition Rationale** | <Give a reason why the decomposition was performed> | |
| **Method for Decomposition** | Choose a Method | |
| **TSR 1 after Decomposition** | **TSR ID** | <Provide the ID of the decomposed TSR> |
| **TSR Title** | <Provide the title of the decomposed TSR> |
| **ASIL** |  |
| **Rationale** | <Provide a reason and thought behind that particular requirement. Should include how the requirement is able to independently fulfill the needs of the parent requirement> |
| **Satisfied by** | <Provide an Technology Function, physical signal, or physical component satisfying the requirement. This element shall be independent of the element satisfied by the other half of the ASIL decomposition.> |
| **TSR 2 after Decomposition** | **TSR ID** | <Provide the ID of the decomposed TSR> |
| **TSR Title** | <Provide the title of the decomposed TSR> |
| **ASIL** |  |
| **Rationale** | <Provide a reason and thought behind that particular requirement. Should include how the requirement is able to independently fulfill the needs of the parent requirement> |
| **Satisfied by** | <Provide an Technology Function, physical signal, or physical component satisfying the requirement. This element shall be independent of the element satisfied by the other half of the ASIL decomposition.> |
| **TSR for Independence**  *Note: should consider commonly used input, output and processing*  *Note: additional row should be added if additional* *requirements for Independence are necessary* | **TSR ID** |  |
| **TSR Title** |  |
| **ASIL** |  |
| **Rationale** |  |

Table 5‑1: ASIL Decomposition Table

## Requirements on Components

### DSM

DSM

#### Technology Function -887126209.jpg **DSM Autosave Generic component function**

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | |

Table 5‑2: Input Signal mappings of Function DSM Autosave Generic component function

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | |

Table 5‑3: Output Signal mappings of Function DSM Autosave Generic component function

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “***Error! Reference source not found.***” name bookmark in the Data Dictionary | Name should be a Word reference to the “**Error! Reference source not found.**” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the ***Error! Reference source not found.***section | Choose an item. | Depends on Method selection. For Method 2 a DID including start bit and length could be given. For Central Car Config a signal could be referenced |
|  |  |  |  |  |

Table 5‑4: Parameter mappings of Function “MyLogicalFunctionA\_Component1”

###### Interface Requirements

##### Function Requirements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement ID**  (of Logical Function) | **Requirement Title** | **Modification** | **Requirement ID**  (of Technology Function) | **Comment** |
| REQ\_abc |  | Removed | -- |  |
| REQ\_def |  | Replaced | REQ\_xyz |  |
| -- |  | Added | REQ\_123 |  |

Table 5‑5: Component Specific Requirements

|  |  |  |
| --- | --- | --- |
| **Requirement ID**  (of Logical Function) | **Requirement Title** | **Comment** |
|  |  |  |
|  |  |  |
| … |  |  |

Table 5‑6: Inherited Requirements

###### Component Specific Requirements

DSM - Seat - Seat Back Recline - Functions

The DSM shall implement the following functions for the Seat Back Recline axis:

Monitor Changes by Threshold

Request Positions

Check Processing Ability

Generate Adjustment Difference

Classify Adjustment by Threshold

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Pedal - Pedal Adjustment Repository - Pedal Repository Controller

The DSM shall take on the role of Pedal Repository Controller for the Pedal Adjustment Repository.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on the role of repository controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Recline - Axis Classification

The DSM shall assign the Seat Back Recline axis an "Axis Classification" of "Common".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Lumbar - Adjustment ID

The DSM shall assign the Seat Back Lumbar axis an "Adjustment ID" of 10.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Adjustment Repository - Signals

The DSM shall provide the following internal signals to the Update Adjustment Repository function for the Seat Adjustment Repository:

"Seat Fore/Aft Track Adjustment"

"Seat Up/Down Track Adjustment"

"Seat Tilt Track Adjustment"

"Seat Left Extension Adjustment"

"Seat Right Extension Adjustment"

"Seat Back Recline Adjustment"

"Seat Back Upper Pivot Adjustment"

"Seat Head Rest Fore/Aft Adjustment"

"Seat Head Rest Up/Down Adjustment"

"Seat Back Lumbar Adjustment"

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to establish which signals go to the repository. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Right Extension - Axis Classification

The DSM shall assign the Seat Right Extension axis an "Axis Classification" of "Rare".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Pedal - Pedal Near/Far - Functions

The DSM shall implement the following functions for the Pedal Near/Far axis:

Monitor Changes by User Input

Classify Adjustment by User Input

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Lumbar - Seat Axis Sensor

The DSM shall take on the role of Seat Axis Sensor for the Seat Back Lumbar axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Head Rest Up/Down - Axis Classification

The DSM shall assign the Seat Head Rest Up/Down axis an "Axis Classification" of "Rare".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Clear Request signal

The DSM shall receive the logical signal "Clear Request" via the CAN signal "Memory\_Cmd".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Clear Request. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Right Extension - Functions

The DSM shall implement the following functions for the Seat Right Extension axis:

Monitor Changes by User Input

Classify Adjustment by User Input

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Pedal - Allocate Pedal Adjustment Repository

The DSM shall allocate space for the Pedal Adjustment Repository.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to allocate repository in DSM for pedal. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Up/Down Track - Seat Axis Sensor

The DSM shall take on the role of Seat Axis Sensor for the Seat Up/Down Track axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Pedal - Pedal Near/Far - Axis Classification

The DSM shall assign the Pedal Near/Far axis an "Axis Classification" of "Rare".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Wheel Tilt Up/Down - Steering Wheel Axis Controller

The DSM shall take on the role of Steering Wheel Axis Controller for the Wheel Tilt Up/Down axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Up/Down Track - Functions

The DSM shall implement the following functions for the Seat Up/Down Track axis:

Monitor Changes by Threshold

Request Positions

Check Processing Ability

Generate Adjustment Difference

Classify Adjustment by Threshold

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Wheel Tilt Up/Down - Generic Adjustment

The DSM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "Wheel Tilt Up/Down Adjustment" for the Wheel Tilt Up/Down axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Wheel Tilt Up/Down - Steering Wheel Axis Sensor

The DSM shall take on the role of Steering Wheel Axis Sensor for the Wheel Tilt Up/Down axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Right Extension - Seat Axis Controller

The DSM shall take on the role of Seat Axis Controller for the Seat Right Extension axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Allocate Seat Adjustment Repository

The DSM shall allocate space for the Seat Adjustment Repository.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to allocate repository in DSM for seat. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Right Extension - Adjustment ID

The DSM shall assign the Seat Right Extension axis an "Adjustment ID" of 5.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Head Rest Up/Down - User Input Classify Parameter

The DSM shall assign the Seat Head Rest Up/Down axis a "User Input Classify Parameter" of "Minor".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign user input classify parameter for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Steering Wheel Adjustment Repository - Data

The DSM shall allocate space in the Steering Wheel Adjustment Repository for the following values:

"Wheel Tilt Up/Down Adjustment"

"Wheel Tele-In/Tele-Out Adjustment"

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to establish space in the repository. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Adjustment Repository - Data

The DSM shall allocate space in the Seat Adjustment Repository for the following values:

"Seat Fore/Aft Track Adjustment"

"Seat Up/Down Track Adjustment"

"Seat Tilt Track Adjustment"

"Seat Left Extension Adjustment"

"Seat Right Extension Adjustment"

"Seat Back Recline Adjustment"

"Seat Back Upper Pivot Adjustment"

"Seat Head Rest Fore/Aft Adjustment"

"Seat Head Rest Up/Down Adjustment"

"Seat Back Lumbar Adjustment"

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to establish space in the repository. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Tilt Track - Axis Classification

The DSM shall assign the Seat Tilt Track axis an "Axis Classification" of "Rare".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Steering Wheel Adjustment Repository - Functions

The DSM shall implement the following functions to manage the Steering Wheel Adjustment Repository:

Update Adjustment Repository

Provide Adjustment Classification

Clear Repository Adjustment Information

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to establish management of the repository. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Tilt Track - Generic Adjustment

The DSM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "Seat Tilt Track Adjustment" for the Seat Tilt Track axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Recline - Threshold Classify Parameter

The DSM shall assign the Seat Back Recline axis an "Threshold Classify Parameter" of 35 percent.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Fore/Aft Track - Generic Adjustment

The DSM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "Seat Fore/Aft Track Adjustment" for the Seat Fore/Aft Track axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Lumbar - Functions

The DSM shall implement the following functions for the Seat Back Lumbar axis:

Monitor Changes by User Input

Classify Adjustment by User Input

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Head Rest Fore/Aft - Seat Axis Controller

The DSM shall take on the role of Seat Axis Controller for the Seat Head Rest Fore/Aft axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Wheel Tele-In/Tele-Out - Threshold Classify Parameter

The DSM shall assign the Wheel Tele-In/Tele-Out axis an "Threshold Classify Parameter" of 30 percent.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Head Rest Up/Down - Seat Axis Sensor

The DSM shall take on the role of Seat Axis Sensor for the Seat Head Rest Up/Down axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Wheel Tilt Up/Down - Adjustment ID

The DSM shall assign the Wheel Tilt Up/Down axis an "Adjustment ID" of 40.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Upper Pivot - Seat Axis Controller

The DSM shall take on the role of Seat Axis Controller for the Seat Back Upper Pivot axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Tilt Track - User Input Classify Parameter

The DSM shall assign the Seat Tilt Track axis a "User Input Classify Parameter" of "Minor".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign user input classify parameter for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Lumbar - Seat Axis Controller

The DSM shall take on the role of Seat Axis Controller for the Seat Back Lumbar axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Auto Save Active Status signal

The DSM shall receive the logical signal "Auto Save Active Status" via the CAN signal "AutoSave\_D\_Stat".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Auto Save Active Status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Pedal - Pedal Near/Far - Adjustment ID

The DSM shall assign the Pedal Near/Far axis an "Adjustment ID" of 42.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Wheel Tilt Up/Down - Axis Classification

The DSM shall assign the Wheel Tilt Up/Down axis an "Axis Classification" of "Common".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Left Extension - Seat Axis Controller

The DSM shall take on the role of Seat Axis Controller for the Seat Left Extension axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Left Extension - User Input Classify Parameter

The DSM shall assign the Seat Left Extension axis a "User Input Classify Parameter" of "Minor".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign user input classify parameter for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Steering Wheel Adjustment Repository - Steering Wheel Repository Controller

The DSM shall take on the role of Steering Wheel Repository Controller for the Steering Wheel Adjustment Repository.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on the role of repository controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Left Extension - Seat Axis Sensor

The DSM shall take on the role of Seat Axis Sensor for the Seat Left Extension axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Pedal - Pedal Near/Far - Pedal Axis Controller

The DSM shall take on the role of Pedal Axis Controller for the Pedal Near/Far axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Lumbar - User Input Classify Parameter

The DSM shall assign the Seat Back Lumbar axis a "User Input Classify Parameter" of "Minor".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign user input classify parameter for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Wheel Tele-In/Tele-Out - Axis Classification

The DSM shall assign the Wheel Tele-In/Tele-Out axis an "Axis Classification" of "Common".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Right Extension - Generic Adjustment

The DSM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "Seat Right Extension Adjustment" for the Seat Right Extension axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Up/Down Track - Generic Adjustment

The DSM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "Seat Up/Down Track Adjustment" for the Seat Up/Down Track axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Recline - Adjustment ID

The DSM shall assign the Seat Back Recline axis an "Adjustment ID" of 6.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Wheel Tilt Up/Down - Functions

The DSM shall implement the following functions for the Wheel Tilt Up/Down axis:

Monitor Changes by Threshold

Request Positions

Check Processing Ability

Generate Adjustment Difference

Classify Adjustment by Threshold

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Head Rest Up/Down - Functions

The DSM shall implement the following functions for the Seat Head Rest Up/Down axis:

Monitor Changes by User Input

Classify Adjustment by User Input

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Fore/Aft Track - Minimum Classify Parameter

The DSM shall assign the Seat Fore/Aft Track axis an "Minimum Classify Parameter" of 5 percent.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign minimum for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Wheel Tele-In/Tele-Out - Steering Wheel Axis Sensor

The DSM shall take on the role of Steering Wheel Axis Sensor for the Wheel Tele-In/Tele-Out axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Tilt Track - Seat Axis Controller

The DSM shall take on the role of Seat Axis Controller for the Seat Tilt Track axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Recline Track - Minimum Classify Parameter

The DSM shall assign the Seat Back Recline axis an "Minimum Classify Parameter" of 5 percent.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign minimum for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Right Extension - Seat Axis Sensor

The DSM shall take on the role of Seat Axis Sensor for the Seat Right Extension axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Steering Wheel Adjustment Repository - Signals

The DSM shall provide the following internal signals to the Update Adjustment Repository function for the Steering Wheel Adjustment Repository:

"Wheel Tilt Up/Down Adjustment"

"Wheel Tele-In/Tele-Out Adjustment"

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to establish which signals go to the repository. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Up/Down Track - Seat Axis Controller

The DSM shall take on the role of Seat Axis Controller for the Seat Up/Down Track axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Fore/Aft Track - Axis Classification

The DSM shall assign the Seat Fore/Aft Track axis an "Axis Classification" of "Common".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Lumbar - Axis Classification

The DSM shall assign the Seat Back Lumbar axis an "Axis Classification" of "Rare".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Fore/Aft Track - Adjustment ID

The DSM shall assign the Seat Fore/Aft Track axis an "Adjustment ID" of 1.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Pedal - Pedal Adjustment Repository - Data

The DSM shall allocate space in the Pedal Adjustment Repository for the following values:

"Pedal Near/Far Adjustment"

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to establish space in the repository. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Head Rest Fore/Aft - Generic Adjustment

The DSM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "Seat Head Rest Fore/Aft Adjustment" for the Seat Head Rest Fore/Aft axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Steering Wheel Adjustment Classification signal

The DSM shall broadcast the logical signal "Adjustment Classification" from the Provide Adjustment Classification function for the Steering Wheel Adjustment Repository as the CAN signal "AutoSaveStrWhl\_D\_Stat".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to send allocation signal for steering wheel. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Left Extension - Generic Adjustment

The DSM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "Seat Left Extension Adjustment" for the Seat Left Extension axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Head Rest Fore/Aft - User Input Classify Parameter

The DSM shall assign the Seat Head Rest Fore/Aft axis a "User Input Classify Parameter" of "Minor".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign user input classify parameter for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Head Rest Fore/Aft - Seat Axis Sensor

The DSM shall take on the role of Seat Axis Sensor for the Seat Head Rest Fore/Aft axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Upper Pivot - Generic Adjustment

The DSM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "Seat Back Upper Pivot Adjustment" for the Seat Back Upper Pivot axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Pedal - Pedal Adjustment Repository - Functions

The DSM shall implement the following functions to manage the Pedal Adjustment Repository:

Update Adjustment Repository

Provide Adjustment Classification

Clear Repository Adjustment Information

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to establish management of the repository. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Up/Down Track - Minimum Classify Parameter

The DSM shall assign the Seat Up/Down Track axis an "Minimum Classify Parameter" of 5 percent.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign minimum for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Adjustment Repository - Functions

The DSM shall implement the following functions to manage the Seat Adjustment Repository:

Update Adjustment Repository

Provide Adjustment Classification

Clear Repository Adjustment Information

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to establish management of the repository. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Upper Pivot - User Input Classify Parameter

The DSM shall assign the Seat Back Upper Pivot axis a "User Input Classify Parameter" of "Minor".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign user input classify parameter for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Fore/Aft Track - Seat Axis Sensor

The DSM shall take on the role of Seat Axis Sensor for the Seat Fore/Aft Track axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Left Extension - Axis Classification

The DSM shall assign the Seat Left Extension axis an "Axis Classification" of "Rare".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Recline - Seat Axis Controller

The DSM shall take on the role of Seat Axis Controller for the Seat Back Recline axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Head Rest Up/Down - Seat Axis Controller

The DSM shall take on the role of Seat Axis Controller for the Seat Head Rest Up/Down axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Exit Without Saving signal

The DSM shall receive the logical signal "Exit Without Saving" via the CAN signal "AutoSaveExit\_B\_Rq".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Exit Without Saving. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Notification Change signal

The DSM shall receive the logical signal "Notification Change" via the CAN signal "Memory\_Cmd".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Notification Change. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Head Rest Fore/Aft - Adjustment ID

The DSM shall assign the Seat Head Rest Fore/Aft axis an "Adjustment ID" of 8.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Fore/Aft Track - Threshold Classify Parameter

The DSM shall assign the Seat Fore/Aft Track axis an "Threshold Classify Parameter" of 30 percent.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Pedal - Pedal Near/Far - Pedal Axis Sensor

The DSM shall take on the role of Pedal Axis Sensor for the Pedal Near/Far axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Up/Down Track - Axis Classification

The DSM shall assign the Seat Up/Down Track axis an "Axis Classification" of "Common".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Wheel Tele-In/Tele-Out - Adjustment ID

The DSM shall assign the Wheel Tele-In/Tele-Out axis an "Adjustment ID" of 41.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Upper Pivot - Seat Axis Sensor

The DSM shall take on the role of Seat Axis Sensor for the Seat Back Upper Pivot axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Upper Pivot - Axis Classification

The DSM shall assign the Seat Back Upper Pivot axis an "Axis Classification" of "Rare".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Up/Down Track - Threshold Classify Parameter

The DSM shall assign the Seat Up/Down Track axis an "Threshold Classify Parameter" of 30 percent.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Wheel Tele-In/Tele-Out - Steering Wheel Axis Controller

The DSM shall take on the role of Steering Wheel Axis Controller for the Wheel Tele-In/Tele-Out axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Adjustment Repository - Seat Repository Controller

The DSM shall take on the role of Seat Repository Controller for the Seat Adjustment Repository.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on the role of repository controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Fore/Aft Track - Functions

The DSM shall implement the following functions for the Seat Fore/Aft Track axis:

Monitor Changes by Threshold

Request Positions

Check Processing Ability

Generate Adjustment Difference

Classify Adjustment by Threshold

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Tilt Track - Functions

The DSM shall implement the following functions for the Seat Tilt Track axis:

Monitor Changes by User Input

Classify Adjustment by User Input

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Wheel Tilt Up/Down - Threshold Classify Parameter

The DSM shall assign the Wheel Tilt Up/Down axis an "Threshold Classify Parameter" of 35 percent.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Recline - Generic Adjustment

The DSM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "Seat Back Recline Adjustment" for the Seat Back Recline axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Upper Pivot - Adjustment ID

The DSM shall assign the Seat Back Upper Pivot axis an "Adjustment ID" of 7.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Head Rest Up/Down - Generic Adjustment

The DSM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "Seat Head Rest Up/Down Adjustment" for the Seat Head Rest Up/Down axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Head Rest Fore/Aft - Functions

The DSM shall implement the following functions for the Seat Head Rest Fore/Aft axis:

Monitor Changes by User Input

Classify Adjustment by User Input

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Left Extension - Functions

The DSM shall implement the following functions for the Seat Left Extension axis:

Monitor Changes by User Input

Classify Adjustment by User Input

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Head Rest Fore/Aft - Axis Classification

The DSM shall assign the Seat Head Rest Fore/Aft axis an "Axis Classification" of "Rare".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Pedal - Pedal Adjustment Repository - Signals

The DSM shall provide the following internal signals to the Update Adjustment Repository function for the Pedal Adjustment Repository:

"Pedal Near/Far Adjustment"

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to establish which signals go to the repository. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Allocate Steering Wheel Adjustment Repository

The DSM shall allocate space for the Steering Wheel Adjustment Repository.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to allocate repository in DSM for steering wheel. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Right Extension - User Input Classify Parameter

The DSM shall assign the Seat Right Extension axis a "User Input Classify Parameter" of "Minor".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign user input classify parameter for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Tilt Track - Adjustment ID

The DSM shall assign the Seat Tilt Track axis an "Adjustment ID" of 3.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Wheel Tilt Up/Down - Minimum Classify Parameter

The DSM shall assign the Wheel Tilt Up/Down axis an "Minimum Classify Parameter" of 5 percent.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign minimum for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Left Extension - Adjustment ID

The DSM shall assign the Seat Left Extension axis an "Adjustment ID" of 4.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Pedal - Pedal Near/Far - Generic Adjustment

The DSM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "Pedal Near/Far Adjustment" for the Pedal Near/Far axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Lumbar - Generic Adjustment

The DSM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "Seat Back Lumbar Adjustment" for the Seat Back Lumbar axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Adjustment Classification signal

The DSM shall broadcast the logical signal "Adjustment Classification" from the Provide Adjustment Classification function for the Seat Adjustment Repository as the CAN signal "AutoSaveDrvSeat\_D\_Stat".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to send allocation signal for seat. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Pedal - Pedal Adjustment Classification signal

The DSM shall broadcast the logical signal "Adjustment Classification" from the Provide Adjustment Classification function for the Pedal Adjustment Repository as the CAN signal "AutoSavePedal\_D\_Stat".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to send allocation signal for pedal. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Pedal - Pedal Near/Far - User Input Classify Parameter

The DSM shall assign the Pedal Near/Far axis a "User Input Classify Parameter" of "Minor".

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign user input classify parameter for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Recline - Seat Axis Sensor

The DSM shall take on the role of Seat Axis Sensor for the Seat Back Recline axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Back Upper Pivot - Functions

The DSM shall implement the following functions for the Seat Back Upper Pivot axis:

Monitor Changes by User Input

Classify Adjustment by User Input

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Head Rest Up/Down - Adjustment ID

The DSM shall assign the Seat Head Rest Up/Down axis an "Adjustment ID" of 9.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Tilt Track - Seat Axis Sensor

The DSM shall take on the role of Seat Axis Sensor for the Seat Tilt Track axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Processing Status Delay Parameter

The DSM shall set the "Processing Status Delay" parameter to 500 milliseconds for all axes.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to set processing status delay. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Fore/Aft Track - Seat Axis Controller

The DSM shall take on the role of Seat Axis Controller for the Seat Fore/Aft Track axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Wheel Tele-In/Tele-Out - Minimum Classify Parameter

The DSM shall assign the Wheel Tele-In/Tele-Out axis an "Minimum Classify Parameter" of 5 percent.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign minimum for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Wheel Tele-In/Tele-Out - Generic Adjustment

The DSM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "Wheel Tele-In/Tele-Out Adjustment" for the Wheel Tele-In/Tele-Out axis.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Seat - Seat Up/Down Track - Adjustment ID

The DSM shall assign the Seat Up/Down Track axis an "Adjustment ID" of 2.

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DSM - Steering Wheel - Wheel Tele-In/Tele-Out - Functions

The DSM shall implement the following functions for the Wheel Tele-In/Tele-Out axis:

Monitor Changes by Threshold

Request Positions

Check Processing Ability

Generate Adjustment Difference

Classify Adjustment by Threshold

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + DSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

### DDM

DDM

#### Technology Function -887126209.jpg **DDM Autosave Generic component function**

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | |

Table 5‑7: Input Signal mappings of Function DDM Autosave Generic component function

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | |

Table 5‑8: Output Signal mappings of Function DDM Autosave Generic component function

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “***Error! Reference source not found.***” name bookmark in the Data Dictionary | Name should be a Word reference to the “**Error! Reference source not found.**” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the ***Error! Reference source not found.***section | Choose an item. | Depends on Method selection. For Method 2 a DID including start bit and length could be given. For Central Car Config a signal could be referenced |
|  |  |  |  |  |

Table 5‑9: Parameter mappings of Function “MyLogicalFunctionA\_Component1”

###### Interface Requirements

##### Function Requirements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement ID**  (of Logical Function) | **Requirement Title** | **Modification** | **Requirement ID**  (of Technology Function) | **Comment** |
| REQ\_abc |  | Removed | -- |  |
| REQ\_def |  | Replaced | REQ\_xyz |  |
| -- |  | Added | REQ\_123 |  |

Table 5‑10: Component Specific Requirements

|  |  |  |
| --- | --- | --- |
| **Requirement ID**  (of Logical Function) | **Requirement Title** | **Comment** |
|  |  |  |
|  |  |  |
| … |  |  |

Table 5‑11: Inherited Requirements

###### Component Specific Requirements

DDM - Driver Mirror Tilt Up/Down - Threshold Classify Parameter

The DDM shall assign the Driver Mirror Tilt Up/Down axis an "Threshold Classify Parameter" of 50 percent.

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Driver Mirror Tilt Up/Down - Axis Classification

The DDM shall assign the Driver Mirror Tilt Up/Down axis an "Axis Classification" of "Common".

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Exit Without Saving signal

The DDM shall receive the logical signal "Exit Without Saving" via the CAN signal "AutoSaveExit\_B\_Rq".

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Exit Without Saving. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Left Side Mirror Adjustment Repository - Data

The DDM shall allocate space in the Left Side Mirror Adjustment Repository for the following values:

"Driver Mirror Tilt Up/Down Adjustment"

"Driver Mirror Tilt Left/Right Adjustment"

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to establish space in the repository. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Driver Mirror Tilt Left/Right - Generic Adjustment

The DDM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "Driver Mirror Tilt Left/Right Adjustment" for the Driver Mirror Tilt Left/Right axis.

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Left Side Mirror Adjustment Repository - Functions

The DDM shall implement the following functions to manage the Left Side Mirror Adjustment Repository:

Update Adjustment Repository

Provide Adjustment Classification

Clear Repository Adjustment Information

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to establish management of the repository. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Driver Mirror Tilt Left/Right - Adjustment ID

The DDM shall assign the Driver Mirror Tilt Left/Right axis an "Adjustment ID" of 51.

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Driver Mirror Tilt Left/Right - Side Mirror Axis Controller

The DDM shall take on the role of Side Mirror Axis Controller for the Driver Mirror Tilt Left/Right axis.

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Left Side Mirror Adjustment Repository - Signals

The DDM shall provide the following internal signals to the Update Adjustment Repository function:

"Driver Mirror Tilt Up/Down Adjustment"

"Driver Mirror Tilt Left/Right Adjustment"

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to establish which signals go to the repository. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Clear Request signal

The DDM shall receive the logical signal "Clear Request" via the CAN signal "Memory\_Cmd".

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Clear Request. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Left Side Mirror Adjustment Classification signal

The DDM shall broadcast the logical signal "Adjustment Classification" from the Provide Adjustment Classification function as the CAN signal "AutoSaveMirrorL\_D\_Stat".

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to send allocation signal. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Auto Save Active Status signal

The DDM shall receive the logical signal "Auto Save Active Status" via the CAN signal "AutoSave\_D\_Stat".

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Auto Save Active Status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Left Side Mirror Adjustment Repository - Side Mirror Repository Controller

The DDM shall take on the role of Side Mirror Repository Controller for the Left Side Mirror Adjustment Repository.

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on the role of repository controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Driver Mirror Tilt Up/Down - Generic Adjustment

The DDM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "Driver Mirror Tilt Up/Down Adjustment" for the Driver Mirror Tilt Up/Down axis.

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Notification Change signal

The DDM shall receive the logical signal "Notification Change" via the CAN signal "Memory\_Cmd".

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Notification Change. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Driver Mirror Tilt Up/Down - Minimum Classify Parameter

The DDM shall assign the Driver Mirror Tilt Up/Down axis an "Minimum Classify Parameter" of 10 percent.

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign minimum for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Allocate Left Side Mirror Adjustment Repository

The DDM shall allocate space for the Left Side Mirror Adjustment Repository.

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to allocate repository in DDM. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Driver Mirror Tilt Up/Down - Functions

The DDM shall implement the following functions for the Driver Mirror Tilt Up/Down axis:

Monitor Changes by Threshold

Request Positions

Check Processing Ability

Generate Adjustment Difference

Classify Adjustment by Threshold

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Driver Mirror Tilt Up/Down - Adjustment ID

The DDM shall assign the Driver Mirror Tilt Up/Down axis an "Adjustment ID" of 50.

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Driver Mirror Tilt Left/Right - Functions

The DDM shall implement the following functions for the Driver Mirror Tilt Left/Right axis:

Monitor Changes by Threshold

Request Positions

Check Processing Ability

Generate Adjustment Difference

Classify Adjustment by Threshold

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Driver Mirror Tilt Up/Down - Side Mirror Axis Sensor

The DDM shall take on the role of Side Mirror Axis Sensor for the Driver Mirror Tilt Up/Down axis.

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Driver Mirror Tilt Left/Right - Threshold Classify Parameter

The DDM shall assign the Driver Mirror Tilt Left/Right axis an "Threshold Classify Parameter" of 50 percent.

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Driver Mirror Tilt Left/Right - Side Mirror Axis Sensor

The DDM shall take on the role of Side Mirror Axis Sensor for the Driver Mirror Tilt Left/Right axis.

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Driver Mirror Tilt Left/Right - Axis Classification

The DDM shall assign the Driver Mirror Tilt Left/Right axis an "Axis Classification" of "Common".

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Driver Mirror Tilt Left/Right - Minimum Classify Parameter

The DDM shall assign the Driver Mirror Tilt Left/Right axis an "Minimum Classify Parameter" of 10 percent.

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign minimum for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

DDM - Driver Mirror Tilt Up/Down - Side Mirror Axis Controller

The DDM shall take on the role of Side Mirror Axis Controller for the Driver Mirror Tilt Up/Down axis.

Satisfied by:

* Functions:
  + DDM Autosave Generic component function
  + DDM Classify Adjustment by Threshold

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

### MCSM

MCSM

#### Technology Function -887126209.jpg **MCSM Autosave Generic component function**

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | |

Table 5‑12: Input Signal mappings of Function MCSM Autosave Generic component function

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | |

Table 5‑13: Output Signal mappings of Function MCSM Autosave Generic component function

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “***Error! Reference source not found.***” name bookmark in the Data Dictionary | Name should be a Word reference to the “**Error! Reference source not found.**” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the ***Error! Reference source not found.***section | Choose an item. | Depends on Method selection. For Method 2 a DID including start bit and length could be given. For Central Car Config a signal could be referenced |
|  |  |  |  |  |

Table 5‑14: Parameter mappings of Function “MyLogicalFunctionA\_Component1”

###### Interface Requirements

##### Function Requirements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement ID**  (of Logical Function) | **Requirement Title** | **Modification** | **Requirement ID**  (of Technology Function) | **Comment** |
| REQ\_abc |  | Removed | -- |  |
| REQ\_def |  | Replaced | REQ\_xyz |  |
| -- |  | Added | REQ\_123 |  |

Table 5‑15: Component Specific Requirements

|  |  |  |
| --- | --- | --- |
| **Requirement ID**  (of Logical Function) | **Requirement Title** | **Comment** |
|  |  |  |
|  |  |  |
| … |  |  |

Table 5‑16: Inherited Requirements

###### Component Specific Requirements

MCSM - Allocate Multicontour Adjustment Repository

The MCSM shall allocate space for the Multicontour Adjustment Repository.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to allocate repository in MCSM. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Upper Bolster - Seat Axis Sensor

The MCSM shall take on the role of Seat Axis Sensor for the MCS Upper Bolster axis.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Middle Lumbar - Seat Axis Controller

The MCSM shall take on the role of Seat Axis Controller for the MCS Middle Lumbar axis.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Lower Bolster - Seat Axis Controller

The MCSM shall take on the role of Seat Axis Controller for the MCS Lower Bolster axis.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Lower Lumbar - User Input Classify Parameter

The MCSM shall assign the MCS Lower Lumbar axis a "User Input Classify Parameter" of "Minor".

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign user input classify parameter for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - Clear Request signal

The MCSM shall receive the logical signal "Clear Request" via the CAN signal "Memory\_Cmd".

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Clear Request. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Lower Lumbar - Functions

The MCSM shall implement the following functions for the MCS Lower Lumbar axis:

Monitor Changes by User Input

Classify Adjustment by User Input

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Middle Lumbar - User Input Classify Parameter

The MCSM shall assign the MCS Middle Lumbar axis a "User Input Classify Parameter" of "Minor".

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign user input classify parameter for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Upper Lumbar- Generic Adjustment

The MCSM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "MCS Upper Lumbar Adjustment" for the MCS Upper Lumbar axis.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Upper Lumbar - Axis Classification

The MCSM shall assign the MCS Upper Lumbar axis an "Axis Classification" of "Rare".

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - Multicontour Adjustment Repository - Seat Repository Controller

The MCSM shall take on the role of Seat Repository Controller for the Multicontour Adjustment Repository.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on the role of repository controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Lower Bolster- Generic Adjustment

The MCSM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "MCS Lower Bolster Adjustment" for the MCS Lower Bolster axis.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - Auto Save Active Status signal

The MCSM shall receive the logical signal "Auto Save Active Status" via the CAN signal "AutoSave\_D\_Stat".

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Auto Save Active Status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - Multicontour Adjustment Repository - Data

The MCSM shall allocate space in the Multicontour Adjustment Repository for the following values:

"MCS Lower Lumbar Adjustment"

"MCS Middle Lumbar Adjustment"

"MCS Upper Lumbar Adjustment"

"MCS Lower Bolster Adjustment"

"MCS Upper Bolster Adjustment"

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to establish space in the repository. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Upper Bolster - Adjustment ID

The MCSM shall assign the MCS Upper Bolster axis an "Adjustment ID" of 24.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - Notification Change signal

The MCSM shall receive the logical signal "Notification Change" via the CAN signal "Memory\_Cmd".

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Notification Change. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Upper Bolster - Axis Classification

The MCSM shall assign the MCS Upper Bolster axis an "Axis Classification" of "Rare".

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Middle Lumbar - Adjustment ID

The MCSM shall assign the MCS Middle Lumbar axis an "Adjustment ID" of 21.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - Exit Without Saving signal

The MCSM shall receive the logical signal "Exit Without Saving" via the CAN signal "AutoSaveExit\_B\_Rq".

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Exit Without Saving. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Middle Lumbar - Seat Axis Sensor

The MCSM shall take on the role of Seat Axis Sensor for the MCS Middle Lumbar axis.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Lower Lumbar - Seat Axis Controller

The MCSM shall take on the role of Seat Axis Controller for the MCS Lower Lumbar axis.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Middle Lumbar - Axis Classification

The MCSM shall assign the MCS Middle Lumbar axis an "Axis Classification" of "Rare".

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Lower Bolster - Axis Classification

The MCSM shall assign the MCS Lower Bolster axis an "Axis Classification" of "Rare".

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - Multicontour Adjustment Repository - Functions

The MCSM shall implement the following functions to manage the Multicontour Adjustment Repository:

Update Adjustment Repository

Provide Adjustment Classification

Clear Repository Adjustment Information

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to establish management of the repository. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Upper Lumbar - User Input Classify Parameter

The MCSM shall assign the MCS Upper Lumbar axis a "User Input Classify Parameter" of "Minor".

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign user input classify parameter for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Upper Bolster - Functions

The MCSM shall implement the following functions for the MCS Upper Bolster axis:

Monitor Changes by User Input

Classify Adjustment by User Input

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - Multicontour Adjustment Classification signal

The MCSM shall broadcast the logical signal "Adjustment Classification" from the Provide Adjustment Classification function as the CAN signal "AutoSaveDrvStms\_D\_Stat".

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to send allocation signal. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Upper Bolster - User Input Classify Parameter

The MCSM shall assign the MCS Upper Bolster axis a "User Input Classify Parameter" of "Minor".

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign user input classify parameter for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Upper Lumbar - Seat Axis Controller

The MCSM shall take on the role of Seat Axis Controller for the MCS Upper Lumbar axis.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - Processing Status Delay Parameter

The MCSM shall set the "Processing Status Delay" parameter to 500 milliseconds for all axes.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to set processing status delay. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Lower Lumbar - Adjustment ID

The MCSM shall assign the MCS Lower Lumbar axis an "Adjustment ID" of 20.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Lower Bolster - Functions

The MCSM shall implement the following functions for the MCS Lower Bolster axis:

Monitor Changes by User Input

Classify Adjustment by User Input

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Upper Bolster - Seat Axis Controller

The MCSM shall take on the role of Seat Axis Controller for the MCS Upper Bolster axis.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Upper Lumbar - Seat Axis Sensor

The MCSM shall take on the role of Seat Axis Sensor for the MCS Upper Lumbar axis.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - Multicontour Adjustment Repository - Signals

The MCSM shall provide the following internal signals to the Update Adjustment Repository function:

"MCS Lower Lumbar Adjustment"

"MCS Middle Lumbar Adjustment"

"MCS Upper Lumbar Adjustment"

"MCS Lower Bolster Adjustment"

"MCS Upper Bolster Adjustment"

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to establish which signals go to the repository. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Middle Lumbar - Generic Adjustment

The MCSM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "MCS Middle Lumbar Adjustment" for the MCS Middle Lumbar axis.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Middle Lumbar - Functions

The MCSM shall implement the following functions for the MCS Middle Lumbar axis:

Monitor Changes by User Input

Classify Adjustment by User Input

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Lower Lumbar - Seat Axis Sensor

The MCSM shall take on the role of Seat Axis Sensor for the MCS Lower Lumbar axis.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Lower Lumbar - Axis Classification

The MCSM shall assign the MCS Lower Lumbar axis an "Axis Classification" of "Rare".

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Lower Bolster - Seat Axis Sensor

The MCSM shall take on the role of Seat Axis Sensor for the MCS Lower Bolster axis.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Upper Bolster- Generic Adjustment

The MCSM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "MCS Upper Bolster Adjustment" for the MCS Upper Bolster axis.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Lower Bolster - User Input Classify Parameter

The MCSM shall assign the MCS Lower Bolster axis a "User Input Classify Parameter" of "Minor".

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign user input classify parameter for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Lower Lumbar - Generic Adjustment

The MCSM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "MCS Lower Lumbar Adjustment" for the MCS Lower Lumbar axis.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Upper Lumbar - Adjustment ID

The MCSM shall assign the MCS Upper Lumbar axis an "Adjustment ID" of 22.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Upper Lumbar - Functions

The MCSM shall implement the following functions for the MCS Upper Lumbar axis:

Monitor Changes by User Input

Classify Adjustment by User Input

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

MCSM - MCS Lower Bolster - Adjustment ID

The MCSM shall assign the MCS Lower Bolster axis an "Adjustment ID" of 23.

Satisfied by:

* Functions:
  + MCSM Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

### PDM

PDM

#### Technology Function -887126209.jpg **PDM Autosave Generic Component function**

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | |

Table 5‑17: Input Signal mappings of Function PDM Autosave Generic Component function

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | |

Table 5‑18: Output Signal mappings of Function PDM Autosave Generic Component function

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “***Error! Reference source not found.***” name bookmark in the Data Dictionary | Name should be a Word reference to the “**Error! Reference source not found.**” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the ***Error! Reference source not found.***section | Choose an item. | Depends on Method selection. For Method 2 a DID including start bit and length could be given. For Central Car Config a signal could be referenced |
|  |  |  |  |  |

Table 5‑19: Parameter mappings of Function “MyLogicalFunctionA\_Component1”

###### Interface Requirements

##### Function Requirements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement ID**  (of Logical Function) | **Requirement Title** | **Modification** | **Requirement ID**  (of Technology Function) | **Comment** |
| REQ\_abc |  | Removed | -- |  |
| REQ\_def |  | Replaced | REQ\_xyz |  |
| -- |  | Added | REQ\_123 |  |

Table 5‑20: Component Specific Requirements

|  |  |  |
| --- | --- | --- |
| **Requirement ID**  (of Logical Function) | **Requirement Title** | **Comment** |
|  |  |  |
|  |  |  |
| … |  |  |

Table 5‑21: Inherited Requirements

###### Component Specific Requirements

PDM - Notification Change signal

The PDM shall receive the logical signal "Notification Change" via the CAN signal "Memory\_Cmd".

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Notification Change. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Passenger Mirror Tilt Up/Down - Generic Adjustment

The PDM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "Passenger Mirror Tilt Up/Down Adjustment" for the Passenger Mirror Tilt Up/Down axis.

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Passenger Mirror Tilt Up/Down - Functions

The PDM shall implement the following functions for the Passenger Mirror Tilt Up/Down axis:

Monitor Changes by Threshold

Request Positions

Check Processing Ability

Generate Adjustment Difference

Classify Adjustment by Threshold

Clear Axis Adjustment Information

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Auto Save Active Status signal

The PDM shall receive the logical signal "Auto Save Active Status" via the CAN signal "AutoSave\_D\_Stat".

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Auto Save Active Status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Right Side Mirror Adjustment Repository - Signals

The PDM shall provide the following internal signals to the Update Adjustment Repository function:

"Passenger Mirror Tilt Up/Down Adjustment"

"Passenger Mirror Tilt Left/Right Adjustment"

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to establish which signals go to the repository. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Allocate Right Side Mirror Adjustment Repository

The PDM shall allocate space for the Right Side Mirror Adjustment Repository.

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to allocate repository in PDM. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Passenger Mirror Tilt Left/Right - Side Mirror Axis Controller

The PDM shall take on the role of Side Mirror Axis Controller for the Passenger Mirror Tilt Left/Right axis.

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Passenger Mirror Tilt Left/Right - Axis Classification

The PDM shall assign the Passenger Mirror Tilt Left/Right axis an "Axis Classification" of "Common".

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Passenger Mirror Tilt Up/Down - Axis Classification

The PDM shall assign the Passenger Mirror Tilt Up/Down axis an "Axis Classification" of "Common".

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Passenger Mirror Tilt Up/Down - Adjustment ID

The PDM shall assign the Passenger Mirror Tilt Up/Down axis an "Adjustment ID" of 52.

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Right Side Mirror Adjustment Repository - Side Mirror Repository Controller

The PDM shall take on the role of Side Mirror Repository Controller for the Right Side Mirror Adjustment Repository.

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on the role of repository controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Passenger Mirror Tilt Up/Down - Side Mirror Axis Controller

The PDM shall take on the role of Side Mirror Axis Controller for the Passenger Mirror Tilt Up/Down axis.

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Processing Status Delay Parameter

The PDM shall set the "Processing Status Delay" parameter to 500 milliseconds for all axes.

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to set processing status delay. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Right Side Mirror Adjustment Classification signal

The PDM shall broadcast the logical signal "Adjustment Classification" from the Provide Adjustment Classification function as the CAN signal "AutoSaveMirrorR\_D\_Stat".

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to send allocation signal. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Passenger Mirror Tilt Up/Down - Minimum Classify Parameter

The PDM shall assign the Passenger Mirror Tilt Up/Down axis an "Minimum Classify Parameter" of 10 percent.

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign minimum for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Passenger Mirror Tilt Left/Right - Minimum Classify Parameter

The PDM shall assign the Passenger Mirror Tilt Left/Right axis an "Minimum Classify Parameter" of 10 percent.

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign minimum for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Right Side Mirror Adjustment Repository - Data

The PDM shall allocate space in the Right Side Mirror Adjustment Repository for the following values:

"Passenger Mirror Tilt Up/Down Adjustment"

"Passenger Mirror Tilt Left/Right Adjustment"

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to establish space in the repository. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Clear Request signal

The PDM shall receive the logical signal "Clear Request" via the CAN signal "Memory\_Cmd".

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Clear Request. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Passenger Mirror Tilt Left/Right - Threshold Classify Parameter

The PDM shall assign the Passenger Mirror Tilt Left/Right axis an "Threshold Classify Parameter" of 50 percent.

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Passenger Mirror Tilt Left/Right - Functions

The PDM shall implement the following functions for the Passenger Mirror Tilt Left/Right axis:

Monitor Changes by Threshold

Request Positions

Check Processing Ability

Generate Adjustment Difference

Classify Adjustment by Threshold

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign functions for the axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Passenger Mirror Tilt Left/Right - Side Mirror Axis Sensor

The PDM shall take on the role of Side Mirror Axis Sensor for the Passenger Mirror Tilt Left/Right axis.

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Right Side Mirror Adjustment Repository - Functions

The PDM shall implement the following functions to manage the Right Side Mirror Adjustment Repository:

Update Adjustment Repository

Provide Adjustment Classification

Clear Repository Adjustment Information

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to establish management of the repository. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Passenger Mirror Tilt Up/Down - Side Mirror Axis Sensor

The PDM shall take on the role of Side Mirror Axis Sensor for the Passenger Mirror Tilt Up/Down axis.

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on role of axis sensor. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Passenger Mirror Tilt Up/Down - Threshold Classify Parameter

The PDM shall assign the Passenger Mirror Tilt Up/Down axis an "Threshold Classify Parameter" of 50 percent.

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Passenger Mirror Tilt Left/Right - Generic Adjustment

The PDM shall assign the "Generic Adjustment" output of the Classify Adjustment by Threshold function to the signal "Passenger Mirror Tilt Left/Right Adjustment" for the Passenger Mirror Tilt Left/Right axis.

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign generic adjustment for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Passenger Mirror Tilt Left/Right - Adjustment ID

The PDM shall assign the Passenger Mirror Tilt Left/Right axis an "Adjustment ID" of 53.

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign adjustment ID. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

PDM - Exit Without Saving signal

The PDM shall receive the logical signal "Exit Without Saving" via the CAN signal "AutoSaveExit\_B\_Rq".

Satisfied by:

* Functions:
  + PDM Autosave Generic Component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Exit Without Saving. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

### ECG

ECG

#### Technology Function -887126209.jpg **ECG Autosave Generic component function**

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | |

Table 5‑22: Input Signal mappings of Function ECG Autosave Generic component function

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | |

Table 5‑23: Output Signal mappings of Function ECG Autosave Generic component function

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “***Error! Reference source not found.***” name bookmark in the Data Dictionary | Name should be a Word reference to the “**Error! Reference source not found.**” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the ***Error! Reference source not found.***section | Choose an item. | Depends on Method selection. For Method 2 a DID including start bit and length could be given. For Central Car Config a signal could be referenced |
|  |  |  |  |  |

Table 5‑24: Parameter mappings of Function “MyLogicalFunctionA\_Component1”

###### Interface Requirements

##### Function Requirements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement ID**  (of Logical Function) | **Requirement Title** | **Modification** | **Requirement ID**  (of Technology Function) | **Comment** |
| REQ\_abc |  | Removed | -- |  |
| REQ\_def |  | Replaced | REQ\_xyz |  |
| -- |  | Added | REQ\_123 |  |

Table 5‑25: Component Specific Requirements

|  |  |  |
| --- | --- | --- |
| **Requirement ID**  (of Logical Function) | **Requirement Title** | **Comment** |
|  |  |  |
|  |  |  |
| … |  |  |

Table 5‑26: Inherited Requirements

###### Component Specific Requirements

Auto Save Data Analytics: HMI - Prompt Response

To capture the user’s response to the prompt, the ECG shall capture the signal AutoSaveHMPromp\_D\_Stat on the event trigger to record the user’s response to a prompt.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Infotainment Adjustment Classification signal

Since the vehicle is not equipped with a HUD, the ECG shall assume the value of the logical signal "Infotainment Adjustment Classification" is always "None".

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Since we have no HUD on this vehicle, assume the signal is always none. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: Steering Column - Classification of Adjustment by Auto Save

To capture when Auto Save’s classification of the steering column, the ECG shall capture the change of the signal AutoSaveStrWhl\_D\_Stat to record Auto Save’s classification of the steering column.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Decide Saving Strategy - Functions

The ECG shall implement the following functions to decide the saving strategy:

Evaluate Saving Strategy

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to decide the saving strategy. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Manual Save signal

The ECG shall receive the logical signal "Manual Save" via the CAN signal "Memory\_Cmd".

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Manual Save. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Right Side Mirror Adjustment Classification signal

The ECG shall receive the logical signal "Right Side Adjustment Classification" via the CAN signal "AutoSaveMirrorR\_D\_Stat".

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive right mirror adjustment classification. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Request Retention Action - Functions

The ECG shall implement the following functions to request the retention action:

Analyze Retention Action

Request Profile Change

Request Save

Request User Feedback

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to request the retention action. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Activation - Configuration

The ECG shall make Auto Save configurable via the parameter "AutoSaveConfig".

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Activation Request. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Activation - Life Cycle Mode

The ECG shall receive the CAN signal "LifeCycMde\_D\_Actl" to determine the active state of Auto Save.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Activation Request. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Inhibit Request - Stowable Steering Column

The ECG shall receive the logical signal "Inhibit Request (5)" via the Ethernet signal "Ssw/DttStateStat". (name subject to change)

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Activation Request. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Inhibit Request - PPP HMI

The ECG shall receive the logical signal "Inhibit Request (1)" via the Ethernet signal "PPPHMIInhibit\_D\_Rq". (name subject to change)

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Inhibit Request. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: Change of profile did not occur

To capture when the change profile event is successful, the ECG shall capture the change of the signal AutoSaveHMIPC\_B\_Rq and see if it is followed by a change to Memory\_Cmd to record whether the change of profile event was successful.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Inhibit Request - Enhanced Memory 2

The ECG shall receive the logical signal "Inhibit Request (6b)" via the CAN signal "PersNoPos\_D\_Actl".

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Inhibit Request. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: Left Mirror - Classification of Adjustment by Auto Save

To capture when Auto Save’s classification of the left mirror, the ECG shall capture the change of the signal AutoSaveMirrorL\_D\_Stat to record Auto Save’s classification of the left mirror.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: Stowable Steering Column Inhibits Auto Save

To capture Stowable Steering Column’s inhibition of Auto Save, the ECG shall capture the change of the signal "Ssw/DttStateStat" to record Stowable Steering Column’s inhibition of Auto Save. (Signal name subject to change)

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: Rejuvenate Inhibits Auto Save

To capture Rejuvenate’s inhibition of Auto Save, the ECG shall capture the change of the signal "RejuvActive\_Stat" to record Rejuvenate’s inhibition of Auto Save. (Signal name subject to change)

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Inhibit Request - Rejuvenate

The ECG shall receive the logical signal "Inhibit Request (4)" via the Ethernet signal "RejuvActive\_Stat". (name subject to change)

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Inhibit Request. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Activation - Diagnostics Mode

The ECG shall inform the Auto Save feature when it is in Diagnostics Mode via an internal signal.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Activation Request. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Classified Adjustments Repository - Data

The ECG shall maintain space for the following data values in the Classified Adjustments Repository:

'Left Side Mirror Adjustment Classification'

'Right Side Mirror Adjustment Classification'

'Infotainment Adjustment Classification'

'Seat Adjustment Classification'

'Multicontour Adjustment Classification'

'Pedal Adjustment Classification'

'Steering Column Adjustment Classification'

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to have a place for classified adjustments. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Prompt Time Constant

The ECG shall set the "Prompt Time Constant" to 30 seconds.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to set prompt time. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Activation - Igniton Status

The ECG shall receive the CAN signal "Ignition\_Status" to determine the active state of Auto Save.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Activation Request. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: Auto Save On/Off

To capture when Auto Save turns on and off, the ECG shall capture the change of the signal AutoSave\_D\_Stat to record Auto Save’s activation.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Request Feedback signal

The ECG shall broadcast the logical signal "Request Feedback" from the Request User Feedback function as the Ethernet signal "AutoSaveHMITyp\_D\_Stat". (name subject to change)

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to send Request Feedback. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Left Side Mirror Adjustment Classification signal

The ECG shall receive the logical signal "Left Side Mirror Adjustment Classification" via the CAN signal "AutoSaveMirrorL\_D\_Stat".

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive left mirror adjustment classification. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Inhibit Request - PPP Authentication

The ECG shall receive the logical signal "Inhibit Request (3)" via the ECG internal signal "Profile Authentication". (name subject to change)

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Inhibit Request. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Inhibit Request - Enhanced Memory 1

The ECG shall receive the logical signal "Inhibit Request (6a)" via the CAN signal "PersNo\_D\_Actl".

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Inhibit Request. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: HMI - User Turns On/Off Auto Save

To capture the user’s activation and deactivation of Auto Save, the ECG shall capture the change of the signal PPPHMIInhibit\_D\_Rq to record the user’s activation and deactivation of Auto Save. (Signal name subject to change)

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: Auto Save request for change profile

To capture the frequency of the request for change of profile, the ECG shall capture the signal AutoSaveHMIPC\_B\_Rq on the event trigger to record the number of profile change requests in a drive cycle.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Allocate Classified Adjustments Repository

The ECG shall allocate space for the Classified Adjustments Repository.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to allocate repository in ECG. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Exit Without Saving signal

The ECG shall broadcast the logical signal "Exit Without Saving" as the CAN signal "AutoSaveExit\_B\_Rq".

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to send Exit Without Saving. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Activation - HMI Mode

The ECG shall receive the CAN signal "HMI\_HMIMode\_St" to determine the active state of Auto Save.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Activation Request. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Classified Adjustments Repository - Functions

The ECG shall implement the following functions to manage the Classified Adjustments Repository:

Update Classified Adjustments Repository

Evaluate Classified Adjustments

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to manage the Classified Adjustments Repository. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Adjustment Time Constant

The ECG shall set the "Adjustment Time Constant" to 5 seconds.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to set adjustment time. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Save Wait Time Constant

The ECG shall set the "Save Wait Time Constant" to 5 seconds.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to set save wait time. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Clear Request signal

The ECG shall receive the logical signal "Clear Request" via the CAN signal "Memory\_Cmd".

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Clear Request. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: Save not made

To capture when the save event is successful, the ECG shall capture the change of the signal AutoSaveRet\_B\_Rq and see if it is followed by a change to Memory\_Cmd to record whether the save event was successful.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: Auto Save prompt display request

To capture the frequency of the prompt display request, the ECG shall capture the signals AutoSaveHMITyp\_D\_Stat and AutoSaveHMIPromp\_B\_Rq on the event trigger to record the number of prompts in a drive cycle.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Multicontour Adjustment Classification signal

The ECG shall receive the logical signal "Multicontour Adjustment Classification" via the CAN signal "AutoSaveDrvStms\_D\_Stat".

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive multicontour adjustment classification. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: Enhanced Memory Inhibits Auto Save

To capture Enhanced Memory’s inhibition of Auto Save, the ECG shall capture the change of the signals PersNo\_D\_Actl and PersNoPos\_D\_Actl to record Enhanced Memory’s inhibition of Auto Save.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: Auto Save Exit Without Saving

To capture when Auto Save exits without saving, the ECG shall capture the change of the signal AutoSaveExit\_B\_Rq to record Auto Save’s exit without saving.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Feedback Request Active signal

The ECG shall broadcast the logical signal "Feedback Request Active" from the Request User Feedback function as the Ethernet signal "AutoSaveHMIPromp\_B\_Rq". (name subject to change)

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to send Feedback Request Active. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Activate/Deactivate Automatic Saving - Functions

The ECG shall implement the following functions to activate and deactivate automatic saving:

Update Inhibit Table

Evaluate Activation Conditions

Send Activation Signal

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to assign threshold for axis. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: Multicontour Seat - Classification of Adjustment by Auto Save

To capture when Auto Save’s classification of the multicontour seat, the ECG shall capture the change of the signal AutoSaveDrvStms\_D\_Stat to record Auto Save’s classification of the multicontour seat.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Steering Wheel Adjustment Classification signal

The ECG shall receive the logical signal "Steering Wheel Adjustment Classification" via the CAN signal "AutoSaveStrWhl\_D\_Stat"

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive steering wheel adjustment classification. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Notification Change signal

The ECG shall receive the logical signal "Notification Change" via the CAN signal "Memory\_Cmd".

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Notification Change. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: Seat - Classification of Adjustment by Auto Save

To capture when Auto Save’s classification of the driver’s seat, the ECG shall capture the change of the signal AutoSaveDrvSeat\_D\_Stat to record Auto Save’s classification of the driver’s seat.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Clear Adjustment Information - Functions

The ECG shall implement the following functions to clear adjustment information:

Reset Infotainment Controller

Clear Classified Adjustments Repository

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to clear adjustment information. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Ignore Time Constant

The ECG shall set the "Ignore Time Constant" to 5 seconds.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to set ignore message time. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: PPP Inhibits Auto Save

To capture PPP’s inhibition of Auto Save, the ECG shall capture the change of the signal "Profile Authentication" to record PPP’s inhibition of Auto Save. (Signal name subject to change)

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Inhibit Request - Easy Entry Easy Exit

The ECG shall receive the logical signal "Inhibit Request (2)" via the CAN signal "SeatPos\_D\_Stat".

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Inhibit Request. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: Prompt not requested

To capture when the prompt event is successful, the ECG shall capture the change of the signal AutoSaveHMITyp\_D\_Stat and AutoSaveHMIPromp\_B\_Rq and see if it is followed by a change to AutoSaveHMPromp\_D\_Stat to record whether the prompt event was successful.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: Right Mirror - Classification of Adjustment by Auto Save

To capture when Auto Save’s classification of the right mirror, the ECG shall capture the change of the signal AutoSaveMirrorR\_D\_Stat to record Auto Save’s classification of the right mirror.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: Easy Entry Easy Exit Inhibits Auto Save

To capture Easy Entry Easy Exit’s inhibition of Auto Save, the ECG shall capture the change of the signal SeatPos\_D\_Stat to record Easy Entry Easy Exit’s inhibition of Auto Save.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Activation - Software Update Mode

The ECG shall inform the Auto Save feature when it is in Software Update Mode via an internal signal.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Activation Request. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Infotainment Controller

The ECG shall take on the role of Infotainment Controller.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to take on the role of infotainment controller. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: Auto Save request for save

To capture the frequency of the request for save, the ECG shall capture the signal AutoSaveRet\_B\_Rq on the event trigger to record the number of save events in a drive cycle.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Seat Adjustment Classification signal

The ECG shall receive the logical signal "Seat Adjustment Classification" via the CAN signal "AutoSaveDrvSeat\_D\_Stat".

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive seat adjustment classification. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Auto Save Active Status signal

The ECG shall broadcast the logical signal "Auto Save Active Status" from the Send Activation Signal function as the CAN signal "AutoSave\_D\_Stat".

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to send Auto Save Active Status. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Save Request signal

The ECG shall broadcast the logical signal "AutoSaveRet\_B\_Rq" from the Request Save function as the CAN signal "AutoSaveRet\_B\_Rq".

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to send Save Request. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Pedal Adjustment Classification signal

The ECG shall receive the logical signal "Pedal Adjustment Classification" via the CAN signal "AutoSavePedal\_D\_Stat".

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive pedal adjustment classification. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Profile Change signal

The ECG shall receive the logical signal "Profile Change" via the CAN signal "Memory\_Cmd".

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to receive Profile Change. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

ECG - Save Time Constant

The ECG shall set the "Save Time Constant" to 5 seconds.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** | Need to set save message time. | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

Auto Save Data Analytics: Pedal - Classification of Adjustment by Auto Save

To capture when Auto Save’s classification of the pedal, the ECG shall capture the change of the signal AutoSavePedal\_D\_Stat to record Auto Save’s classification of the pedal.

Satisfied by:

* Functions:
  + ECG Autosave Generic component function

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Patrick Brown (pbrow243) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0c | End of Requirement | | | | |

## Requirements on Connections

### Networks

#### “CAN Bus xxx”

##### Protocol Requirements

##### Electrical Requirements

#### “LIN Bus xxx”

##### Protocol Requirements

###### Schedule Table

##### Electrical Requirements

#### “Ethernet xxx”

### HW I/Os

#### “HW I/O xxx”

## Requirements on Development Process

# Open Concerns

| ID | Concern Description | e-Tracker Reference | Status | Solution |
| --- | --- | --- | --- | --- |
| 1 | Initial export of document from MagicDraw is very rough; cleanup on all sections required for next release |  | Open |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |

Table 6‑1: Open Concerns

# Revision History

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Revision | Date | Description | Approved by | Responsible |
| A | 2021/03/09 | Initial version:   * Requirements for modules are in document * Logical/CAN mapping is in document * Other sections still require expansion |  | PBROW243 |
|  |  |  |  |  |

## Template Revisions

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Version | Rev. | Date | Description | Responsible |
| 0 | 2 | 2015-08-05 | * TOC corrected * Document Properties adapted to match needs of VBA macros | Awegman1 |
| 1 | 0 | 2015-11-16 | * Revision History moved to chapter 7 * Table-Styles removed | Awegman1 |
| 1 | 1 | 2016-03-02 | * Rework according to PCL example | Jbaden1 |
| 1 | 2 | 2016-03-22 | * V1.3: Footer formating corrected (Issue 19) * “Constraints” chapter renamed to “Input Requirements” (Issue 20) | Jbaden1 |
| 1 | 3 | 2016-04-20 | * Broken Wiki links repaired | Jbaden1 |
| 2 | 0 | 2016-05-23 | * Prepared for Specification\_Macros.dotm v2.0 * Additional explanations added to ch. 2.2 “Input Requirements” (ARL and SDS requirements often go here) | Jbaden1 |
| 2 | 1 | 2016-07-08 | * Template version added to footer | Jbaden1 |
| 2 | 2 | 2016-07-15 | * Sample SysML diagrams added * Data Dictionary reworked * Alignment with relevant sections in SRD templated | Jbaden1 |
| 3 | 0 | 2016-09-05 | * Lessons learned from IPRB incorporated | Jbaden1 |
| 4 | 0 | 2016-09-27 | * Alignment with QPIP Feature Function Ownership workstream. Platform Spec renamed to Feature Implementation Spec | Jbaden1 |
| 4 | 1 | 2016-11-04 | * Chapters “Purpose” and “Scope” reworked. | Jbaden1 |
| 4 | 1 | 2016-11-10 | * Subsection for “Logical Service Interfaces” added. | Jbaden1 |
| 5 | 0 | 2017-01-13 | * Meta data updated for specification macros, version 3.1 * SW Unit chapter removed for the time being * Green boxes added for user hints | Jbaden1 |
| 5 | 1 | 2017-01-18 | * Minor editorial changes (e.g. hyperlinks highlighted in comments) | Jbaden1 |
| 5 | 1b | 2017-01-20 | * Some editorial corrections * Substructure of old Network Communication (now Connections) moved to Requirements on Connections | Jbaden1 |
| 6 | 0 | 2018-07-24 | * CR53: * Add new cover sheet * Add disclaimer section * Add the following meta-data to the doc properties for the the new cover sheet   + DocGis1ItemNumber   + DocGis2Classification   + DocType   + DocStatus   + DocIssueDate   + DocReleaseDate * CR63: Update FuSa sharepoint references in templates | Jbaden1 |
| 6 | 0 | 2018-08-06 | * CR81: Incorporate lessons learned from System Service Spec pilot (Vehicle Speed) into AFS and FIS | Jbaden1 |
| 6 | 0 | 2018-09-28 | * Broken links to RE Wiki repaired | Jbaden1 |
| 6 | 0 | 2018-10-31 | * Minor corrections on cover sheet and in footer to be more GIS compliant and VSEM aligned * “Overview” and “Description” exchanged in headings (following common sense) | Jbaden1 |
| 6 | 0 | 2018-11-30 | * Update of Functional Safety sections after review by Functional Safety Team * Initial support for variant handling | Jbaden1 |
| 6 | 0 | 2018-12-01 | * Variant condition fields added consistently * Links updated | Jbaden1 |
| 6 | 0 | 2018-12-11 | * Variant condition fields removed from mapping/allocation tables * Mapping tables simplified * Explanatory text for “Variants” sections revised | Jbaden1 |
| 6 | 0a | 2019-01-04 | * Chapter heading “Inherited Function Requirements” removed. Corresponding table renamed to “Requirements not cascaded”. * E/E Connection table got another column for allocated messages * Naming conventions for Implemented Functions corrected (FncName\_CmpName instead of FncName\_on\_CmpName) * Editorial corrections on the cover sheet * Explanatory text added to “Ethernet” section in chapter “Requirements on Connections” * AIS templates updated. Linked to Wiki page | Jbaden1 |
| 6 | 0a | 2019-01-04 | * Minor restructuring in FuSa chapter – after aligning with ECU Functional Spec * Bugfix: table 13 renamed from FTTI table to FHT table, includes a bug fix: each FSR is allocated to only one ECU/component | Jbaden1 |
| 6 | 0b | 2019-02-04 | * Change: Chapter “Interface Requirements” added to “Implemented Function xxx” section (to have a single chapter for to collect subscriber/publisher interface and mapping requirements which to not conform to the corresponding Data Dictionary objects) * Change: “CAN Interface” subsection renamed to “AIS Interfaces” again. Although several Subscriber/Publisher interface attributes are probably CAN bus specific, other attributes seem to be well suited for other networks than CAN. * Change: Chapter “ECU Specific Requirements” renamed to “Component Specific Requirements” in chapter “Implemented Function xxx”. Table “Requirements not cascaded” renamed to “Component Specific Requirements” and refined to describe changes from Logical Function requirements set more formally. This is also to help during VSEM import to identify those requirements of the Logical Function which cannot be simply carried over to the ECU. * Change: Explanatory text in section “Implemented Function xxx” improved. | Jbaden1 |
| 6 | 0c | 2019-02-05 | * Change: Layout of AIS Interfaces in Data Dictionary reworked to enable Excel Import | Jbaden1 |
| 6 | 0c | 2019-02-20 | * Bugfix: In AIS Interfaces none-picklist fields formatted as invisible | Jbaden1 |
| 6 | 1a | 2019-02-05 | Functional Safety related changes:   * Table “Architectural Redundancy Summary” updated * Section “Functional Flows for FTTI ‘xyz’” added to chapter “Component Interaction Diagrams” * Fault Tolerant Time Summary section added to Functional Safety chapter * Chapter “HW Metrics” added | Jbaden1 |
| 6 | 1a | 2019-04-02 | Headings of “Architectural Redundancy Summary” table clarified | Jbaden1 |
| 6 | 1a | 2019-04-10 | * ASIL Decomposition table moved from Function Spec into the Feature Implementation Spec (ASIL Decomposition of Technical Safety Requirements) * 2 alternative versions of the Function Allocation Table (Standard variant vs. Functional Safety variant) placed next to each other. | Jbaden1 |
| 6 | 1a | 2019-05-31 | * Function Allocation Table split into a base (non FuSa) part and a FuSa part to allow a more flexible mapping of MBSE functions (Logical and Technology) to RE functions (Atomic Logical and Implemented). | Jbaden1 |
| 6 | 1a | 2019-05-31 | * “Input Requirement” section reworked (symmetrically to all other templates). * Sections “Functional Flows for FTTI xyz” and “Fault Tolerant Time Summary” removed, because guidance is not available yet. * “Reference” and “Glossary” section moved back to introduction, i.e., to the very beginning of the document (such that also section 2 can already rely on it). * Some mostly editorial changes per request from FuSa team. | Jbaden1 |
| 6 | 1a | 2019-07-02 | * "Important" box added on cover sheet which points to the macros * “Input Requirements” section renamed to Input Information (after discussion with FuSa team) | Jbaden1 |
| 6 | 1a | 2019-07-17 | * Chapter “Message List” removed from CAN and LIN specific chapters of section “Requirements on Connections” | Jbaden1 |
| 6 | 1a | 2019-10-08 | * Chapter “ASIL Decomposition of Technical Safety Requirements”: Input TSRs are specified in the chapter right above the decomposition table. | Jbaden1 |
| 6 | 1a | 2019-10-09 | * Chapter “Service Oriented Communication” moved to section “Messages” in the Data Dictionary. Details from Central SW Wiki about FNV2 SOA added | Jbaden1 |
| 6 | 1a | 2019-10-25 | * Minor updates for HW IOs/Signals * Subsection “Functional Safety” removed from chapter “Feature Implementation Modeling”. Per requrest from FuSa team since no guidance is available how to model e.g. FHT timing diagram. | Jbaden1 |
| 6 | 1a | 2019-05-11 | * Copyright notice shortened and moved to cover sheet and added to footer (to be compliant [with Ford copyright guidelines](http://www.fgti.ford.com/client/NewFGTI/CopyrightNotice.html)) * Term “Disclaimer” no longer used for what is actually only a copyright notice | Jbaden1 |
| 6 | 1a | 2019-22-11 | * Some minor modifications for the SOA APIs/MQTT Messages in the section “Messages” of the Data Dictionary (section references Service Contracts via the API name) * Some minor updates of the Input/Output mapping tables in section “Requirements on Components” for mappings to SOA APIs and EDAS signals. | Jbaden1 |
| 6 | 1a | 2019-12-05 | * Upstream Documents section added to “Input Requirements/Documents” table * Custom style table formatting removed | Jbaden1 |
| 6 | 1a | 2020-01-07 | * Some fine tuning for naming conventions of E/E components and connections. * List of HW I/O signal types reduced to RF-A, RF-D, D, A, Networked and PWM. * Protocol column added to the E/E connection table | Jbaden1 |
| 6 | 1a | 2020-01-07 | * “HW Metric” and “Architecture Redundancy Summary” sections removed per request from the Functional Architecture Team (based on Governance Board decision [FSTGB-97](mailto:TrackLite%20%23%20FSTGB-97:%20https://www.tracklite.ford.com/prweb/PRAuth/TrackLiteSSO?pyActivity=@baseclass.RedirectAndRunWraper&ThreadName=WorkLinkThread&bPurgeTargetThread=true&AccessGroupName=FSTGB:ProjectAdministrators&Location=pyActivity%3DWork-.Open%26Action%3DReview%26HarnessPurpose%3DReview%26InsHandle%3DFORD-FSTGB-WORK+FSTGB-97)) * “Functional Safety” chapter moved to “Feature Implementation Requirements” section. “Function Allocation” chapter seemed no longer appropriate. | Jbaden1 |
| 6 | 1a | 2020-01-07 | * Ordering of fields in AIS interfaces tables modified to conform with the Macro Template and the Importer Sheet * Page Header: no longer in bold letters | Jbaden1 |
| 6 | 1a | 2020-03-09 | * Missing doc property “LatestSigMappingID” and “LatestAisInterfaceID” added * doc property “CopyrightDate” re-formatted to text and copyright date field in footer corrected * Version numbering re-initialized as 0.1 * Init value of version/revision date set to “yyyy/mm/dd” instead of “yyyy-mm-dd” to be in line with the “Edit Document Property” dialog * Type of “Latest….ID” doc properties changed from Text to Number | Jbaden1 |
| 6 | 1a | 2020-03-11 | * “Mapping” table removed from template. Has been migrated to macro. | Jbaden1 |
| 6 | 1a | 2020-03-13 | * Separate chapter “Technical Safety Requirements” removed. Content already covered by Allocation Table in chapter Function Allocation. * “Implemented Function” replaced by term “Technology Function” | Jbaden1 |

# Appendix

## Data Dictionary

### Logical Signals

|  |  |  |
| --- | --- | --- |
| **Signal Name** | **Description** | **Details** |
| **Profile Positional Settings** |  | Satisfies:  *No reqs. satisfied* |
| **Monitoring: AHUD Data** | The AHUD Controller will notify Auto Save Arbitrator with changes in AHUD positional settings. | Satisfies:  *No reqs. satisfied* |
| **Example Signal** | The description of the signal in the Documentation field. | Satisfies:  *No reqs. satisfied* |
| **Profile Setting Auto Save** | Enhanced Memory will notify Auto Save with the Profile Settings Auto Save status. When the user toggles the status then Enhanced Memory will notify Auto Save. | Satisfies:  *No reqs. satisfied* |
| **Change\_Profile\_Request** | This signal contains the information necessary to requests the creation of a new profile from profile Manager. | Satisfies:  *No reqs. satisfied* |
| **S2** |  | Satisfies:  *No reqs. satisfied* |
| **Stime** | The logical signal ‘Stime’ keeps track of the current time within the system. It is used by the timer function to determine when the countdown has reached its end. Stime is intended to be local time signal on an ECU. | Satisfies:  *No reqs. satisfied* |
| **Vehicle Positional Adjustment** |  | Satisfies:  *No reqs. satisfied* |
| **New Profile Request** |  | Satisfies:  *No reqs. satisfied* |
| **Recall\_Profile3** |  | Satisfies:  *No reqs. satisfied* |
| **Active Driver Profile** | Enhanced Memory will notify Auto Save which driver profile is currently active. | Satisfies:  *No reqs. satisfied* |
| **Feature inhibit** |  | Satisfies:  *No reqs. satisfied* |
| **SoftwareUpdate\_On** |  | Satisfies:  *No reqs. satisfied* |
| **Commodity\_Continuous\_Status** | This signal indicates whether an adjustment has occurred for a given axis. This signal is sent continuously from the Vehicle Positional Setting Monitoring System. It is intended to be a software input to the Monitor function. | Satisfies:  *No reqs. satisfied* |
| **Manual Save** | Indicates that the user has manually saved the current position settings and Auto Save should respond by returning to idle.  This signal is the same as the existing Memory\_Cmd signal.  ASIL: QM  Encoding Type: Memory\_Cmd  Discrete Encoding Values:  0x0 Null  0x1 Store\_1  0x2 Store\_2  0x3 Store\_3  0x4 Store\_4  0x5 Recall\_1  0x6 Recall\_2  0x7 Recall\_3  0x8 Recall\_4  Unit: Enumeration | Satisfies:  *No reqs. satisfied* |
| **Second Signal** | Influence Description on Documentation field. | Satisfies:  *No reqs. satisfied* |
| **Update Last Saved Positions: Auto Save** |  | Satisfies:  *No reqs. satisfied* |
| **Positional Settings Recall Request** |  | Satisfies:  *No reqs. satisfied* |
| **Key\_Acc** |  | Satisfies:  *No reqs. satisfied* |
| **Key Status** |  | Satisfies:  *No reqs. satisfied* |
| **Commodity\_Event\_Status** | This signal indicates that an adjustment has occurred for a given axis. This signal is sent when the axis adjustment occurs from the Vehicle Positional Setting Monitoring System. It is intended to be a software input to the Monitor function. | Satisfies:  *No reqs. satisfied* |
| **Driver Response: Vehicle** |  | Satisfies:  *No reqs. satisfied* |
| **Vehicle\_Mode** | This signal indicates the current operating mode of the host vehicle. These modes could be Normal, Factory, or Transport. | Satisfies:  *No reqs. satisfied* |
| **InternalSignal2** |  | Satisfies:  *No reqs. satisfied* |
| **Monitoring: Pedal Data** | The Pedal Controller will notify Auto Save Arbitrator with changes in Pedal positional settings. | Satisfies:  *No reqs. satisfied* |
| **Update Last Saved Positions: EM** |  | Satisfies:  *No reqs. satisfied* |
| **Request\_Prompt** | This signal contains the requests for a prompt to be delivered to the user of the profile host vehicle. | Satisfies:  *No reqs. satisfied* |
| **Inhibited** |  | Satisfies:  *No reqs. satisfied* |
| **Monitoring: Right Mirror Data** | The Right Mirror Controller will notify Auto Save Arbitrator with changes in Right Mirror positional settings. | Satisfies:  *No reqs. satisfied* |
| **Auto\_Save\_Settings\_Status** | This signal indicates if Auto Save setting is enabled on the current active profile on the host vehicle. | Satisfies:  *No reqs. satisfied* |
| **Threshold\_Classify\_Result** | This signal contains the classification of the last processed positional adjustment. The value will be ‘Micro’ if the distance from the saved position was less than the threshold. The value will be ‘Macro’ if the commodity is greater than or equal to the threshold. | Satisfies:  *No reqs. satisfied* |
| **Button Press** |  | Satisfies:  *No reqs. satisfied* |
| **Profile Setting Auto Save & Easy Entry Easy Exit & Profile Inhibit & Driver Profile & Valet Mode** |  | Satisfies:  *No reqs. satisfied* |
| **CANSignal1** |  | Satisfies:  *No reqs. satisfied* |
| **User\_Input\_Clasify\_Result** | This signal contains the classification of the last processed positional adjustment. The value will be ‘Micro’ if an adjustment occurs and the commodity axis is predetermined to always be micro. The value will be ‘Macro’ if an adjustment occurs and the commodity axis is predetermined to always be macro. | Satisfies:  *No reqs. satisfied* |
| **YES** |  | Satisfies:  *No reqs. satisfied* |
| **InternalSignal3** |  | Satisfies:  *No reqs. satisfied* |
| **Physical** |  | Satisfies:  *No reqs. satisfied* |
| **CANSignal2** |  | Satisfies:  *No reqs. satisfied* |
| **Disable\_AutoSave** |  | Satisfies:  *No reqs. satisfied* |
| **Recall Request** | The Auto Save feature will notify Enhanced Memory to recall positional settings determined by Auto Save. Auto Save will indicate either Last Saved Positions or Ideal Positions to be recalled. Enhanced Memory will notify Classic Memory who will recall the selected positional setting. | Satisfies:  *No reqs. satisfied* |
| **Profile Change | Key Status** |  | Satisfies:  *No reqs. satisfied* |
| **Driver Decision Request: Auto Save** |  | Satisfies:  *No reqs. satisfied* |
| **BacktoIdle** |  | Satisfies:  *No reqs. satisfied* |
| **Threshold\_Calibration** | This signal contains a calibration that determines if a user adjustment is ‘Micro’ or ‘Macro’, known as the threshold. The value will be ‘Micro’ if the distance from the saved position was less than the threshold. The value will be ‘Macro’ if the commodity is greater than or equal to the threshold.. | Satisfies:  *No reqs. satisfied* |
| **Diagnostic Mode Deactivate** |  | Satisfies:  *No reqs. satisfied* |
| **Diagnostic Mode Activate** |  | Satisfies:  *No reqs. satisfied* |
| **Easy Entry Easy Exit Status** |  | Satisfies:  *No reqs. satisfied* |
| **EasyEntryEasyExit\_OFF** |  | Satisfies:  *No reqs. satisfied* |
| **Memory Button Pressed** | The Enhanced Memory feature will notify Auto Save when the driver has pressed a Memory Button. Auto Save will determine if the same profile as the current active profile is being recalled. If the same profile is being recalled then Auto Save will update the Last Saved Positions with the Ideal Positions prior to the profile recall. | Satisfies:  *No reqs. satisfied* |
| **Auto Save Inhibit** | The Portable Profile feature will notify Auto Save that the active driver profile has not been authenticated. When the profile is not authenticated then restrictions shall apply to the profile. Saved positional settings for the profile will not be recalled and adjustments to positional settings will not be saved. | Satisfies:  *No reqs. satisfied* |
| **Key\_Acc|Run** |  | Satisfies:  *No reqs. satisfied* |
| **Request\_to\_Save** | This signal contains the information necessary to requests a save action outside to an entity outside the Auto Save feature. | Satisfies:  *No reqs. satisfied* |
| **Profile\_Inhibit\_Status** | This signal indicates the inhibit status of the current active profile on the host vehicle. | Satisfies:  *No reqs. satisfied* |
| **Inactive\_Mode** |  | Satisfies:  *No reqs. satisfied* |
| **Recall\_Profile1** |  | Satisfies:  *No reqs. satisfied* |
| **Current Positional Settings** |  | Satisfies:  *No reqs. satisfied* |
| **Key\_Off** |  | Satisfies:  *No reqs. satisfied* |
| **Profile Setting Auto Save | Easy Entry Easy Exit | Profile Inhibit | Driver Profile | Valet Mode | Profile Change** |  | Satisfies:  *No reqs. satisfied* |
| **User Creates New Profile** |  | Satisfies:  *No reqs. satisfied* |
| **Driver Decision Request: EM** |  | Satisfies:  *No reqs. satisfied* |
| **Current Positional Settings Request** |  | Satisfies:  *No reqs. satisfied* |
| **Input\_Threshold\_Status** | The Input\_Threshold\_Status signal indicates that an adjustment has been made and the Buffer function must now start requesting positions. | Satisfies:  *No reqs. satisfied* |
| **Create\_NewProfile** |  | Satisfies:  *No reqs. satisfied* |
| **Replace Last Save Positions Successful** |  | Satisfies:  *No reqs. satisfied* |
| **G & C** |  | Satisfies:  *No reqs. satisfied* |
| **Software Update & (Vehicle Mode | Feature Enabled)** |  | Satisfies:  *No reqs. satisfied* |
| **Save Request** | The Enhanced Memory feature will notify Auto Save when Enhanced Memory determines the need to save. A request will be sent to Auto Save to requesting that Auto Save perform save functionality. Auto Save save functionality will update the Ideal Position with current positional settings. | Satisfies:  *No reqs. satisfied* |
| **S6** |  | Satisfies:  *No reqs. satisfied* |
| **Vehicle Mode & Feature Enabled** |  | Satisfies:  *No reqs. satisfied* |
| **New Profile Creation Request** | The Auto Save feature will notify Enhanced Memory that the user has requested to create a new profile. | Satisfies:  *No reqs. satisfied* |
| **Software Update & (Vehicle Mode & Feature Enabled)** |  | Satisfies:  *No reqs. satisfied* |
| **Replace Last Saved Positions with Ideal Request** |  | Satisfies:  *No reqs. satisfied* |
| **ValetMode\_ON** |  | Satisfies:  *No reqs. satisfied* |
| **Vehicle Mode | Feature Enabled** |  | Satisfies:  *No reqs. satisfied* |
| **S4** |  | Satisfies:  *No reqs. satisfied* |
| **Enhanced Memory state** |  | Satisfies:  *No reqs. satisfied* |
| **Current\_Position** | The Current\_Position signal transmits the current position values of the commodity axis that the function is allocated to. The Monitor User Input function utilizes the Active\_Profile signal to identify which profile’s values to transmit. | Satisfies:  *No reqs. satisfied* |
| **Monitoring: Seat Data** | The Seat Controller will notify Auto Save Arbitrator with changes in Seat positional settings. | Satisfies:  *No reqs. satisfied* |
| **Ideal Positions Request** |  | Satisfies:  *No reqs. satisfied* |
| **InternalSignal1** |  | Satisfies:  *No reqs. satisfied* |
| **Inital Positional Adjustment** |  | Satisfies:  *No reqs. satisfied* |
| **profile siwtch notification** |  | Satisfies:  *No reqs. satisfied* |
| **User Manually Saves** |  | Satisfies:  *No reqs. satisfied* |
| **Driver Response: Enhanced Memory** |  | Satisfies:  *No reqs. satisfied* |
| **Profile\_Resume\_status** | This signal indicates if there is a profile resume occurring. Also indicates whether the current profile is being refreshed or another profile is being resumed. | Satisfies:  *No reqs. satisfied* |
| **Recall\_GuestProfile** |  | Satisfies:  *No reqs. satisfied* |
| **U & C** |  | Satisfies:  *No reqs. satisfied* |
| **Vehicle Mode | Feature Enabled | Software Update** |  | Satisfies:  *No reqs. satisfied* |
| **Driver Profile Active** |  | Satisfies:  *No reqs. satisfied* |
| **User\_Input\_Calibration** | This signal contains a calibration that determines if a user adjustment is ‘Micro’ or ‘Macro’. The value will be ‘Micro’ if the commodity is set to always be micro. The value will be ‘Macro’ if the commodity is set to always be macro. | Satisfies:  *No reqs. satisfied* |
| **NO** |  | Satisfies:  *No reqs. satisfied* |
| **Update Last Saved Positions Request** | When the same profile is being recalled as the current active profile then the Ideal Positions will be recalled. Auto Save will send a request to Classic Memory to replace the values in Last Saved Positions with the values in Ideal Positions. When the values have been replaced then Auto Save will notify Enhanced Memory to proceed with the positional settings recall. | Satisfies:  *No reqs. satisfied* |
| **Enable\_AutoSave** |  | Satisfies:  *No reqs. satisfied* |
| **Information** |  | Satisfies:  *No reqs. satisfied* |
| **G & C & Evaluation Timer** |  | Satisfies:  *No reqs. satisfied* |
| **Driver Response: Driver** |  | Satisfies:  *No reqs. satisfied* |
| **SoftwareUpdate\_Off** |  | Satisfies:  *No reqs. satisfied* |
| **Start\_Timer** |  | Satisfies:  *No reqs. satisfied* |
| **Restart\_Timer** |  | Satisfies:  *No reqs. satisfied* |
| **Secondary Positional Adjustment** |  | Satisfies:  *No reqs. satisfied* |
| **Auto\_Save\_Active\_Status** | This signal indicates the current mode of operation of Auto Save feature. | Satisfies:  *No reqs. satisfied* |
| **Active\_Mode** |  | Satisfies:  *No reqs. satisfied* |
| **EasyEntryEasyExit\_ON** |  | Satisfies:  *No reqs. satisfied* |
| **Not Inhibited** |  | Satisfies:  *No reqs. satisfied* |
| **Request\_Positions** | The Request\_Positions signal requests the values for Current Position and Saved Position. The receiving function utilizes the Active\_Profile signal to identify the profile that contains the requested values. | Satisfies:  *No reqs. satisfied* |
| **S1** |  | Satisfies:  *No reqs. satisfied* |
| **Save\_Position** | The Saved\_Position signal transmits the saved position values of the commodity axis that the function is allocated to. The Monitor User Input function utilizes the Active\_Profile signal to identify which profile’s values to transmit. | Satisfies:  *No reqs. satisfied* |
| **Energy** |  | Satisfies:  *No reqs. satisfied* |
| **Wait Timer | User Declines Save | Prompt Blocked** |  | Satisfies:  *No reqs. satisfied* |
| **Monitoring: Left Mirror Data** | The Left Mirror Controller will notify Auto Save Arbitrator with changes in Left Mirror positional settings. | Satisfies:  *No reqs. satisfied* |
| **Feedback** |  | Satisfies:  *No reqs. satisfied* |
| **Recall\_Profile2** |  | Satisfies:  *No reqs. satisfied* |
| **Ignition\_Status** | The Ignition\_Status signal indicates the current ignition status on the host vehicle. | Satisfies:  *No reqs. satisfied* |
| **Profile\_User\_Status** | This signal indicates if the active profile is a user profile. | Satisfies:  *No reqs. satisfied* |
| **User Requests Resume of Same Profile** |  | Satisfies:  *No reqs. satisfied* |
| **S3** |  | Satisfies:  *No reqs. satisfied* |
| **Input\_User\_Input\_Status** | The Input\_User\_Input\_Status signal indicates that an adjustment has been made and the Classify by User Input function must now classify the change. | Satisfies:  *No reqs. satisfied* |
| **Software Update** |  | Satisfies:  *No reqs. satisfied* |
| **S7** |  | Satisfies:  *No reqs. satisfied* |
| **Save Positional Settings Request** | The Auto Save feature will notify Enhanced Memory to update the Last Saved Positions. Enhanced Memory will notify Classic Memory who will update Last Save Positions. | Satisfies:  *No reqs. satisfied* |
| **CANSignal3** |  | Satisfies:  *No reqs. satisfied* |
| **Update Ideal Positions Request** | At key off or profile change, Auto Save will determine if the key cycle duration has reached the threshold. When the threshold is met then Auto Save will send a request to Classic Memory requesting Last Saved Positions. Auto Save will replace the values in Ideal Positions with the values from Last Saved Positions. | Satisfies:  *No reqs. satisfied* |
| **Profile Change** | Indicates that a change of profile has occurred and Auto Save should respond by returning to an idle state.  This signal is the same as the existing Memory\_Cmd signal.  ASIL: QM  Encoding Type: Memory\_Cmd  Discrete Encoding Values:  0x0 Null  0x1 Store\_1  0x2 Store\_2  0x3 Store\_3  0x4 Store\_4  0x5 Recall\_1  0x6 Recall\_2  0x7 Recall\_3  0x8 Recall\_4  Unit: Enumeration | Satisfies:  *No reqs. satisfied* |
| **Monitoring: Steering Column Data** | The Steering Column Controller will notify Auto Save Arbitrator with changes in Steering Column positional settings. | Satisfies:  *No reqs. satisfied* |
| **S5** |  | Satisfies:  *No reqs. satisfied* |
| **EEEE\_Status** | This signal Indicates if an Easy Entry Easy Exit event is occurring. | Satisfies:  *No reqs. satisfied* |
| **User\_Response** | This signal indicates the user’s response to the selection of the saving options presented by the host vehicle. | Satisfies:  *No reqs. satisfied* |
| **Profile\_Save\_Status** | This signal indicates if the current profile is being saved by another external entity outside of the boundaries of the Auto Save feature. | Satisfies:  *No reqs. satisfied* |
| **Stop\_Timer** |  | Satisfies:  *No reqs. satisfied* |
| **Material** |  | Satisfies:  *No reqs. satisfied* |
| **Profile Change** | Enhanced Memory will notify Auto Save when a Memory Seat Button has been pressed or held. Auto Save will determine from these inputs which saved positional settings should be recalled. | Satisfies:  *No reqs. satisfied* |
| **Timer\_Calibration** | The logical signal ‘Timer\_Calibration’ is a means of configuring the ‘Default\_Time\_Constant’ and ‘Short\_Adjust\_Constant’ values in the “Decide Timer” function. When the “Decide Timer” function receives this signal, it should update the ‘Default\_Time\_Constant’ and ‘Short\_Adjust\_Constant’ values ‘Timer\_Calibration’. | Satisfies:  *No reqs. satisfied* |
| **ActiveProfile\_Status** | This signal indicates which Profile is currently active on the profile host vehicle. | Satisfies:  *No reqs. satisfied* |
| **ValetMode\_OFF** |  | Satisfies:  *No reqs. satisfied* |
| **Ideal Positions** |  | Satisfies:  *No reqs. satisfied* |

### Logical Parameters

### Technical Signals

InternalSignal3

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **Init Default Value** | |  |
| **Encoding Type Name** | |  |
| Note: An encoding is either discrete or continuous. Delete fields below which are not needed, | | |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
|  |  |
|  |  |
| **Unit** | |  |

Table: Signal Details of InternalSignal3

CANSignal2

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **Init Default Value** | |  |
| **Encoding Type Name** | |  |
| Note: An encoding is either discrete or continuous. Delete fields below which are not needed, | | |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
|  |  |
|  |  |
| **Unit** | |  |

Table: Signal Details of CANSignal2

CANSignal3

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **Init Default Value** | |  |
| **Encoding Type Name** | |  |
| Note: An encoding is either discrete or continuous. Delete fields below which are not needed, | | |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
|  |  |
|  |  |
| **Unit** | |  |

Table: Signal Details of CANSignal3

InternalSignal1

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **Init Default Value** | |  |
| **Encoding Type Name** | |  |
| Note: An encoding is either discrete or continuous. Delete fields below which are not needed, | | |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
|  |  |
|  |  |
| **Unit** | |  |

Table: Signal Details of InternalSignal1

CANSignal1

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **Init Default Value** | |  |
| **Encoding Type Name** | |  |
| Note: An encoding is either discrete or continuous. Delete fields below which are not needed, | | |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
|  |  |
|  |  |
| **Unit** | |  |

Table: Signal Details of CANSignal1

InternalSignal2

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **Init Default Value** | |  |
| **Encoding Type Name** | |  |
| Note: An encoding is either discrete or continuous. Delete fields below which are not needed, | | |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
|  |  |
|  |  |
| **Unit** | |  |

Table: Signal Details of InternalSignal2

#### GSDB Signals

#### HW I/Os

#### Diagnostic Interfaces

##### DTCs

<Some Description of the DTC.

Refer to VSEM document “[Diagnostic Fault Coverage and DTC Numbers](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=yAUtrNhnx3NrTDAAAAAAAAAAAAA&servername=Production_Server)

[Design Consideration](https://www.vsemweb.ford.com/tc/launchapp?-attach=true&-s=226TCSession&-o=yAUtrNhnx3NrTDAAAAAAAAAAAAA&servername=Production_Server)”, what to fill into the attributes below>

|  |  |
| --- | --- |
| **Test Period Time** |  |
| **Test Run Criteria,** |  |
| **Enable Criteria (EC)** |  |
| **Applicable** |  |
| **FailureTypeBytes** |  |
| **Test Period Time** |  |
| **Test Run Criteria,** |  |

##### DIDs

### Technical Parameters

### Mappings

### Technical Interfaces

#### AIS Interfaces

##### Publisher Interfaces

##### Subscriber Interfaces

#### AUTOSAR Ports

### Messages/APIs

#### CAN Bus “<Bus Name>”

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CAN ID** | **Transmission Mode** | **Period** | **Signal Names** | **Transmitter(s)** | **Receiver(s)** |
|  |  |  |  |  |  |
|  |
|  |
|  |

#### LIN Bus “<Bus Name>”

#### AUTOSAR Interfaces

#### SOA Service Contracts

<Service contract purpose/behavior>

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Messaging Pattern | Frequency  (For Data Broadcast Only) | Message Data Element(s)  (Must Match GPB) or applicable CAN signal | Description of Data Element(s) | Topic Name |
| Choose an item. |  | GBP Data element / CAN Signal name 1 | Detailed encoding of data element 1 |  |
| … |  |  |
| GBP Data element / CAN Signal name 1 | Detailed encoding of data element 3 |  |

### Encoding Types

Position

This signal indicates the current or saved position for a given axis.

ASIL: QM

Min Value: 0

Max Value: 65535

Resolution: 1

Offset: 0

Unit: Integer

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Position Value** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Position

ProfileType

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Driver** |  |
| **None** |  |
| **Guest** |  |
| **Temporary** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of ProfileType

Assumption Categories

Assumption Categories is a value type that defines literals used for specifying the "Category" of an Assumptions element.

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **<UNSPECIFIED>** |  |
| **Behavioral** |  |
| **Controllability** |  |
| **Vehicle** |  |
| **Other Systems** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Assumption Categories

Repository Clear Complete

This signal indicates when the clearing of the information that has been retained in the Classified Adjustments Repository is complete. It is true when the process is complete, false otherwise.

ASIL: QM

Encoding Type: Boolean

Discrete Encoding Values:

0x0 FALSE

0x1 TRUE

Unit: Boolean

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Repository Clear Complete** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Repository Clear Complete

Acknowledge Inhibit Change

Indicates that the examination of the active status of the feature has occurred.

ASIL: QM

Encoding Type: Boolean

Discrete Encoding Values:

0x0 FALSE

0x1 TRUE

Unit: Boolean

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Acknowledge Inhibit Change** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Acknowledge Inhibit Change

Clear Request

This signal indicates whether the modules in the Auto Save Domain should clear their saved retention information.

ASIL: QM

Encoding Type: Boolean

Discrete Encoding Values:

0x0 FALSE

0x1 TRUE

Unit: Boolean

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Request to Clear** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Clear Request

Profile Save Request

Extra signal?

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Profile Save Request

Adjustment Classification Acknowledge

Indicates that the update to the Classified Adjustments Repository has been acknowledged by the Evaluate Classified Adjustments function.

ASIL: QM

Encoding Type: Boolean

Discrete Encoding Values:

0x0 FALSE

0x1 TRUE

Unit: Boolean

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Adjustment Classification Acknowledge** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Adjustment Classification Acknowledge

Adjustment

Indicates that an adjustment has occurred and Auto Save should respond by classifying the type of adjustment made. Contains an integer with the ID of the axis that is being adjusted.

ASIL: QM

Min Value: 0

Max Value: 1023

Resolution: 1

Offset: 0

Unit: Integer

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Adjustment ID** |  |
| **Adjustment Occurred** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Adjustment

Request Profile Change

This signal indicates that the Auto Save feature has determined that a profile change should occur. It is different from the signal sent to the profile manager.

ASIL: QM

Encoding Type: Boolean

Discrete Encoding Values:

0x0 FALSE

0x1 TRUE

Unit: Boolean

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Request Profile Change** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Request Profile Change

Difference Result

This signal contains the difference between the current position and saved position. Contains an integer with the amount of change to the axis.

ASIL: QM

Min Value: 0

Max Value: 100

Resolution: 1

Offset: 0

Unit: Percent

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Difference Result Value** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Difference Result

Request to Clear

Indicates that a successful save of positional settings has occurred and Auto Save should respond by clearing any saved adjustment information.

This signal is the same as the existing Memory\_Cmd signal.

ASIL: QM

Encoding Type: Memory\_Cmd

Discrete Encoding Values:

0x0 Null

0x1 Store\_1

0x2 Store\_2

0x3 Store\_3

0x4 Store\_4

0x5 Recall\_1

0x6 Recall\_2

0x7 Recall\_3

0x8 Recall\_4

Unit: Enumeration

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Request to Clear** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Request to Clear

Retain Settings Enum

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **None** |  |
| **Save** |  |
| **Feedback** |  |
| **Exit** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Retain Settings Enum

Current Position

This signal indicates the current position of a given axis as a percentage of axis travel.

ASIL: QM

Min Value: 0

Max Value: 100

Resolution: 1

Offset: 0

Unit: Percent

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Current Position Value** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Current Position

Retention Action State Enum

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Idle** |  |
| **Prompt Wait** |  |
| **Timeout Prompt** |  |
| **Trap** |  |
| **Off** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Retention Action State Enum

Feedback Request Active

Indicates that the Auto Save feature feedback from the user. The Host Vehicle HMI needs to open up a prompt to request feedback from the user regarding the positional settings that were adjusted.

ASIL: QM

Encoding Type: Request Feedback

Discrete Encoding Values:

0x0 No

0x1 Yes

Unit: Boolean

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Feedback Request Active** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Feedback Request Active

Exit Without Saving

This signal indicates that the Auto Save feature has determined that it should stop operation for this key cycle without saving the adjustments.

ASIL: QM

Encoding Type: Boolean

Discrete Encoding Values:

0x0 No

0x1 Yes

Unit: Boolean

Note: Based on discussions with NetCom, this signal will likely need to be assigned values of "No" and "Yes" instead of the preferred "FALSE" and "TRUE".

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Exit Without Saving** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Exit Without Saving

EasyEntryEasyExit

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Active** |  |
| **Inactive** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of EasyEntryEasyExit

ValetMode

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Active** |  |
| **Inactive** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of ValetMode

Adjustment Notification Acknowledge

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Adjustment Notification Acknowledge** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Adjustment Notification Acknowledge

Clear Adjustment Information Complete

This signal indicates when the clearing of the adjustment information is complete. It is true when the process is complete, false otherwise.

ASIL: QM

Encoding Type: Boolean

Discrete Encoding Values:

0x0 FALSE

0x1 TRUE

Unit: Boolean

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Clear Adjustment Information Complete** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Clear Adjustment Information Complete

Request Save

This signal indicates that the Auto Save feature has determined that the retention of positional settings should occur. It is different from the signal sent to the Profile Update Manager of Positional Settings.

ASIL: QM

Encoding Type: Boolean

Discrete Encoding Values:

0x0 FALSE

0x1 TRUE

Unit: Boolean

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Request Save** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Request Save

HardwareV&VMethods

HardwareV&VMethods is a value type that defines literals used for specifying the V&V Method(s) used for to verify proper implementation of a Hardware Safety Requirement.

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Durability Test** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of HardwareV&VMethods

Retention Action State

The Retention Action State signal indicates the current state of the Analyze Retention Action function. It is used to inform the Evaluate Saving Strategy function of how the Analyze Retention Action Function is responding to the requested retention strategy.

ASIL: QM

Encoding Type: Retention Action Status

Discrete Encoding Values:

0x0 Off

0x1 Idle

0x2 Prompt Wait

0x3 Timeout Prompt

0x4 Trap

0x5 Not Used

0x6 Not Used

0x7 Not Used

Unit: Enumeration

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Retention Action State** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Retention Action State

Feedback Information

Infotainment HMI will send this signal to the Auto Save feature to indicate the user's response to the prompt.

ASIL: QM

Encoding Type: Feedback Information

Discrete Encoding Values:

0x0 = None

0x1 = No Save

0x2 = Save

0x3 = Change Profile

0x4 = Blocked

0x5 = Timeout

0x6 = Not Used

0x7 = Not Used

Unit: Enumeration

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Save** |  |
| **No Save** |  |
| **Change Profile** |  |
| **None** |  |
| **Blocked** |  |
| **Timeout** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Feedback Information

asil

asil is a value type that defines literals used for specifying the automotive safety integrity level for requirements, functions, and architecture elements.

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **QM** |  |
| **A** |  |
| **B** |  |
| **C** |  |
| **D** |  |
| **A(B)** |  |
| **A(C)** |  |
| **A(D)** |  |
| **B(C)** |  |
| **B(D)** |  |
| **C(D)** |  |
| **A(A)** |  |
| **B(B)** |  |
| **C(C)** |  |
| **D(D)** |  |
| **QM(A)** |  |
| **QM(B)** |  |
| **QM(C)** |  |
| **QM(D)** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of asil

Generic Adjustment

This signal contains the classification of a particular axis in a sub-domain.

ASIL: QM

Encoding Type: Adjustment Classification

Discrete Encoding Values:

0x0 None

0x1 In Progress

0x2 Major

0x3 Minor

Unit: Enumeration

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Generic Adjustment** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Generic Adjustment

Feedback Activation

This signal indicates that the Auto Save feature has determined that it should request the activation of feedback. This is an internal signal, not found on the network.

ASIL: QM

Encoding Type: Boolean

Discrete Encoding Values:

0x0 FALSE

0x1 TRUE

Unit: Boolean

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Feedback Activation** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Feedback Activation

Update Alert

Indicates that an update has occurred in a repository and the Auto Save feature should update Adjustment Notification.

ASIL: QM

Encoding Type: Boolean

Discrete Encoding Values:

0x0 FALSE

0x1 TRUE

Unit: Boolean

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Alert Active** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Update Alert

SRSCategory

SRSCategory is a value type that defines literals used for specifying the "Category" of a Technical Safety Requirement.

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **General** |  |
| **Safety Related Function** |  |
| **Internal Fault Handling** |  |
| **External Fault Handling** |  |
| **Latent Fault Handling** |  |
| **Metric** |  |
| **Reduced Functionality** |  |
| **User Information** |  |
| **Maintain Safe State / Recovery** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of SRSCategory

KeyStatus

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Off** |  |
| **Accessory** |  |
| **Run** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of KeyStatus

Request Feedback

Indicates the type of feedback the Auto Save feature wants from the user. The Host Vehicle HMI needs to open up a prompt to request feedback from the user regarding the positional settings that were adjusted.

ASIL: QM

Encoding Type: Request Feedback

Discrete Encoding Values:

0x0 Seat

0x1 Mirrors

0x2 Pedals

0x3 Steering Wheel

0x4 HUD

0x5 Multiple

0x6 Save Confirm

0x7 Ignore Confirm

Unit: Enumeration

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **None** |  |
| **HUD** |  |
| **Seat** |  |
| **Steering Wheel** |  |
| **Mirror** |  |
| **Pedal** |  |
| **Multiple** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Request Feedback

True

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
|  |  |
| **Unit** | |  |

Table: Encoding Details of True

Axis Adjustment Data

Repeated signal? This does not seem correct

ASIL: QM

Min Value: 0

Max Value: 65535

Resolution: 1

Offset: 0

Unit: Integer

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Adjustment Value** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Axis Adjustment Data

ProfileInhibit

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Active** |  |
| **Inactive** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of ProfileInhibit

Adjustment Notification

This signal contains the classification of the whole Auto Save Domain.

ASIL: QM

Encoding Type: Adjustment Classification

Discrete Encoding Values:

0x0 None

0x1 In Progress

0x2 Major

0x3 Minor

Unit: Enumeration

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Adjustment Notification** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Adjustment Notification

Request Save

Indicates that Auto Save is requesting the retention of positional settings and the Profile Update Manager of Positional Settings should retain the current positional settings.

ASIL: QM

Encoding Type: Request Save

Discrete Encoding Values:

0x0 No Save

0x1 Save

Unit: Enumeration

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Save** |  |
| **No Save** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Request Save

Adjustment Classification Alert

Indicates that an update has occurred in the Classified Adjustments Repository and the Auto Save feature should evaluate it.

ASIL: QM

Encoding Type: Boolean

Discrete Encoding Values:

0x0 FALSE

0x1 TRUE

Unit: Boolean

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Adjustment Classification Alert** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Adjustment Classification Alert

Adjustment Enum

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Minor** |  |
| **Major** |  |
| **In Progress** |  |
| **None** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Adjustment Enum

Activation Status

Indicates whether the feature should be active or inactive.

ASIL: QM

Encoding Type: Activation Status

Discrete Encoding Values:

0x0 Disabled

0x1 Enabled Inactive

0x2 Enabled Active

Unit: Enumeration

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Disabled** |  |
| **Enabled Inactive** |  |
| **Enabled Active** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Activation Status

FSRCategory

FSRCategory is a value type that defines literals used for specifying the "Category" of a Functional Safety Requirement.

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **General** |  |
| **Safety Related Function** |  |
| **Maintain Safe State/Recovery** |  |
| **User Information** |  |
| **Reduced Functionality** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of FSRCategory

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
|  |  |
| **Unit** | |  |

Table: Encoding Details of

VehicleMode

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Factory** |  |
| **Transport** |  |
| **Normal** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of VehicleMode

Acknowledge Adjustment Repository

This signal acknowledges that the Adjustment Classification has been updated in response to changes in an Adjustment Repository.

ASIL: QM

Encoding Type: Boolean

Discrete Encoding Values:

0x0 FALSE

0x1 TRUE

Unit: Boolean

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Acknowledge Adjustment Repository** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Acknowledge Adjustment Repository

Inhibit Change Notification

Indicates that a signal has arrived that may affect the active status of the feature.

ASIL: QM

Encoding Type: Boolean

Discrete Encoding Values:

0x0 FALSE

0x1 TRUE

Unit: Boolean

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Inhibit Status Change** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Inhibit Change Notification

Threshold Status

The Threshold Status signal is the output of a monitoring function. It indicates whether an axis is moving or not.

ASIL: QM

Encoding Type: Threshold Status

Discrete Encoding Values:

0x0 None

0x1 Inactive

0x2 Active

Unit: Enumeration

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Inactive** |  |
| **Active** |  |
| **None** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Threshold Status

Inhibit Status

Indicates that a Profile Inhibitor Manager has changed the inhibition status and Auto Save should respond by activating or deactivating the feature.

ASIL: QM

Min Value: 0

Max Value: 1023

Resolution: 1

Offset: 0

Unit: Integer

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Inhibit ID** |  |
| **Inhibit Active** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Inhibit Status

Feedback Acknowledgment

This signal indicates that the Auto Save feature has requested feedback. This is an internal signal, not found on the network.

ASIL: QM

Encoding Type: Boolean

Discrete Encoding Values:

0x0 FALSE

0x1 TRUE

Unit: Boolean

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Feedback Acknowledgment** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Feedback Acknowledgment

Notification Change

Indicates that a change of profile has occurred and Auto Save should respond by returning to an idle state.

This signal is the same as the existing Memory\_Cmd signal.

ASIL: QM

Encoding Type: Memory\_Cmd

Discrete Encoding Values:

0x0 Null

0x1 Store\_1

0x2 Store\_2

0x3 Store\_3

0x4 Store\_4

0x5 Recall\_1

0x6 Recall\_2

0x7 Recall\_3

0x8 Recall\_4

Unit: Enumeration

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **0x0 None** |  |
| **0x1 Store\_1** |  |
| **0x2 Store\_2** |  |
| **0x3 Store\_3** |  |
| **0x4 Store\_4** |  |
| **0x5 Recall\_1** |  |
| **0x6 Recall\_2** |  |
| **0x7 Recall\_3** |  |
| **0x8 Recall\_4** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Notification Change

Retain Settings

This signal indicates that the Auto Save feature has determined what retention action should occur. It is different from the signal sent to the Profile Update Manager of Positional Settings.

ASIL: QM

Encoding Type: Retain Settings

Discrete Encoding Values:

0x0 None

0x1 Save

0x2 Feedback

0x3 Exit

Unit: Enumeration

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Retain Settings** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Retain Settings

Processing Status

The Processing Status signal indicates whether the Check Processing Ability function has determined that the current position has stopped moving.

ASIL: QM

Encoding Type: Processing Status

Discrete Encoding Values:

0x0 Ready

0x1 Busy

Unit: Enumeration

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Ready** |  |
| **Busy** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Processing Status

SoftwareV&VMethods

SoftwareV&VMethods is a value type that defines literals used for specifying the V&V Method(s) used to verify proper implementation of a Software Safety Requirement.

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Inspection** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of SoftwareV&VMethods

Decide Feedback

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Decide Feedback

Request Profile Change

Indicates that the Auto Save feature wants the Profile Manager to open a change profile screen so that the user can change profile.

ASIL: QM

Encoding Type: Request Profile Change

Discrete Encoding Values:

0x0 No

0x1 Yes

Unit: Enumeration

Note: Based on discussions with NetCom, this signal will likely need to be assigned values of "No" and "Yes".

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Change Profile** |  |
| **No Change** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Request Profile Change

Status[Boolean]

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Status[Boolean]

Exit Retention

This signal indicates that the Auto Save feature has determined that it should stop operation for this key cycle.

ASIL: QM

Encoding Type: Boolean

Discrete Encoding Values:

0x0 FALSE

0x1 TRUE

Unit: Boolean

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Exit Retention** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Exit Retention

VaVStatus

VaVStatus is a value type that defines literals used for specifying that status of a FS V&V review activity.

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **not yet started** |  |
| **review in progress** |  |
| **review complete** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of VaVStatus

Clear Repository

This signal indicates whether the Auto Save Decide Function should clear the information that has been retained in the Classified Adjustments Repository.

ASIL: QM

Encoding Type: Boolean

Discrete Encoding Values:

0x0 FALSE

0x1 TRUE

Unit: Boolean

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Clear Repository** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Clear Repository

Notification Status

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **unnamed1** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Notification Status

Adjustment Classification

This signal contains the consolidated classification of a sub-domain of axes.

ASIL: QM

Encoding Type: Adjustment Classification

Discrete Encoding Values:

0x0 None

0x1 In Progress

0x2 Major

0x3 Minor

Unit: Enumeration

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Minor** |  |
| **Major** |  |
| **In Progress** |  |
| **None** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Adjustment Classification

Active

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Active

Manual Save Request

Extra signal?

ASIL: QM

Encoding Type: Boolean

Discrete Encoding Values:

0x0 FALSE

0x1 TRUE

Unit: Boolean

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Manual Save Request

False

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
|  |  |
| **Unit** | |  |

Table: Encoding Details of False

AutoSaveRet\_B\_Rq

Indicates that Auto Save is requesting the retention of positional settings and the Profile Update Manager of Positional Settings should retain the current positional settings.

ASIL: QM

Encoding Type: Boolean

Discrete Encoding Values:

0x0 No

0x1 Yes

Unit: Boolean

Note: Based on discussions with NetCom, this signal will likely need to be assigned values of "No" and "Yes" instead of the preferred "FALSE" and "TRUE".

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **AutoSaveRet\_B\_Rq** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of AutoSaveRet\_B\_Rq

Saved Position

This signal indicates the saved position of a given axis as a percentage of axis travel.

ASIL: QM

Min Value: 0

Max Value: 100

Resolution: 1

Offset: 0

Unit: Percent

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Saved Position Value** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Saved Position

V&VMethod

V&VMethod is a value type that defines literals for specifying the V&V Method(s) used to verify proper implementation of a Functional or Technical Safety Requirement.

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Vehicle test** |  |
| **Peer review** |  |
| **System test** |  |
| **Software test** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of V&VMethod

SWCategory

FSRCategory is a value type that defines literals used for specifying the "Category" of a Functional Safety Requirement.

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **General Software Safety** |  |
| **Safety Related Function** |  |
| **Internal Fault Handling** |  |
| **External Fault Handling** |  |
| **Latent Fault Handling** |  |
| **Reduced Functionality** |  |
| **User Information** |  |
| **Maintain Safe State/Recovery** |  |
| **Off-Board Tests and Coordination** |  |
| **Production and Service Modification of Software** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of SWCategory

Request Notification

Indicates that the profile change has occurred and Auto Save needs to know that the profile change has occurred.

OUT OF DATE?

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Request Notification** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Request Notification

HWCategory

FSRCategory is a value type that defines literals used for specifying the "Category" of a Functional Safety Requirement.

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Design Verification** |  |
| **External Fault Detection** |  |
| **External Fault Tolerance** |  |
| **General** |  |
| **Internal Fault Detection** |  |
| **Metrics** |  |
| **Production/Service/Decommissioning** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of HWCategory

Input Status

The Input Status signal is the output of a monitoring function. It indicates whether an axis is being modified or not.

ASIL: QM

Encoding Type: Input Status

Discrete Encoding Values:

0x0 None

0x1 Inactive

0x2 Active

Unit: Enumeration

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Inactive** |  |
| **Active** |  |
| **None** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Input Status

Adjustment Alert

Indicates that an update has occurred in a repository and the Auto Save feature should provide an updated classification.

ASIL: QM

Encoding Type: Boolean

Discrete Encoding Values:

0x0 FALSE

0x1 TRUE

Unit: Boolean

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Notification** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Adjustment Alert

Result

Result is an enumeration that defines literals for specifying the outcome of a review.

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **passed review** |  |
| **did not pass review** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Result

Action to take

**Note:** An encoding is either discrete or continuous. Delete those fields, which are not needed.

|  |  |  |
| --- | --- | --- |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) | Value 1 |  |
| Value 2 | … |
| … | … |
| **Save** |  |
| **ignore** |  |
| **Error** |  |
|  |  |
| **Unit** | |  |

Table: Encoding Details of Action to take

Document ends here.