Stowable Steering Wheel

<<Physical>>

F002870

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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 SCMB <Feature> to the following electrical architecture(s):

*No Electrical Architecture found.*

## Document Audience

The FIS is authored by - . 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 the function stakeholders and their roles & responsibilities refer to <Put VSEM Link here>.

## References

### Ford Documents

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

No Ford documents specified in model.

### External Documents and Publications

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

| **Reference** | **Document / Publication** |
| --- | --- |
| IEEE Std 1012-2004 IEEE Standard for Software Verification and Validation |  |
| ISO/IEC 19500-2:2003 |  |
| UML Testing Profile (UTP), v1.2 |  |
| Wikipedia | https://en.wikipedia.org/wiki/Concept |

Table 1‑3: External documents and publications

## Glossary

### Definitions

| **Definition** | **Description** |
| --- | --- |
| ABS | Automatic Breaking System |
| APIM | Accessory Protocol Interface Module (SYNC) |
| BCM | Body Control Module |
| BMS | Battery Management System |
| DAB | Driver Air Bag or one version of a Passive Restraint. |
| DC | Drive Control ( Locomotion and Passive restraint (Air Bag) Control) |
| Deploy | Come out / Move away from Dashboard or Instrument Panel Cluster |
| Drivability Status | Status to make sure all the component's status are good before allowing the drivability to user for safe drive |
| Drive Control | Drive Control is the Control status of Locomotion and Passive Restraint ( Drive Airbag)) |
| Drive Mode | The original Mode of the Vehicle in which the work surface for productivity is inside the instrument panel assembly ( stowed and locked) and the Driver seat is at drive seat position and Steering Column is Deployed |
| Drive state | The original Mode of the Vehicle in which the work surface for productivity is inside the instrument panel assembly ( stowed and locked) and the Driver seat is at drive seat position and Steering Column is Deployed |
| DSM | Driver Seat Module or Seat Controller. |
| ECM | Engine Control Module. |
| ECU | Electronic Control Module |
| EPAS | Electronic Power Assisted Steering |
| FuSa | Functional Safety |
| High speed | Approximately more than 52 mph (83 kph) |
| Low speed | Approximately 12 to 36 mph (19 to 58 kph ) |
| Medium speed | Approximately 36 mph to 52 mph (58 to 83 kph) |
| PCM | Powertrain Control Module |
| PSCM | Power Steering Control Module |
| RCM | Restraint Control Module or Seatbelt Controller |
| Rest Mode | The mode in which driver will have Driver seat is moved back (Work mode seat position) and Steering Column is stowed inside( Work Surface will not be Arbitrated) |
| Rest state | The mode in which driver will have Driver seat is moved back (Work mode seat position) and Steering Column is stowed inside( Work Surface will not be Arbitrated) |
| Stow | Move in / Move towards to Dashboard or Instrument Panel Cluster |
| term | A representation of a Concept expressed in Natural Language. In the vocabulary of a Domain of Discourse a term enables common understanding of domain concepts. |
| term glossary | A term glossary is a table of agreed upon definitions for terms used in project development that may provide clarity or avoid confusion to stakeholders. |
| TLA | Three Letter Acronym |
| Tray | Work surface where a User / Driver can use |
| Very Low Speed | Approximately 0 to 12 mph (0 to 19 kph) |
| Work Mode | The mode in which driver will have a work surface for productivity and the Driver seat is moved back (Work mode seat position) and Steering Column is stowed inside. |
| Work state | The mode in which driver will have a work surface for productivity and the Driver seat is moved back (Work mode seat position) and Steering Column is stowed inside. |

Table 1‑4: Definitions used in this document

### Abbreviations

| **Abbr.** | **Stands for** | **Description** |
| --- | --- | --- |
| ATLA | Another Three Letter Acronym |  |

Table 1‑5: Abbreviations used in this document.

# Feature Implementation Overview

## Description

Stowable Steering Wheel

Driver seat Module B or Passenger Seat Module

## 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** | | | |
|  | <Example:  id + title of relevant Function Spec> | <Example: “Function requirements of Logical Function …”> | <Note: If you reference a requirement in this column, then that requirement should have a trace link in its [“Source”/”Source Req.” attribute](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) field pointing back to the input requirement (or to a requirement inside the input document) given in this table row> |
|  |  |  |  |
| **Ford Engineering Standards** | | | |
|  | <Example: some SDS (requirement)> |  |  |
|  |  |  |  |
| **Legal Regulations** | | | |
|  | Compliance with FMVSS101 | The Feature shall comply with FMVSS101. |  |
|  |  |  |  |
| **Industry Standards** | | | |
|  | ISO 26262 | The system should be developed according to Ford's implementation of Functional Safety. |  |
|  |  |  |  |
| **Other Sources** | | | |
|  |  |  |  |
|  | Productivity | The driver shall use the feature to deploy a work surface and move the driver seat position in a timely manner as specified by User Experience guidelines. |  |
|  | Gain Space and Freedom of Movement | The driver shall have the ability to stow the steering column and move the driver seat position in a timely manner as specified by User Experience guidelines. |  |
|  | Unsafe Operating States | Unsafe Operating States shall be identified and mitigated as per ISO 26262 Functional Safety Analysis. |  |
|  | Easy to Understand Controls | The vehicle driver shall have access to easy-to-understand and intuitive controls and status information in close physical proximity to one another concerning the state of the feature. |  |
|  | Example AR |  |  |
|  | System Loudness | The system shall function at less than TBD dB. |  |
|  | Ease of Feature State Movement | The driver shall have the ability to easily move from a current feature state to any other valid state as quickly as possible. States are as follows: Drive, Rest/ Play and Work. |  |
|  |  |  |  |

Table 2‑1: Input Requirements/Documents

## Lessons Learned

No lessons learned specified.

## Assumptions

No Assumptions specified.

# Feature Implementation Architecture

## Functional Architecture

### Description

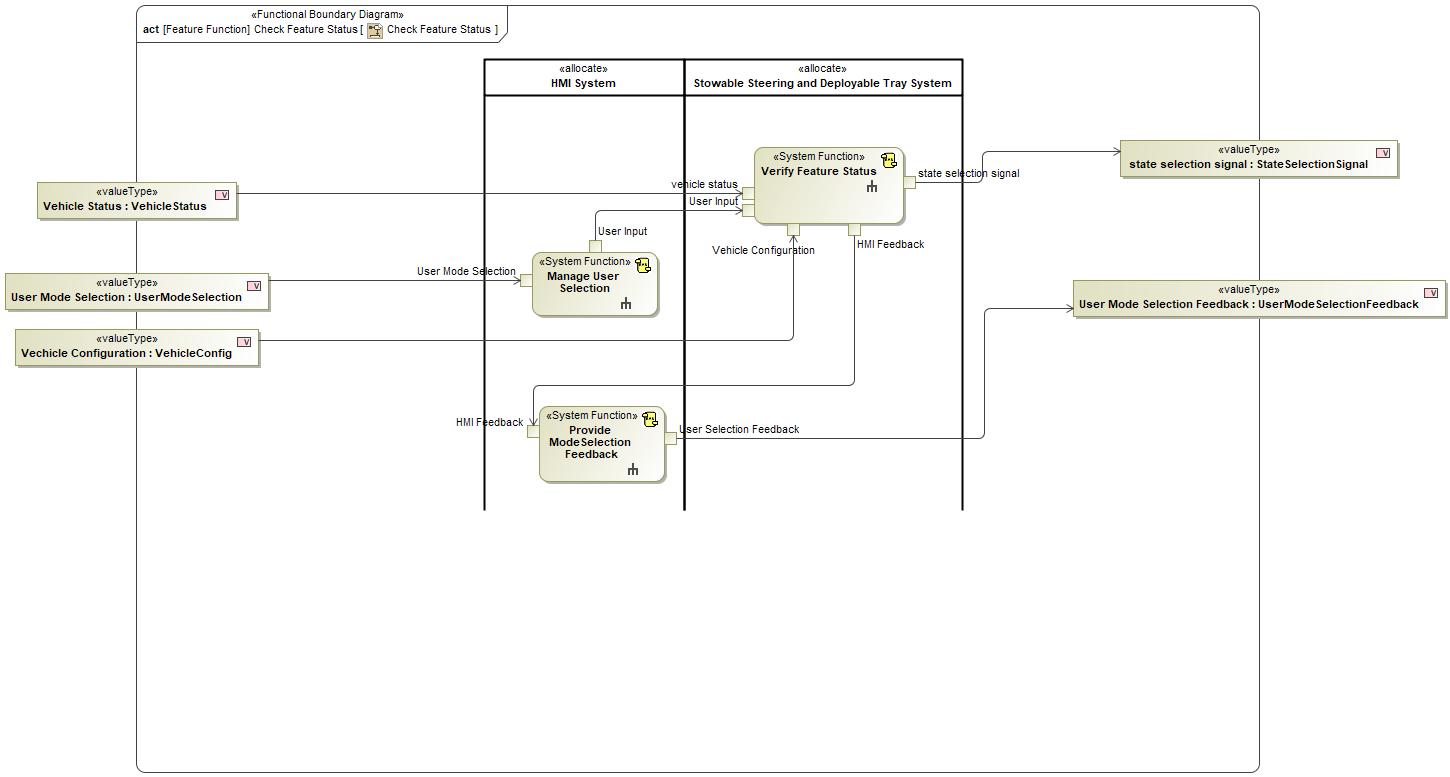


Figure 3‑1: Check Feature Status

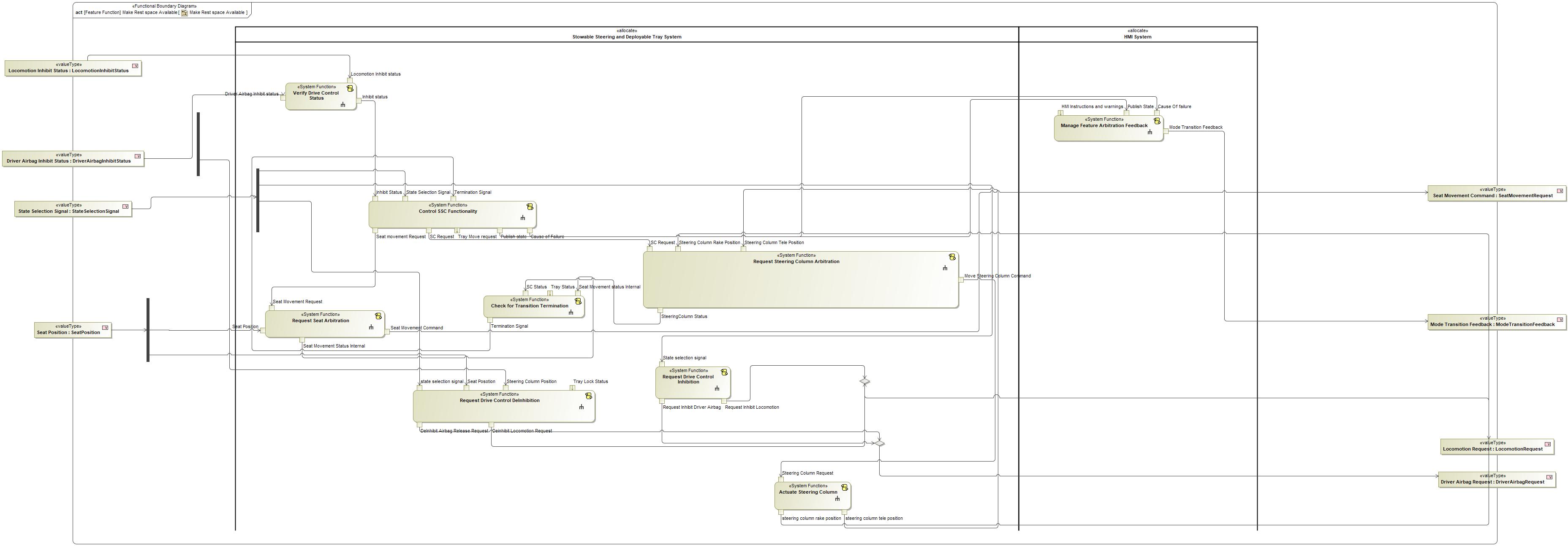


Figure 3‑1: Make Rest space Available

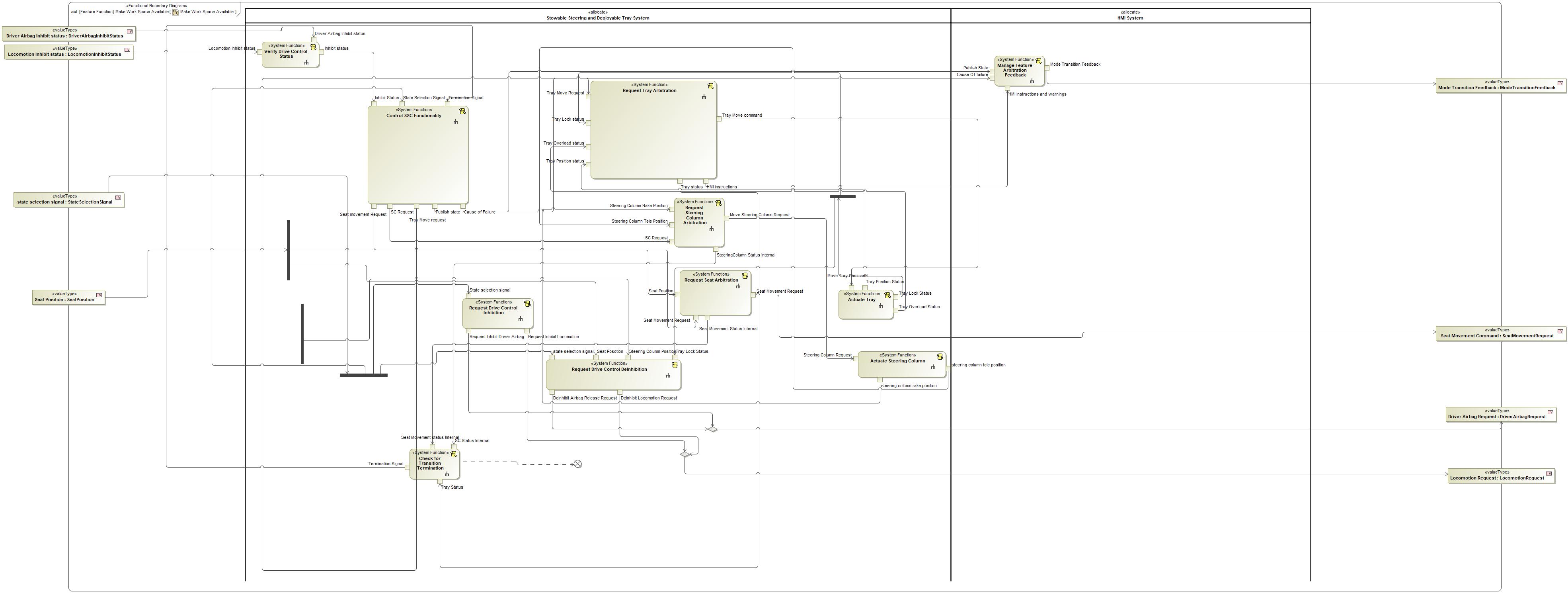


Figure 3‑1: Make Work Space Available

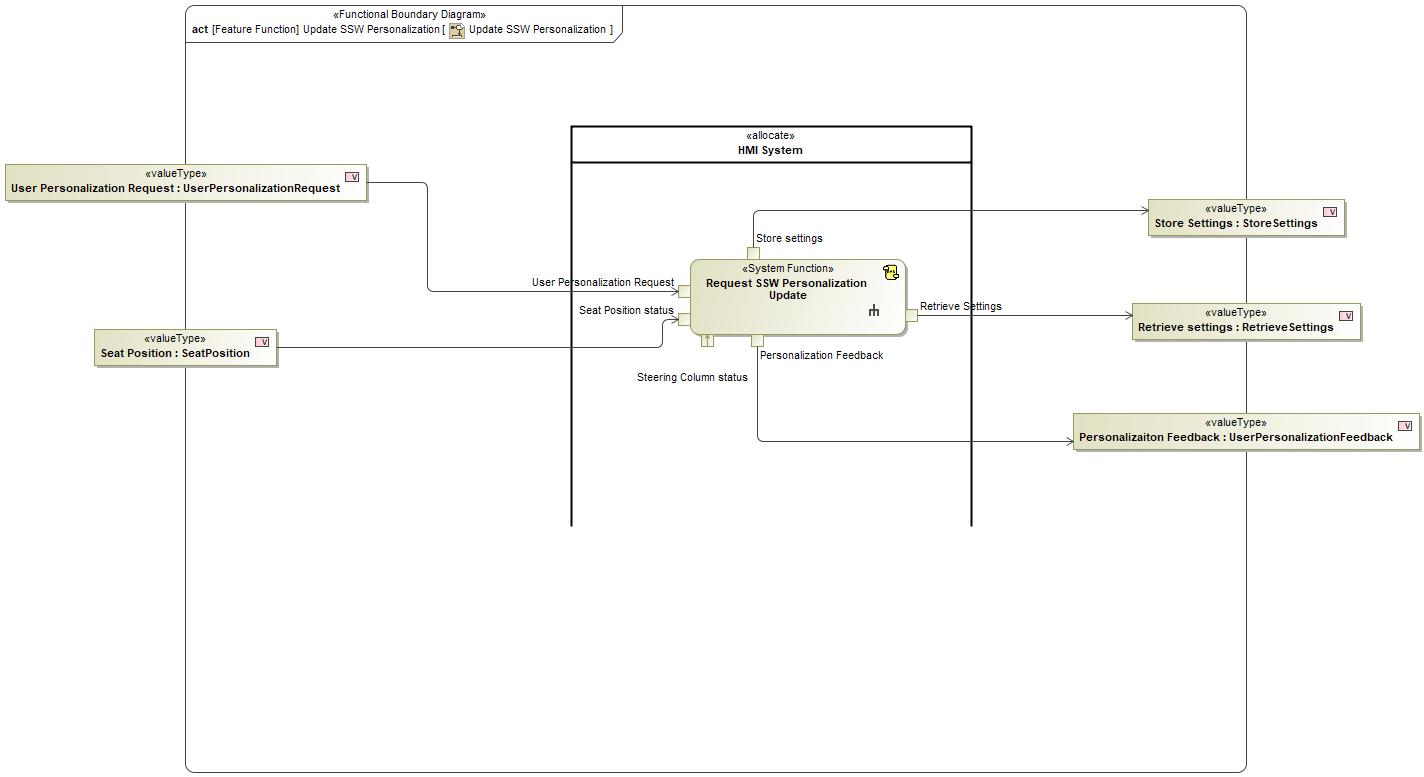


Figure 3‑1: Update SSW Personalization

### 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 |
| --- | --- | --- |
|  | (action) Manage User Selection | System Function responsible for managing User Selection |
|  | (action) Provide ModeSelection Feedback | System function responsible for providing user about the mode selection |
|  | (action) Verify Feature Status | This Function verifies the User Input , vehicle Status and Vehicle Configuration and provides State Selection signal and HMI Feedback |

Table 3‑2: List of Functions on Check Feature Status

| **Function ID** | Function Name | Function Description |
| --- | --- | --- |
|  | (action) Request Steering Column Arbitration | A System Function responsible for preparing the Steering Column to Arbitrate and send the respective command to Arbitrate Steering Column to next functions |
|  | (action) Check for Transition Termination | This system Functions check all the terminate signals information from Seat , steering Column and Tray Table and verifies if termination of transition is necessary |
|  | (action) Request Drive Control DeInhibition | Depending upon State Selection Signal this function sends a request to DeInhibit Drive Control |
|  | (action) Manage Feature Arbitration Feedback | This System Function will take care of Conveying the Feedback to User about the mode transition |
|  | (action) Request Drive Control Inhibition | Depending upon State Selection Signal this function sends a request to Inhibit Drive Control |
|  | (action) Request Drive Control DeInhibition | System Function responsible for DeInhibition as per Depending upon State Selection Signal this function sends a request to DeInhibit Drive Control |
|  | (action) Verify Drive Control Status | System Function responsible for Verify the Drive Control Status Before Actuating the feature |
|  | (action) Control SSC Functionality | When received State selection signal for mode transition , this function issues individual requests to Seat, steering Column and Tray Table after verifying the Inhibit status and Provide a cause of Failure if the transition is not possible |
|  | (action) Request Seat Arbitration | This System Function responsible for preparing the Seat to Arbitrate and send the respective request to Driver Seat System |
|  | (action) Request Drive Control DeInhibition | System Function responsible for Requesting the Drive Control ( Locomotion and Driver Airbag) Deinhibition |
|  | (action) Actuate Steering Column | System Function Responsible for Actuating Steering Column as per request from Feature Controller |
|  | (action) Request Drive Control Inhibition | System Function responsible for Inhibition as per Depending upon State Selection Signal this function sends a request to Inhibit Drive Control |
|  | (action) Request Drive Control DeInhibition | Depending upon State Selection Signal this function sends a request to DeInhibit Drive Control |
|  | (action) Request Drive Control DeInhibition | Depending upon State Selection Signal this function sends a request to DeInhibit Drive Control |

Table 3‑2: List of Functions on Make Rest space Available

| **Function ID** | Function Name | Function Description |
| --- | --- | --- |
|  | (action) Request Steering Column Arbitration | A System Function responsible for preparing the Steering Column to Arbitrate and send the respective command to Arbitrate Steering Column to next functions |
|  | (action) Check for Transition Termination | This system Functions check all the terminate signals information from Seat , steering Column and Tray Table and verifies if termination of transition is necessary |
|  | (action) Request Tray Arbitration | This System Function is responsible for preparing the Tray to Arbitrate and send the respective command for Arbitrating tray to other functions |
|  | (action) Request Drive Control DeInhibition | Depending upon State Selection Signal this function sends a request to DeInhibit Drive Control |
|  | (action) Manage Feature Arbitration Feedback | This System Function will take care of Conveying the Feedback to User about the mode transition |
|  | (action) Request Drive Control Inhibition | Depending upon State Selection Signal this function sends a request to Inhibit Drive Control |
|  | (action) Request Drive Control DeInhibition | System Function responsible for DeInhibition as per Depending upon State Selection Signal this function sends a request to DeInhibit Drive Control |
|  | (action) Actuate Tray | System Function responsible for Actuating Tray based on requests |
|  | (action) Request Seat Arbitration | This System Function responsible for preparing the Seat to Arbitrate and send the respective request to Driver Seat System |
|  | (action) Verify Drive Control Status | System Function responsible for Verify the Drive Control Status Before Actuating the feature |
|  | (action) Control SSC Functionality | When received State selection signal for mode transition , this function issues individual requests to Seat, steering Column and Tray Table after verifying the Inhibit status and Provide a cause of Failure if the transition is not possible |
|  | (action) Request Drive Control DeInhibition | System Function responsible for Requesting the Drive Control ( Locomotion and Driver Airbag) Deinhibition |
|  | (action) Actuate Steering Column | System Function Responsible for Actuating Steering Column as per request from Feature Controller |
|  | (action) Request Drive Control Inhibition | System Function responsible for Inhibition as per Depending upon State Selection Signal this function sends a request to Inhibit Drive Control |
|  | (action) Request Drive Control DeInhibition | Depending upon State Selection Signal this function sends a request to DeInhibit Drive Control |
|  | (action) Request Drive Control DeInhibition | Depending upon State Selection Signal this function sends a request to DeInhibit Drive Control |

Table 3‑2: List of Functions on Make Work Space Available

| **Function ID** | Function Name | Function Description |
| --- | --- | --- |
|  | (action) Request SSW Personalization Update | System Function responsible for requesting an Update for Personalization in seat and steering column |

Table 3‑2: List of Functions on Update SSW Personalization

### Signal List

|  |  |  |
| --- | --- | --- |
| **Signal Name** | **Description** | **Details** |
| **DriverAirbagInhibitStatus** | Status of the Driver Airbag Inhibition | Satisfies:  *No reqs. satisfied* |
| **DriverAirbagRequest** | Request sent to the Driver Airbag system / Passive Restraint System for either Inhibit or Deinhibit | Satisfies:  *No reqs. satisfied* |
| **HMIFeedback** | Feedback given to HMI | Satisfies:  *No reqs. satisfied* |
| **LocomotionInhibitStatus** | Status of the Locomotion Inhibition | Satisfies:  *No reqs. satisfied* |
| **LocomotionRequest** | Request to Powertrain / Locomotion to Inhibit /Deinhibit | Satisfies:  *No reqs. satisfied* |
| **SeatMovementRequest** | Command to Move seat which goes to the Driver seat System | Satisfies:  *No reqs. satisfied* |
| **SeatPosition** | Current Seat Position from the Driver Seat System | Satisfies:  *No reqs. satisfied* |
| **SteeringColumnRakePosition** | Steering Column Position in Rake Position | Satisfies:  *No reqs. satisfied* |
| **SteeringColumnRequest** | Request to Move steering Column with respect to selected Mode | Satisfies:  *No reqs. satisfied* |
| **SteeringColumnTelePosition** | Steering Column Position in Tele Position | Satisfies:  *No reqs. satisfied* |
| **TrayLockStatus** | Tray lock status is given by Tray Lock sensor | Satisfies:  *No reqs. satisfied* |
| **TrayPostionStatus** | Tray Position status is the feedback for Tray position given by Tray position Sensor | Satisfies:  *No reqs. satisfied* |
| **UserInput** | Input given by user through HMI | Satisfies:  *No reqs. satisfied* |
| **UserModeSelection** | Mode selection information from User | Satisfies:  *No reqs. satisfied* |
| **VehicleConfig** | Configuration of the Feature and Vehicle Specific | Satisfies:  *No reqs. satisfied* |
| **VehicleStatus** | This Signal is the collectivity approval signal which includes Parking status, battery state of charge and Vehicle Speed | Satisfies:  *No reqs. satisfied* |

Table 3‑3: List of Logical Signals

## Physical Architecture

### E/E Architecture

#### E/E Architecture Variants

*No E/E Architecture Variant found.*

##### E/E Architecture “Architecture Variant”: Technical Block Diagram

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

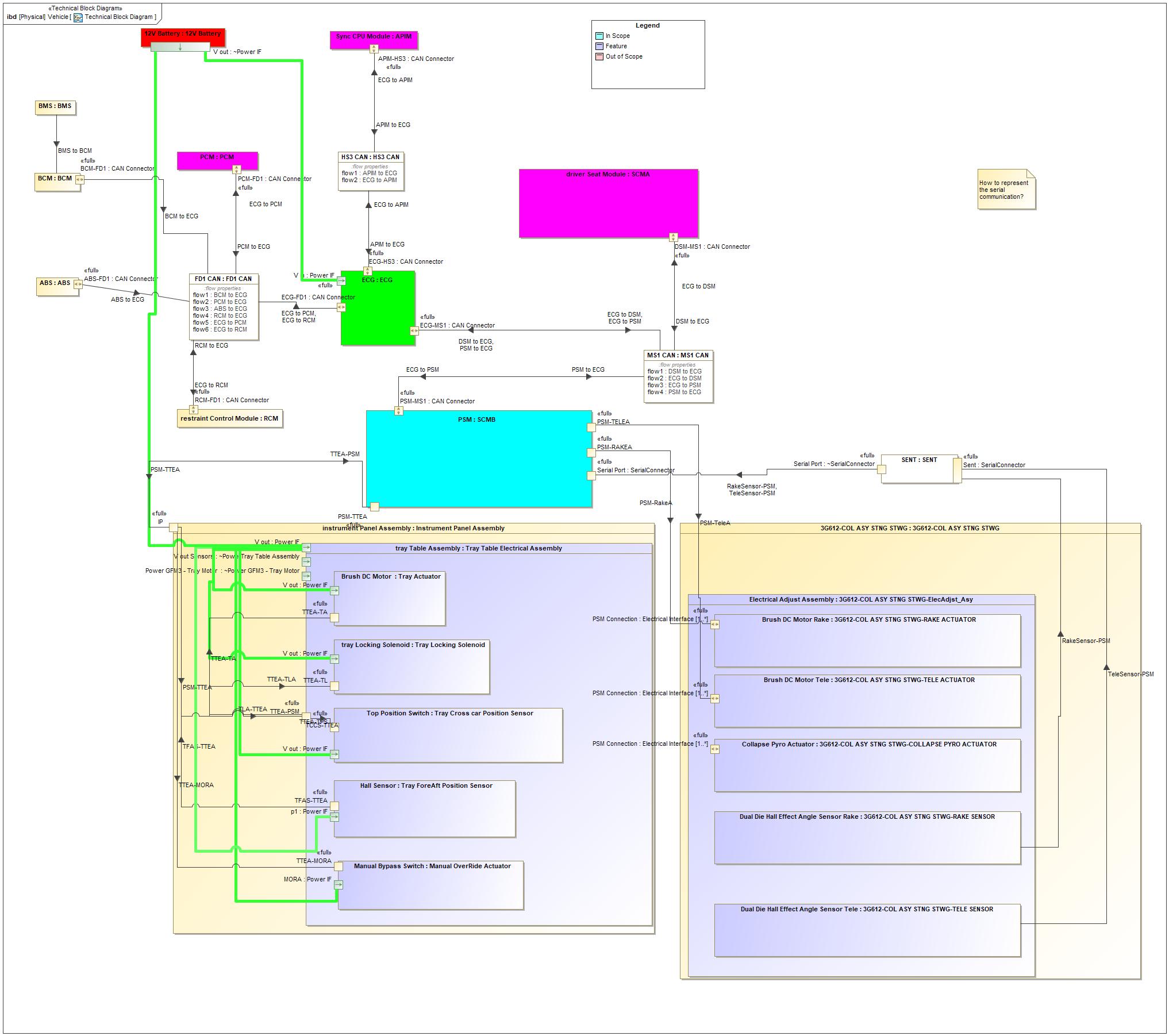


Figure 3‑2-1: Technical Block Diagram

#### E/E Components

|  |  |
| --- | --- |
| Component Name | **Description** |
| 3G612-COL ASY STNG STWG | GE2 Stowable Steering Column |
| 12V Battery | Battery Supply for the all sensors and Actuators |
| ABS | Automatic Breaking System |
| BCM | Body Control Module |
| BMS | Battery Management System |
| Brush DC Motor (Tray Actuator) | Motor or Gas spring responsible for Tray Movement |
| Brush DC Motor Rake (3G612-COL ASY STNG STWG-RAKE ACTUATOR) | DC Motor for Steering column Actuation in Rake Direction |
| Brush DC Motor Tele (3G612-COL ASY STNG STWG-TELE ACTUATOR) | DC Motor for Steering column Actuation in Tele Direction |
| Collapse Pyro Actuator (3G612-COL ASY STNG STWG-COLLAPSE PYRO ACTUATOR) | Pyro Actuator controlled by RCM present in Steering column Assembly |
| driver Seat Module (SCMA) | Driver seat Module A or DSM |
| Dual Die Hall Effect Angle Sensor Rake (3G612-COL ASY STNG STWG-RAKE SENSOR) | Interfaces not defined because the block is only used to define the composition of an existing block. |
| Dual Die Hall Effect Angle Sensor Tele (3G612-COL ASY STNG STWG-TELE SENSOR) | Interfaces not defined because the block is only used to define the composition of an existing block. |
| ECG | Enhanced Central Gateway |
| Electrical Adjust Assembly (3G612-COL ASY STNG STWG-ElecAdjst\_Asy) | Steering Column Electrical Assembly consisting of Motors and Sensors for Rake and Tele Movement of steering Column |
| FD1 CAN | Full depth communication bus for CAN |
| Hall Sensor (Tray ForeAft Position Sensor) | Sensor to detect the Tray Table foreAft Position |
| HS3 CAN | High speed communication bus for CAN |
| instrument Panel Assembly (Instrument Panel Assembly) | Instrument Panel Assembly where Tray, HMI and all other are present |
| Manual Bypass Switch (Manual OverRide Actuator) | Switch to Override the Tray Table Actuations Manually |
| MS1 CAN | Medium Speed communication Bus for CAN |
| PCM | Power train Control Module |
| PSM (SCMB) | Driver seat Module B or Passenger Seat Module |
| restraint Control Module (RCM) | Restraint Control Module |
| SENT | SENT Communication Protocol |
| Sync CPU Module (APIM) | Accessory Protocol Interface Module |
| Top Position Switch (Tray Cross car Position Sensor) | Sensor for detecting the Cross-car position of Tray |
| tray Locking Solenoid (Tray Locking Solenoid) | Solenoid responsible for Locking and Unlocking the Tray |
| tray Table Assembly (Tray Table Electrical Assembly) | Electrical Assembly for all sensors and Actuators in the Tray Assembly |

Table 3‑6: Electrical Components

#### E/E Connections

*No E/E Connections found.*

#### Signal List

|  |  |  |
| --- | --- | --- |
| **Signal Name** | **Description** | **Details** |
| **LearnNotificaiton** | Feedback to user about the new positions learned of steering column and tray | Satisfies:  *No reqs. satisfied* |
| **RequestLocomotionInhibitRelease** | Request to De Inhibit the Locomotion | Satisfies:  *No reqs. satisfied* |
| **UserIn** | User Input | Satisfies:  *No reqs. satisfied* |
| **MoveSteClmnTelescopeToDrvPos** | Command to Move steering Column to Drive position | Satisfies:  *No reqs. satisfied* |
| **CurntSeatPos** | Current seat position | Satisfies:  *No reqs. satisfied* |
| **TrayTableObstructionStat** | Tray Table obstruction status | Satisfies:  *No reqs. satisfied* |
| **TrayTableCrossCarPos** | Tray Table position (+- 12V Signal) | Satisfies:  *No reqs. satisfied* |
| **Ssw/DttStateScreenNotification** | signal containing the information to convey on HMI about the mode | Satisfies:  *No reqs. satisfied* |
| **SeatPosMoveRq** | Request to Move Driver seat | Satisfies:  *No reqs. satisfied* |
| **StoredColumnPositionWork** | Memory position for Steering Column at work mode | Satisfies:  *No reqs. satisfied* |
| **TrayTableForeAftPos** | Tray Table Fore Aft Position | Satisfies:  *No reqs. satisfied* |
| **MoveSteClmTelescopeToSelectedPos** | Command to Move steering column to selected position | Satisfies:  *No reqs. satisfied* |
| **StoredSeatMemoryPositonRest** | Memory position for Driver seat at Rest Mode | Satisfies:  *No reqs. satisfied* |
| **FeatStateSelCmd** | State Selection signal / Feature state selection command is the data of what mode user selected | Satisfies:  *No reqs. satisfied* |
| **SteClmnPosRake** | Steering Column position in Rake Direction | Satisfies:  *No reqs. satisfied* |
| **RequestLocomotionInhibit** | Request to Inhibit the Locomotion | Satisfies:  *No reqs. satisfied* |
| **SeatPosMoveCmd** | Signal to Move seat with respect to the mode selected | Satisfies:  *No reqs. satisfied* |
| **CmdSteClmnRakeToDrvPos** | Command to Move steering Column to Drive Position | Satisfies:  *No reqs. satisfied* |
| **DrvrAirbagDisinhbtRq** | Request to De Inhibit the Airbag | Satisfies:  *No reqs. satisfied* |
| **TrayTableStowCmd** | Command signal to Stow Tray | Satisfies:  *No reqs. satisfied* |
| **CmdSteClmnRakeToSelectedPos** | Command to Move steering Column to Selected Position | Satisfies:  *No reqs. satisfied* |
| **DriveStateAvaiStatus** | Drive state Availability status to user when the user intends to transit into Drive mode | Satisfies:  *No reqs. satisfied* |
| **RestStateAvailabilityStatus** | Mode Availability status if user intends to transit to rest mode | Satisfies:  *No reqs. satisfied* |
| **UserScreenNotification** | Screen notification on HMI for User | Satisfies:  *No reqs. satisfied* |
| **StoredColumnPositionStatus** | Status of storing Memory position for Steering Column | Satisfies:  *No reqs. satisfied* |
| **Ssw/DttStateStat** | Current state of Feature | Satisfies:  *No reqs. satisfied* |
| **TrayTableLockStat** | Tray Table Lock status | Satisfies:  *No reqs. satisfied* |
| **Veh\_V\_ActlBrk** | Vehicle Velocity as seen by the brake | Satisfies:  *No reqs. satisfied* |
| **CurntClmPos** | Current steering Column position | Satisfies:  *No reqs. satisfied* |
| **InhbtStat** | Inhibit status after Locomotion status and Driver Airbag Inhibit status verified | Satisfies:  *No reqs. satisfied* |
| **StoredColumnPositionRest** | Memory position of steering Column in Rest mode | Satisfies:  *No reqs. satisfied* |
| **StoredSeatPosRes** | Seat Position status internal signal withing SCMB | Satisfies:  *No reqs. satisfied* |
| **BattStateOfChrg** | Battery state of Charge | Satisfies:  *No reqs. satisfied* |
| **TrayTableUnlockCmd** | Command signal to Unlock Tray((Pulse -12V Digital signal ) | Satisfies:  *No reqs. satisfied* |
| **TrayTableDeployCmd** | Command signal to Deploy Tray | Satisfies:  *No reqs. satisfied* |
| **BSBattSOC** | High Voltage Battery state of charge ( A signal to be determined) | Satisfies:  *No reqs. satisfied* |
| **UserScreenLowSliNotification** | Notification on User screen for Low sli | Satisfies:  *No reqs. satisfied* |
| **StoredSeatMemoryPositionWork** | Memory position for Driver seat at Work Mode | Satisfies:  *No reqs. satisfied* |
| **StoredColumnMemoryPositionDrive** | Memory of Column memory position | Satisfies:  *No reqs. satisfied* |
| **Tray/MtrLoad/ForceSensor** | Tray Load status | Satisfies:  *No reqs. satisfied* |
| **TrayTableLockCmd** | Command signal to Lock Tray (Pulse +12V Digital signal ) | Satisfies:  *No reqs. satisfied* |
| **AirbagDrv\_B\_RqDactv** | Request to Inhibit and DeInhibit Airbag  1. Request (AirbagInhbtRq )  2. No Request (DrvrAirbagDisinhbtRq) | Satisfies:  *No reqs. satisfied* |
| **SteClmnPosTele** | Steering Column position in Tele Direction | Satisfies:  *No reqs. satisfied* |
| **ManualOverRideCmd** | This is the User Input to Manual Override the Tray Table | Satisfies:  *No reqs. satisfied* |
| **LocomotionInhibitStat** | Inhibit status of Locomotion | Satisfies:  *No reqs. satisfied* |
| **AirbagDrv\_D\_Actv** | Inhibit status of Driver Airbag(AirbagInhbtStat)  1.NotAvailable  2.Off  3.On (Default)  4. Fault | Satisfies:  *No reqs. satisfied* |
| **TrayTableDeployStat** | Tray Table Deploy status | Satisfies:  *No reqs. satisfied* |
| **WorkStateAvailabilityStatus** | Work state Availability status to user when the user intends to transit into work mode | Satisfies:  *No reqs. satisfied* |
| **SSW/DttScreenNotification** | Feedback for user about the Mode Transition | Satisfies:  *No reqs. satisfied* |
| **StoredSeatMemoryPositionDrive** | Memory position for Driver seat at Drive Mode | Satisfies:  *No reqs. satisfied* |
| **UserStateSelection** | Feedback for User of what he selected | Satisfies:  *No reqs. satisfied* |
| **Personalization settings** | User personalization settings for Seat and steering column positions | Satisfies:  *No reqs. satisfied* |
| **PrkStat** | Vehicle Parking status | Satisfies:  *No reqs. satisfied* |
| **DisplayTrayTableInstructions** | Instructions for how to use Tray Table for User | Satisfies:  *No reqs. satisfied* |

Table 3‑8: List of Technical Signals

### Software Component Architecture

*Not supported by MagicDraw report generation.*

#### Description

*Not supported by MagicDraw report generation.*

## Function Deployment

### Deployment Variants

*Not supported by MagicDraw report generation.*

#### Deployment “Variant 1”

This deployment variant … <add some explanatory text here>

No description specified.

### Function Allocation

| Component | Technology Function Name | Logical Function Name |
| --- | --- | --- |
|
| PCM | DisInhibit Locomotion | *No logical function allocated* |
| Inhibit Locomotion | *No logical function allocated* |
| Provide Transmission status | *No logical function allocated* |
| Tray Cross car Position Sensor | Provide Cross car Tray Position | * Provide Tray Position |
| Tray Table Electrical Assembly | Provide Cross car Tray Position | * Provide Tray Position |
| Actuate Tray Locking Mechanism | * Actuate Tray Locking * Provide Tray Lock status |
| Deploy Tray Table | *No logical function allocated* |
| Stow Tray Table | *No logical function allocated* |
| Move Tray Table | *No logical function allocated* |
| Provide ForAft Tray position | *No logical function allocated* |
| BMS | Provide Battery SOC | *No logical function allocated* |  |
| ABS | Provide Vehicle Speed | *No logical function allocated* |
| Instrument Panel Assembly | Stow Tray Table | *No logical function allocated* |
| Deploy Tray Table | *No logical function allocated* |
| Provide Cross car Tray Position | * Provide Tray Position |
| Actuate Tray Locking Mechanism | * Actuate Tray Locking * Provide Tray Lock status |
| Move Tray Table | *No logical function allocated* |
| Provide ForAft Tray position | *No logical function allocated* |  |
| Tray Actuator | Deploy Tray Table | *No logical function allocated* |
| Stow Tray Table | *No logical function allocated* |
| Move Tray Table | *No logical function allocated* |
| Tray ForeAft Position Sensor | Provide ForAft Tray position | *No logical function allocated* |  |
| Tray Locking Solenoid | Actuate Tray Locking Mechanism | * Actuate Tray Locking * Provide Tray Lock status |
| APIM | Notify User to Low Sli SOC | * Provide HMI Feedback |
| Display User State Selection | *No logical function allocated* |
| Notify User reason of state Unavailability | *No logical function allocated* |
| Notify/Display to User SSW/DTT State | *No logical function allocated* |
| Notify User of Successfull state position learned | *No logical function allocated* |
| Accept User Input of Available State Selection | *No logical function allocated* |
| Accept User Input of Peronalization settings | *No logical function allocated* |
| RCM | Inhibit Driver Airbag | *No logical function allocated* |
| Command Driver Airbag DisInhibit | *No logical function allocated* |
| SCMB | Deploy Steering Column | * Request SteeringColumn Deployment * Control Steering Column Functionality |
| Verify Availabilty of Work State | * Check vehicle status |
| Verify Availability of Rest State | * Check vehicle status |
| Verify Availability of Drive State | * Evaluate Drivability status * Check vehicle status |
| Check Driver seat stored position reached | * Check Seat position |
| Monitor Tray | * Provide Tray Obstruction Status |
| Publish SSW/DTT state | *No logical function allocated* |
| Command Tray Table Deploy | * Request Tray Deployment * Control Tray Functionality |
| Check Column Stored Position Reached | *No logical function allocated* |
| Request Airbag Inhibit | * Request Airbag Disabling |
| Request Locomotion Inhibit | * Request Locomotion Disabling |
| Request Driver Airbag DisInhibit | * Request Airbag Enabling |
| Request Locomotion Inhibit Release | * Request Locomotion Enabling |
| store rest state column position | * Store SteeringColumn Memory Position |
| Stow Steering Column | * Request SteeringColumn Stowing * Control Steering Column Functionality |
| Unlock Tray Table | * Request Tray Unlock |
| Lock Tray Table | * Request Tray Lock * Control Tray Functionality |
| check Inhibit Status | * Check Inhibit status |
| Request Maneuver Driver Seat To Stored Position | * Request to Move Seat |
| Command Tray Table Stow | * Provide Tray Stow Instructions * Control Tray Functionality |
| Check battery SOC | *No logical function allocated* |
| Check Vehicle Speed | *No logical function allocated* |
| SCMA | Provide Seat Position | *No logical function allocated* |
| Store work state driver memory seat position | *No logical function allocated* |
| Store Rest State Driver Memory Seat Position | * Manage seat save request |
| Store Drive State Driver Memory Seat Position | * Manage seat save request |
| Command Maneuver Driver Seat To Stored Position | *No logical function allocated* |
| Provide Steering Column Position | *No logical function allocated* |
| Store Drive State Column Position | * Store SteeringColumn Memory Position |
| store work state comun position | * Store SteeringColumn Memory Position |

Table 3‑9: Function Allocation Table (Basic)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Component | | Technology Function Name | TSR | |
| Name | ASIL |  | ID | ASIL |
| PCM |  | DisInhibit Locomotion | * Locomotion status |  |
|  | Inhibit Locomotion | * Locomotion status |  |
|  | Provide Vehicle Speed | *No reqs. satisfied by tech. fx.* |  |
|  | Provide Transmission status | *No reqs. satisfied by tech. fx.* |  |
| Tray Cross car Position Sensor |  | Provide Cross car Tray Position | * Cross Car Tray position |  |
| Tray Table Electrical Assembly |  | Provide Cross car Tray Position | * Cross Car Tray position |  |
|  | Actuate Tray Locking Mechanism | * Actuate Tray Locking Mechanism * Actuate Tray Unlocking Mechanism |  |
|  | Deploy Tray Table | *No reqs. satisfied by tech. fx.* |  |
|  | Stow Tray Table | *No reqs. satisfied by tech. fx.* |  |
|  | Move Tray Table | * Tray Movement Stowing * Tray Movement Deploying |  |
|  | Provide ForAft Tray position | * Fore Aft Tray Position |  |
| BMS |  | Provide Battery SOC | * Battery SOC |  |  |
| BCM |  | Provide Battery SOC | * Battery SOC |  |
| ABS |  | Provide Vehicle Speed | *No reqs. satisfied by tech. fx.* |  |
| Instrument Panel Assembly |  | Stow Tray Table | *No reqs. satisfied by tech. fx.* |  |
|  | Deploy Tray Table | *No reqs. satisfied by tech. fx.* |  |
|  | Provide Cross car Tray Position | * Cross Car Tray position |  |
|  | Actuate Tray Locking Mechanism | * Actuate Tray Locking Mechanism * Actuate Tray Unlocking Mechanism |  |
|  | Move Tray Table | * Tray Movement Stowing * Tray Movement Deploying |  |
|  | Provide ForAft Tray position | * Fore Aft Tray Position |  |  |
| Tray Actuator |  | Deploy Tray Table | *No reqs. satisfied by tech. fx.* |  |
|  | Stow Tray Table | *No reqs. satisfied by tech. fx.* |  |
|  | Move Tray Table | * Tray Movement Stowing * Tray Movement Deploying |  |
| Tray ForeAft Position Sensor |  | Provide ForAft Tray position | * Fore Aft Tray Position |  |  |
| Tray Locking Solenoid |  | Actuate Tray Locking Mechanism | * Actuate Tray Locking Mechanism * Actuate Tray Unlocking Mechanism |  |
| APIM |  | Notify User to Low Sli SOC | * User low sli notification |  |
|  | Display User State Selection | * Display Selected Mode |  |
|  | Notify User reason of state Unavailability | * Reason of state Unavailability |  |
|  | Notify/Display to User SSW/DTT State | * User Screen Notification |  |
|  | Notify User of Successfull state position learned | * Position Learn Notification |  |
|  | Accept User Input of Available State Selection | * User Input * User screen selection * Abort Mode Transition |  |
|  | Accept User Input of Peronalization settings | * Accept Personalization settings |  |
| RCM |  | Inhibit Driver Airbag | * Driver Airbag status |  |
|  | Command Driver Airbag DisInhibit | * Driver Airbag status |  |
| SCMB |  | Deploy Steering Column | * Tele/ Rake Ramp Start/ Stop * Deploy Steering Column |  |
|  | Verify Availabilty of Work State | * Work state Availability |  |
|  | Verify Availability of Rest State | * Rest state Availability |  |
|  | Verify Availability of Drive State | * Drive state Availability |  |
|  | Check Driver seat stored position reached | *No reqs. satisfied by tech. fx.* |  |
|  | Monitor Tray | * Manual Tray Table Instructions |  |
|  | Publish SSW/DTT state | * Publish SSW/DTT state |  |
|  | Command Tray Table Deploy | * Deploy Tray Table |  |
|  | Check Column Stored Position Reached | * Check Column Position Reached |  |
|  | Request Airbag Inhibit | * Driver Airbag Inhibit Request |  |
|  | Request Locomotion Inhibit | * Locomotion Inhibit Request |  |
|  | Request Driver Airbag DisInhibit | * Driver Airbag DeInhibit Request |  |
|  | Request Locomotion Inhibit Release | * Locomotion DeInhibit Request |  |
|  | store rest state column position | *No reqs. satisfied by tech. fx.* |  |
|  | Stow Steering Column | * Tele/ Rake Ramp Start/ Stop * Stow Steering Column |  |
|  | Unlock Tray Table | * Control Tray Locking Functionality * Unlock Tray Table |  |
|  | Lock Tray Table | * Control Tray Locking Functionality * Lock Tray Table |  |
|  | check Inhibit Status | * Check Inhibit Status |  |
|  | Request Maneuver Driver Seat To Stored Position | * Seat Movement Request |  |
|  | Command Tray Table Stow | * Stow Tray Table |  |
|  | Check battery SOC | *No reqs. satisfied by tech. fx.* |  |
|  | Check Vehicle Speed | *No reqs. satisfied by tech. fx.* |  |
| SCMA |  | Provide Seat Position | * Seat Position |  |
|  | Store work state driver memory seat position | *No reqs. satisfied by tech. fx.* |  |
|  | Store Rest State Driver Memory Seat Position | *No reqs. satisfied by tech. fx.* |  |
|  | Store Drive State Driver Memory Seat Position | *No reqs. satisfied by tech. fx.* |  |
|  | Command Maneuver Driver Seat To Stored Position | *No reqs. satisfied by tech. fx.* |  |
|  | Provide Steering Column Position | *No reqs. satisfied by tech. fx.* |  |
|  | Store Drive State Column Position | *No reqs. satisfied by tech. fx.* |  |
|  | store work state comun position | *No reqs. satisfied by tech. fx.* |  |

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

# Feature Implementation Modeling

## Component Interaction Diagrams

### Scenario: “System Startup / Shutdown”

### Scenario: “Normal Operation”

N/A

## Component Interface Behavior Diagrams

*Not supported by MagicDraw report generation.*

*See Appendix Section 8.1.9 for Technology State Machines*

# Feature Implementation Requirements

## Functional Safety

### 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

### Stowable Steering and Deployable Tray Physical

Stowable Steering and Deployable Tray Physical

### Tray Locking Solenoid

Tray Locking Solenoid

#### Technology Function 427495563.jpg **Actuate Tray Locking Mechanism**

Function responsible for Lock / Unlock the Tray table and Send the Lock status

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Actuate Tray Locking Mechanism | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Lock Command  TrayMoveCommand | Tray Table Lock Command :  TrayTableLockCmd | | |  |  |  |
| Review in model  Tray Table Unlock Command  TrayMoveCommand | Tray Table Unlock Command :  TrayTableUnlockCmd | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Actuate Tray Locking Mechanism

###### Outputs

(No outputs have been defined)

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-28 Actuate Tray Locking Mechanism

Actuate Tray Locking Mechanism shall Lock Tray Table when received TrayTableLockCmd

Satisfied by:

* Functions:
  + Actuate Tray Locking Mechanism

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-28 | | | | | | | |
| **Rationale** | To lock Tray Table | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Kim, Yoon (ykim33) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

IR-29 Actuate Tray Unlocking Mechanism

Actuate Tray Locking Mechanism shall Unlock Tray Table when received TrayTableUnlockCmd

Satisfied by:

* Functions:
  + Actuate Tray Locking Mechanism

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-29 | | | | | | | |
| **Rationale** | To Unlock Tray Table | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Kim, Yoon (ykim33) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

### APIM

APIM

#### Technology Function 1911948665.jpg **Notify User to Low Sli SOC**

Indicate Low sli State of Charge Warning

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Notify User to Low Sli SOC | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  SSW/DTT state  StateOfFeature | SSW/DTT state :  Ssw/DttStateStat | | |  |  |  |
| Review in model  Battery State of charge  VehicleStatus | Battery State of charge :  BattStateOfChrg | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Notify User to Low Sli SOC

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Notify User to Low Sli SOC | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  User screen SLI notification  HMIFeedback | User screen SLI notification :  UserScreenLowSliNotification | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Notify User to Low Sli SOC

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-25 User low sli notification

APIM shall convey user Notification for Low SLI SOC if the Battery SOC alert signal is received when the User tries to transit the mode of operation

Satisfied by:

* Functions:
  + Notify User to Low Sli SOC

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-25 | | | | | | | |
| **Rationale** | To display User Battery SOC | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Pakala, Sankeerth Reddy (S.) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function 528771020.jpg **Display User State Selection**

Display the User accept user state learn mode of operation

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Display User State Selection | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  User Input  UserInput | User Input :  UserIn | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Display User State Selection

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Display User State Selection | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  User state selection  HMIFeedback | User state selection :  UserStateSelection | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Display User State Selection

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-33 Display Selected Mode

APIM shall convey user what mode of Feature Mode of operation he selected

Satisfied by:

* Functions:
  + Display User State Selection

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-33 | | | | | | | |
| **Rationale** | To let User know what he selected | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Pakala, Sankeerth Reddy (S.) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 2 - Medium | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function -1403635846.jpg **Notify User reason of state Unavailability**

Notifying the User why the selected state is not Available

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Notify User reason of state Unavailability | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  User Input  UserInput | User Input :  UserIn | | |  |  |  |
| Review in model  Work state Availability status  HMIFeedback | Work state Availability status :  WorkStateAvailabilityStatus | | |  |  |  |
| Review in model  Drive State Availability status  HMIFeedback | Drive State Availability status :  DriveStateAvaiStatus | | |  |  |  |
| Review in model  Rest state Availability status  HMIFeedback | Rest state Availability status :  RestStateAvailabilityStatus | | |  |  |  |
| Review in model  Display Tray Table Instructions  HMIInsWar | Display Tray Table Instructions :  DisplayTrayTableInstructions | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Notify User reason of state Unavailability

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Notify User reason of state Unavailability | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  User Screen Notification  HMIFeedback | User Screen Notification :  UserScreenNotification | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Notify User reason of state Unavailability

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-16 Reason of state Unavailability

APIM shall convey the information to user why the selected mode of operation is not available

Provided that it will receive the Availability status of all 3 modes

Satisfied by:

* Functions:
  + Notify User reason of state Unavailability

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-16 | | | | | | | |
| **Rationale** | To Notify user why the mode selected is not available | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Pakala, Sankeerth Reddy (S.) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function -247644511.jpg **Notify/Display to User SSW/DTT State**

Display state of feature

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Notify/Display to User SSW/DTT State | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  SSW/DTT State Status  StateOfFeature | SSW/DTT State Status :  Ssw/DttStateStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Notify/Display to User SSW/DTT State

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Notify/Display to User SSW/DTT State | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  SSW/DttScreenNotification  ModeTransitionFeedback | SSW/DttScreenNotification :  SSW/DttScreenNotification | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Notify/Display to User SSW/DTT State

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-26 User Screen Notification

APIM shall convey the user with a notification of the current state of Feature(Work/Drive/Rest)

Satisfied by:

* Functions:
  + Notify/Display to User SSW/DTT State

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-26 | | | | | | | |
| **Rationale** | To display User Current State of Feature | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Pakala, Sankeerth Reddy (S.) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function 321781657.jpg **Notify User of Successfull state position learned**

Notifying the user of successful arbitration of mode he requested

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Notify User of Successfull state position learned | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Stored Column Position status  SteeringColumnStatus | Stored Column Position status :  StoredColumnPositionStatus | | |  |  |  |
| Review in model  Stored Seat Position Status  SeatMovementStatusInternal | Stored Seat Position Status :  StoredSeatPosRes | | |  |  |  |
| Review in model  SSW/DTT state  StateOfFeature | SSW/DTT state :  Ssw/DttStateStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Notify User of Successfull state position learned

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Notify User of Successfull state position learned | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Learn Notiifcation  UserPersonalizationFeedback | Learn Notiifcation :  LearnNotificaiton | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Notify User of Successfull state position learned

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-32 Position Learn Notification

APIM shall convey User about the success state of the new positions user tried to edit for desire mode

Satisfied by:

* Functions:
  + Notify User of Successfull state position learned

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-32 | | | | | | | |
| **Rationale** | To let USer know if he succeded in learning new positions for steering Column and Driver seat | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Pakala, Sankeerth Reddy (S.) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 2 - Medium | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function -489740346.jpg **Accept User Input of Available State Selection**

Component Function responsible for accepting the user input

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Accept User Input of Available State Selection | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  User Input  UserInput | User Input :  UserIn | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Accept User Input of Available State Selection

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Accept User Input of Available State Selection | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Feature state Selection Command  StateSelectionSignal | Feature state Selection Command :  FeatStateSelCmd | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Accept User Input of Available State Selection

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

1136 Abort Mode Transition

APIM shall convey PSM if User intends to abort the mode transition for any reason

Satisfied by:

* Functions:
  + Accept User Input of Available State Selection

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: 1136 | | | | | | | |
| **Rationale** | To Abort the transiiton in between if User intends | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Pakala, Sankeerth Reddy (S.) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

IR-15 User Input

APIM shall convey to SCMB(PSM) what mode user has requested via CAN

Satisfied by:

* Functions:
  + Accept User Input of Available State Selection

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-15 | | | | | | | |
| **Rationale** | Function within APIM that accepts the User Input of Available Feature Modes | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Pakala, Sankeerth Reddy (S.) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

IR-27 User screen selection

APIM shall allow user to select his desired Feature mode of operation

Satisfied by:

* Functions:
  + Accept User Input of Available State Selection

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-27 | | | | | | | |
| **Rationale** | To Accept User Input of Selection | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Pakala, Sankeerth Reddy (S.) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function -910325131.jpg **Accept User Input of Peronalization settings**

Component Function responsible for Accepting User Input for Personalization settings

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Accept User Input of Peronalization settings | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  User Input  UserInput | User Input :  UserIn | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Accept User Input of Peronalization settings

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Accept User Input of Peronalization settings | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Personalization settings  UserPersonalizationRequest | Personalization settings :  Personalization settings | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Accept User Input of Peronalization settings

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-31 Accept Personalization settings

APIM shall allow user to change his personalization settings for seat and steering column for his desired mode as he esired

Satisfied by:

* Functions:
  + Accept User Input of Peronalization settings

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-31 | | | | | | | |
| **Rationale** | To allow user to change the stored Positions of steering Column and Seat for Different Modes | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Pakala, Sankeerth Reddy (S.) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

### Tray Load Sensor

Tray Load Sensor

### Tray Cross car Position Sensor

Tray Cross car Position Sensor

#### Technology Function 402563156.jpg **Provide Cross car Tray Position**

Component Function in Tray Table Cross Car Sensor to provide Tray Table cross car position

##### Function Interfaces

###### Inputs

(No inputs have been defined)

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Provide Cross car Tray Position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table pos  TrayPostionStatus | Tray Table pos :  TrayTableCrossCarPos | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Provide Cross car Tray Position

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-6 Cross Car Tray position

Provide Cross car Tray Position function shall provide TrayTableCrossCarPos constantly

Satisfied by:

* Functions:
  + Provide Cross car Tray Position

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-6 | | | | | | | |
| **Rationale** | This Function Providing Cross Car Tray Position | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Kim, Yoon (ykim33) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

### Steering Column Mechanical Assembly

Steering Column Mechanical Assembly

### Instrument Panel Assembly

Instrument Panel Assembly

#### Technology Function -1987757361.jpg **Stow Tray Table**

Tray Table Function responsible for Moving Tray Table

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Stow Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table stow command  TrayMoveCommand | Tray Table stow command :  TrayTableStowCmd | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Stow Tray Table

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Stow Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Deploy Status  TrayPostionStatus | Tray Table Deploy Status :  TrayTableDeployStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Stow Tray Table

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

#### Technology Function -2132447320.jpg **Deploy Tray Table**

Component Function of tray table motor / actuator for deploying the tray table

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Deploy Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Deploy Table command  TrayMoveCommand | Deploy Table command :  TrayTableDeployCmd | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Deploy Tray Table

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Deploy Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Deploy Status  TrayPostionStatus | Tray Table Deploy Status :  TrayTableDeployStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Deploy Tray Table

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

#### Technology Function 402563156.jpg **Provide Cross car Tray Position**

Component Function in Tray Table Cross Car Sensor to provide Tray Table cross car position

##### Function Interfaces

###### Inputs

(No inputs have been defined)

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Provide Cross car Tray Position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table pos  TrayPostionStatus | Tray Table pos :  TrayTableCrossCarPos | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Provide Cross car Tray Position

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-6 Cross Car Tray position

Provide Cross car Tray Position function shall provide TrayTableCrossCarPos constantly

Satisfied by:

* Functions:
  + Provide Cross car Tray Position

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-6 | | | | | | | |
| **Rationale** | This Function Providing Cross Car Tray Position | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Kim, Yoon (ykim33) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function 427495563.jpg **Actuate Tray Locking Mechanism**

Function responsible for Lock / Unlock the Tray table and Send the Lock status

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Actuate Tray Locking Mechanism | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Lock Command  TrayMoveCommand | Tray Table Lock Command :  TrayTableLockCmd | | |  |  |  |
| Review in model  Tray Table Unlock Command  TrayMoveCommand | Tray Table Unlock Command :  TrayTableUnlockCmd | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Actuate Tray Locking Mechanism

###### Outputs

(No outputs have been defined)

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-28 Actuate Tray Locking Mechanism

Actuate Tray Locking Mechanism shall Lock Tray Table when received TrayTableLockCmd

Satisfied by:

* Functions:
  + Actuate Tray Locking Mechanism

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-28 | | | | | | | |
| **Rationale** | To lock Tray Table | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Kim, Yoon (ykim33) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

IR-29 Actuate Tray Unlocking Mechanism

Actuate Tray Locking Mechanism shall Unlock Tray Table when received TrayTableUnlockCmd

Satisfied by:

* Functions:
  + Actuate Tray Locking Mechanism

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-29 | | | | | | | |
| **Rationale** | To Unlock Tray Table | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Kim, Yoon (ykim33) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function 894666143.jpg **Move Tray Table**

Function in Actuator responsible for Tray Table Actuation

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Move Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Table Stow command  TrayMoveCommand | Table Stow command :  TrayTableStowCmd | | |  |  |  |
| Review in model  Tray table Deploy command  TrayMoveCommand | Tray table Deploy command :  TrayTableDeployCmd | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Move Tray Table

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Move Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Deploy status  TrayPostionStatus | Tray Table Deploy status :  TrayTableDeployStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Move Tray Table

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

1133 Tray Movement Deploying

when Move Tray Table function receives TrayTableDeployCmd it shall move the Tray table to Deployed position provided that the Tray is in the Instrument Panel Assembly and Locked

Satisfied by:

* Functions:
  + Move Tray Table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: 1133 | | | | | | | |
| **Rationale** | To Arbitrate Tray Table Position according to request received | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Kim, Yoon (ykim33) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

IR-5 Tray Movement Stowing

when Move Tray Table function receives TrayTableStowCmd it shall move the Tray table to stowed position provided that the Tray is in the center position

Satisfied by:

* Functions:
  + Move Tray Table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-5 | | | | | | | |
| **Rationale** | Tray Tabel Stowing | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Kim, Yoon (ykim33) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function 1686403067.jpg **Provide ForAft Tray position**

Component Function in Tray Table ForeAft Sensor to provide Tray Table ForeAft position

##### Function Interfaces

###### Inputs

(No inputs have been defined)

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Provide ForAft Tray position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Fore Aft Position  TrayPostionStatus | Tray Table Fore Aft Position :  TrayTableForeAftPos | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Provide ForAft Tray position

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-3 Fore Aft Tray Position

ProvideForeAft Tray Position function shall provide TrayTableForeAftrPos constantly

Satisfied by:

* Functions:
  + Provide ForAft Tray position

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-3 | | | | | | | |
| **Rationale** | Function responsbile for Sending ForeAft Tray Position | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Kim, Yoon (ykim33) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

### Tray Table Mechanical Assembly

Tray Table Mechanical Assembly

### Vehicle

Vehicle

### Tray ForeAft Position Sensor

Tray ForeAft Position Sensor

#### Technology Function 1686403067.jpg **Provide ForAft Tray position**

Component Function in Tray Table ForeAft Sensor to provide Tray Table ForeAft position

##### Function Interfaces

###### Inputs

(No inputs have been defined)

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Provide ForAft Tray position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Fore Aft Position  TrayPostionStatus | Tray Table Fore Aft Position :  TrayTableForeAftPos | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Provide ForAft Tray position

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-3 Fore Aft Tray Position

ProvideForeAft Tray Position function shall provide TrayTableForeAftrPos constantly

Satisfied by:

* Functions:
  + Provide ForAft Tray position

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-3 | | | | | | | |
| **Rationale** | Function responsbile for Sending ForeAft Tray Position | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Kim, Yoon (ykim33) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

### Steering Column

Steering Column

### Tray Table Electrical Assembly

Tray Table Electrical Assembly

#### Technology Function 402563156.jpg **Provide Cross car Tray Position**

Component Function in Tray Table Cross Car Sensor to provide Tray Table cross car position

##### Function Interfaces

###### Inputs

(No inputs have been defined)

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Provide Cross car Tray Position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table pos  TrayPostionStatus | Tray Table pos :  TrayTableCrossCarPos | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Provide Cross car Tray Position

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-6 Cross Car Tray position

Provide Cross car Tray Position function shall provide TrayTableCrossCarPos constantly

Satisfied by:

* Functions:
  + Provide Cross car Tray Position

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-6 | | | | | | | |
| **Rationale** | This Function Providing Cross Car Tray Position | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Kim, Yoon (ykim33) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function 427495563.jpg **Actuate Tray Locking Mechanism**

Function responsible for Lock / Unlock the Tray table and Send the Lock status

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Actuate Tray Locking Mechanism | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Lock Command  TrayMoveCommand | Tray Table Lock Command :  TrayTableLockCmd | | |  |  |  |
| Review in model  Tray Table Unlock Command  TrayMoveCommand | Tray Table Unlock Command :  TrayTableUnlockCmd | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Actuate Tray Locking Mechanism

###### Outputs

(No outputs have been defined)

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-28 Actuate Tray Locking Mechanism

Actuate Tray Locking Mechanism shall Lock Tray Table when received TrayTableLockCmd

Satisfied by:

* Functions:
  + Actuate Tray Locking Mechanism

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-28 | | | | | | | |
| **Rationale** | To lock Tray Table | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Kim, Yoon (ykim33) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

IR-29 Actuate Tray Unlocking Mechanism

Actuate Tray Locking Mechanism shall Unlock Tray Table when received TrayTableUnlockCmd

Satisfied by:

* Functions:
  + Actuate Tray Locking Mechanism

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-29 | | | | | | | |
| **Rationale** | To Unlock Tray Table | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Kim, Yoon (ykim33) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function -2132447320.jpg **Deploy Tray Table**

Component Function of tray table motor / actuator for deploying the tray table

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Deploy Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Deploy Table command  TrayMoveCommand | Deploy Table command :  TrayTableDeployCmd | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Deploy Tray Table

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Deploy Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Deploy Status  TrayPostionStatus | Tray Table Deploy Status :  TrayTableDeployStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Deploy Tray Table

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

#### Technology Function -1987757361.jpg **Stow Tray Table**

Tray Table Function responsible for Moving Tray Table

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Stow Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table stow command  TrayMoveCommand | Tray Table stow command :  TrayTableStowCmd | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Stow Tray Table

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Stow Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Deploy Status  TrayPostionStatus | Tray Table Deploy Status :  TrayTableDeployStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Stow Tray Table

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

#### Technology Function 894666143.jpg **Move Tray Table**

Function in Actuator responsible for Tray Table Actuation

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Move Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Table Stow command  TrayMoveCommand | Table Stow command :  TrayTableStowCmd | | |  |  |  |
| Review in model  Tray table Deploy command  TrayMoveCommand | Tray table Deploy command :  TrayTableDeployCmd | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Move Tray Table

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Move Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Deploy status  TrayPostionStatus | Tray Table Deploy status :  TrayTableDeployStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Move Tray Table

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

1133 Tray Movement Deploying

when Move Tray Table function receives TrayTableDeployCmd it shall move the Tray table to Deployed position provided that the Tray is in the Instrument Panel Assembly and Locked

Satisfied by:

* Functions:
  + Move Tray Table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: 1133 | | | | | | | |
| **Rationale** | To Arbitrate Tray Table Position according to request received | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Kim, Yoon (ykim33) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

IR-5 Tray Movement Stowing

when Move Tray Table function receives TrayTableStowCmd it shall move the Tray table to stowed position provided that the Tray is in the center position

Satisfied by:

* Functions:
  + Move Tray Table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-5 | | | | | | | |
| **Rationale** | Tray Tabel Stowing | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Kim, Yoon (ykim33) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function 1686403067.jpg **Provide ForAft Tray position**

Component Function in Tray Table ForeAft Sensor to provide Tray Table ForeAft position

##### Function Interfaces

###### Inputs

(No inputs have been defined)

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Provide ForAft Tray position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Fore Aft Position  TrayPostionStatus | Tray Table Fore Aft Position :  TrayTableForeAftPos | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Provide ForAft Tray position

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-3 Fore Aft Tray Position

ProvideForeAft Tray Position function shall provide TrayTableForeAftrPos constantly

Satisfied by:

* Functions:
  + Provide ForAft Tray position

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-3 | | | | | | | |
| **Rationale** | Function responsbile for Sending ForeAft Tray Position | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Kim, Yoon (ykim33) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

### SCMA

SCMA

#### Technology Function 1159857308.jpg **Provide Seat Position**

Function which Involves DSM sending Seat position to Feature Module

##### Function Interfaces

###### Inputs

(No inputs have been defined)

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Provide Seat Position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Current Seat Position  SeatPosition | Current Seat Position :  CurntSeatPos | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Provide Seat Position

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-7 Seat Position

The DSM shall continuously provide seat position through CurntSeatPos CAN signal

Satisfied by:

* Functions:
  + Provide Seat Position

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-7 | | | | | | | |
| **Rationale** | This Function Providing Driver Seat Position | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function 1142993981.jpg **Store work state driver memory seat position**

Function in which user can store the memory position for driver seat in Work Mode

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Store work state driver memory seat position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Current seat position  SeatPosition | Current seat position :  CurntSeatPos | | |  |  |  |
| Review in model  User Input  UserInput | User Input :  UserIn | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Store work state driver memory seat position

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Store work state driver memory seat position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Store seat position work  SeatPosition | Store seat position work :  StoredSeatMemoryPositionWork | | |  |  |  |
| Review in model  StoredSeatPositionStatus  SeatMovementStatusInternal | StoredSeatPositionStatus :  StoredSeatPosRes | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Store work state driver memory seat position

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

#### Technology Function 1785755957.jpg **Store Rest State Driver Memory Seat Position**

Function in which user can store the memory position for driver seat in Rest Mode

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Store Rest State Driver Memory Seat Position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Current seat position  SeatPosition | Current seat position :  CurntSeatPos | | |  |  |  |
| Review in model  User Input  UserInput | User Input :  UserIn | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Store Rest State Driver Memory Seat Position

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Store Rest State Driver Memory Seat Position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Stored seat position rest  SeatPosition | Stored seat position rest :  StoredSeatMemoryPositonRest | | |  |  |  |
| Review in model  Stored Seat Position Status  SeatMovementStatusInternal | Stored Seat Position Status :  StoredSeatPosRes | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Store Rest State Driver Memory Seat Position

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

#### Technology Function 1732697024.jpg **Store Drive State Driver Memory Seat Position**

Function in which the user would able to store the memory position for seat in Drive Mode

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Store Drive State Driver Memory Seat Position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Current seat position  SeatPosition | Current seat position :  CurntSeatPos | | |  |  |  |
| Review in model  User Input  UserInput | User Input :  UserIn | | |  |  |  |
| Review in model  Feature state selection Command  StateSelectionSignal | Feature state selection Command :  FeatStateSelCmd | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Store Drive State Driver Memory Seat Position

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Store Drive State Driver Memory Seat Position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Store seat position drive  SeatPosition | Store seat position drive :  StoredSeatMemoryPositionDrive | | |  |  |  |
| Review in model  Stored Seat Position Status  SeatMovementStatusInternal | Stored Seat Position Status :  StoredSeatPosRes | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Store Drive State Driver Memory Seat Position

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

#### Technology Function -106527271.jpg **Command Maneuver Driver Seat To Stored Position**

Function in which DSM Commanding Driver seat to move to stored position

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Command Maneuver Driver Seat To Stored Position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Seat Position Move command  SeatMovementRequest | Seat Position Move command :  SeatPosMoveCmd | | |  |  |  |
| Review in model  Stored Seat Memory Position WORK  SeatPosition | Stored Seat Memory Position WORK :  StoredSeatMemoryPositionWork | | |  |  |  |
| Review in model  Stored Seat Memory Position Drive  SeatPosition | Stored Seat Memory Position Drive :  StoredSeatMemoryPositionDrive | | |  |  |  |
| Review in model  Stored Seat Memory Rest position  SeatPosition | Stored Seat Memory Rest position :  StoredSeatMemoryPositonRest | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Command Maneuver Driver Seat To Stored Position

###### Outputs

(No outputs have been defined)

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

#### Technology Function 1130562190.jpg **Provide Steering Column Position**

##### Function Interfaces

###### Inputs

(No inputs have been defined)

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Provide Steering Column Position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Steering Column Position  SteeringColumnRakePosition | Steering Column Position :  SteClmnPosRake | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Provide Steering Column Position

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

#### Technology Function -43576576.jpg **Store Drive State Column Position**

Allow the steering column to move to the stored memory location

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Store Drive State Column Position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Personalization settings  UserPersonalizationRequest | Personalization settings :  Personalization settings | | |  |  |  |
| Review in model  Steering Column Rake Position  SteeringColumnRakePosition | Steering Column Rake Position :  SteClmnPosRake | | |  |  |  |
| Review in model  Steering Column Tele Position  SteeringColumnTelePosition | Steering Column Tele Position :  SteClmnPosTele | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Store Drive State Column Position

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Store Drive State Column Position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Stored Column Position status  SteeringColumnStatus | Stored Column Position status :  StoredColumnPositionStatus | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Store Drive State Column Position

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

#### Technology Function 1166209760.jpg **store work state comun position**

The steering wheel column memory position for the "Work" state for the Stowable Steering Wheel/Deploy Tray Table feature can be used.

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: store work state comun position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Personalization settings  UserPersonalizationRequest | Personalization settings :  Personalization settings | | |  |  |  |
| Review in model  Steering Column Tele Position  SteeringColumnTelePosition | Steering Column Tele Position :  SteClmnPosTele | | |  |  |  |
| Review in model  Steering Column Rake Position  SteeringColumnRakePosition | Steering Column Rake Position :  SteClmnPosRake | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function store work state comun position

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: store work state comun position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  stored column posiition work  SteeringColumnStatus | stored column posiition work :  StoredColumnPositionWork | | |  |  |  |
| Review in model  Stored Column Position status  SteeringColumnStatus | Stored Column Position status :  StoredColumnPositionStatus | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function store work state comun position

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

### ECG

ECG

### Steering Wheel

Steering Wheel

### Tray Surface

Tray Surface

### ABS

ABS

#### Technology Function 1602218108.jpg **Provide Vehicle Speed**

Provide Vehicle speed as seen for brakes

##### Function Interfaces

###### Inputs

(No inputs have been defined)

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Provide Vehicle Speed | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Vehicle Speed  VehicleStatus | Vehicle Speed :  Veh\_V\_ActlBrk | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Provide Vehicle Speed

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

### RCM

RCM

#### Technology Function -2036863172.jpg **Inhibit Driver Airbag**

Component Function within RCM (Restraint Control Module) commanding to Inhibit the Airbags

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Inhibit Driver Airbag | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Airbag Inhibit Request  DriverAirbagRequest | Airbag Inhibit Request :  AirbagDrv\_B\_RqDactv | | |  |  |  |
| Review in model  Park status  VehicleStatus | Park status :  PrkStat | | |  |  |  |
| Review in model  Vehicle speed  VehicleStatus | Vehicle speed :  Veh\_V\_ActlBrk | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Inhibit Driver Airbag

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Inhibit Driver Airbag | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Driver Airbag Inhibit status  DriverAirbagInhibitStatus | Driver Airbag Inhibit status :  AirbagDrv\_D\_Actv | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Inhibit Driver Airbag

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-2 Driver Airbag status

The RCM shall provide the Driver Airbag Inhibit status(AirbagInhbtStat) to the SCMB via FD1 CAN when it receives DrvrAirbagDisinhbtRq and AirbagInbtRq

Satisfied by:

* Functions:
  + Inhibit Driver Airbag
  + Command Driver Airbag DisInhibit

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-2 | | | | | | | |
| **Rationale** | To DeInhibit Driver Airbag before going into Drive Mode | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Tippy, David (dtippy) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function 561981927.jpg **Command Driver Airbag DisInhibit**

Restraint Control Module commanding to DeInhibit the Airbags

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Command Driver Airbag DisInhibit | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Airbag DeInhibit Request  DriverAirbagRequest | Airbag DeInhibit Request :  AirbagDrv\_B\_RqDactv | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Command Driver Airbag DisInhibit

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Command Driver Airbag DisInhibit | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Driver Airbag Inhibit status  DriverAirbagInhibitStatus | Driver Airbag Inhibit status :  AirbagDrv\_D\_Actv | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Command Driver Airbag DisInhibit

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-2 Driver Airbag status

The RCM shall provide the Driver Airbag Inhibit status(AirbagInhbtStat) to the SCMB via FD1 CAN when it receives DrvrAirbagDisinhbtRq and AirbagInbtRq

Satisfied by:

* Functions:
  + Inhibit Driver Airbag
  + Command Driver Airbag DisInhibit

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-2 | | | | | | | |
| **Rationale** | To DeInhibit Driver Airbag before going into Drive Mode | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Tippy, David (dtippy) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

### SCMB

SCMB

#### Technology Function -1766615313.jpg **Deploy Steering Column**

The steering column allowed to return to the correct driving position when the Stowable Steering Wheel/Deply Tray Table feature not in use.

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Deploy Steering Column | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Feat state sel command  StateSelectionSignal | Feat state sel command :  FeatStateSelCmd | | |  |  |  |
| Review in model  Steering Column Tele Position  SteeringColumnTelePosition | Steering Column Tele Position :  SteClmnPosTele | | |  |  |  |
| Review in model  Steering Column Rake Position  SteeringColumnRakePosition | Steering Column Rake Position :  SteClmnPosRake | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Deploy Steering Column

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Deploy Steering Column | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  SC Deploy Command  SteeringColumnRequest | SC Deploy Command :  MoveSteClmnTelescopeToDrvPos | | |  |  |  |
| Review in model  SC Deploy Command Rake  SteeringColumnRequest | SC Deploy Command Rake :  CmdSteClmnRakeToDrvPos | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Deploy Steering Column

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

826 Tele/ Rake Ramp Start/ Stop

Feature Module (GFM3\_SCM) shall Actuate the Tele and Rake Motors by Ramping up or down the voltage while starting / Stopping Motors lest too much current go through the motors

Satisfied by:

* Functions:
  + Deploy Steering Column
  + Stow Steering Column

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: 826 | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Alsakka, Rania (RALSAKKA) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 2 - Medium | **Status** | In-Progress |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

1132 Deploy Steering Column

Deploy Steering Column Function shall Set

Command Tele to Selected = Deploy and

Command Rake to Selected = Deploy

Provided that

FeatStateSelCmd= Drive

SteeringColumnTelePos=Deployed

SteeringColumnRakePos=Deployed

StoredWorkPosition=Work

Satisfied by:

* Functions:
  + Deploy Steering Column

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: 1132 | | | | | | | |
| **Rationale** | To issue a request to Deploy Steering Column | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function -1154370482.jpg **Verify Availabilty of Work State**

Based on Vehicle status, Verify if Play State is available or not

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Verify Availabilty of Work State | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  battery state of charge  VehicleStatus | battery state of charge :  BattStateOfChrg | | |  |  |  |
| Review in model  SSW/DTT state  StateOfFeature | SSW/DTT state :  Ssw/DttStateStat | | |  |  |  |
| Review in model  park status  VehicleStatus | park status :  PrkStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Verify Availabilty of Work State

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Verify Availabilty of Work State | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Work state Availability status  HMIFeedback | Work state Availability status :  WorkStateAvailabilityStatus | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Verify Availabilty of Work State

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-17 Work state Availability

Verify Availability of work state Function shall verify the availability of Work Mode and set WorkStateAvailabilityStatus=True

provided that SSW/DTT State= DRIVE||REST

Parkstatus=Parked

BatterySOC==GOOD

Satisfied by:

* Functions:
  + Verify Availabilty of Work State

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-17 | | | | | | | |
| **Rationale** | To Evaulate Drive Mode Availability | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function 170090236.jpg **Verify Availability of Rest State**

Based on Vehicle status, Verify if Rest State is available or not

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Verify Availability of Rest State | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  battery state of charge  VehicleStatus | battery state of charge :  BattStateOfChrg | | |  |  |  |
| Review in model  SSW/DTT state  StateOfFeature | SSW/DTT state :  Ssw/DttStateStat | | |  |  |  |
| Review in model  park status  VehicleStatus | park status :  PrkStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Verify Availability of Rest State

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Verify Availability of Rest State | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Rest State Availability status  HMIFeedback | Rest State Availability status :  RestStateAvailabilityStatus | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Verify Availability of Rest State

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-18 Rest state Availability

Verify Availability of REST state Function shall verify the availability of RestMode and set RestStateAvailabilityStatus=True

provided that SSW/DTT State= DRIVE||WORK

Parkstatus=Parked

BatterySOC==GOOD

Satisfied by:

* Functions:
  + Verify Availability of Rest State

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-18 | | | | | | | |
| **Rationale** | To evaluate Rest Mode Availability | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function 126408108.jpg **Verify Availability of Drive State**

Based on Vehicle status ,Verify if Drive State is available or not

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Verify Availability of Drive State | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  battery state of charge  VehicleStatus | battery state of charge :  BattStateOfChrg | | |  |  |  |
| Review in model  SSW/DTT state  StateOfFeature | SSW/DTT state :  Ssw/DttStateStat | | |  |  |  |
| Review in model  park status  VehicleStatus | park status :  PrkStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Verify Availability of Drive State

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Verify Availability of Drive State | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Drive state Availability status  HMIFeedback | Drive state Availability status :  DriveStateAvaiStatus | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Verify Availability of Drive State

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-19 Drive state Availability

Verify Availability of Drive state Function shall verify the availability of Drive Mode and set DriveStateAvailabilityStatus=True

provided that SSW/DTT State= WORK||REST

Parkstatus=Parked

BatterySOC==GOOD

Satisfied by:

* Functions:
  + Verify Availability of Drive State

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-19 | | | | | | | |
| **Rationale** | User Cannot enter Drive state if any of Vehicle status is not valid or if Locomotion and Driver Airbag are not DeInhibited | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function -657960630.jpg **Check Driver seat stored position reached**

To verify that the seat has reached the correct position for the Stowable Steering Wheel/Tray Table feature can be used.

##### Function Interfaces

###### Inputs

(No inputs have been defined)

###### Outputs

(No outputs have been defined)

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

#### Technology Function -1585504521.jpg **Monitor Tray**

To monitor the tray table movemenet for any obstruction that would cause the featrue to not work properly.

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Monitor Tray | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Feature State Selection Command  StateSelectionSignal | Feature State Selection Command :  FeatStateSelCmd | | |  |  |  |
| Review in model  Tray Table Cross Car Position  TrayPostionStatus | Tray Table Cross Car Position :  TrayTableCrossCarPos | | |  |  |  |
| Review in model  Tray Table Fpre Aft Position  TrayPostionStatus | Tray Table Fpre Aft Position :  TrayTableForeAftPos | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Monitor Tray

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Monitor Tray | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  HMI Instructions for Tray Table  HMIInsWar | HMI Instructions for Tray Table :  DisplayTrayTableInstructions | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Monitor Tray

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-30 Manual Tray Table Instructions

Monitor Tray Table Function shall output DisplayTrayTableInstructions if

FeatStateSelCmd= DRIVE||REST

TrayTableForeAftPos=Deployed

TrayTableCrossCarPos=Deployed

Satisfied by:

* Functions:
  + Monitor Tray

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-30 | | | | | | | |
| **Rationale** | To provide user Tray Instructions if user intends to go to drive mode but forgets to Stow Tray Table | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function -1063619240.jpg **Publish SSW/DTT state**

Feature Issuing current Feature mode of Operation

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Publish SSW/DTT state | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Steering Column Deploy Status | Steering Column Deploy Status : | | |  |  |  |
| Review in model  Tray Table deploy status  TrayPostionStatus | Tray Table deploy status :  TrayTableDeployStat | | |  |  |  |
| Review in model  Driver seat position  SeatPosition | Driver seat position :  CurntSeatPos | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Publish SSW/DTT state

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Publish SSW/DTT state | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  SSW/DTT state  StateOfFeature | SSW/DTT state :  Ssw/DttStateStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Publish SSW/DTT state

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-24 Publish SSW/DTT state

Publish SSW/DTT state function shall set SSW/DTT state value according to the steeringcolumn deploy status, tray table deploy status and Driver seat position

Satisfied by:

* Functions:
  + Publish SSW/DTT state

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-24 | | | | | | | |
| **Rationale** | To Evaluate the current state | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function -1809958717.jpg **Command Tray Table Deploy**

Allow the tray table to come out of its stowed position for use by the occupant

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Command Tray Table Deploy | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Lock status  TrayLockStatus | Tray Table Lock status :  TrayTableLockStat | | |  |  |  |
| Review in model  Feature state selection command  StateSelectionSignal | Feature state selection command :  FeatStateSelCmd | | |  |  |  |
| Review in model  Tray Table ForeAft Position  TrayPostionStatus | Tray Table ForeAft Position :  TrayTableForeAftPos | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Command Tray Table Deploy

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Command Tray Table Deploy | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Deploy Command  TrayMoveCommand | Tray Table Deploy Command :  TrayTableDeployCmd | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Command Tray Table Deploy

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-23 Deploy Tray Table

Command Tray Table Deploy Function shall set TrayTableDeployCmd=TRUE, provided that

FeatStateSelCmd=WORK

TrayTableLockStatus=UNLOCKED

Traytableforeaftposition=STOWED

Satisfied by:

* Functions:
  + Command Tray Table Deploy

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-23 | | | | | | | |
| **Rationale** | Command to Deploy Table | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function -1961294620.jpg **Check Column Stored Position Reached**

To verify that the steering wheel column has reached the correct stowed position for the Stowable Steering Wheel/Deploy Tray Table feature can be used.

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Check Column Stored Position Reached | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Feature state selection command  StateSelectionSignal | Feature state selection command :  FeatStateSelCmd | | |  |  |  |
| Review in model  Steering Column Tele Position  SteeringColumnTelePosition | Steering Column Tele Position :  SteClmnPosTele | | |  |  |  |
| Review in model  Steering Column Rake Position  SteeringColumnRakePosition | Steering Column Rake Position :  SteClmnPosRake | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Check Column Stored Position Reached

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Check Column Stored Position Reached | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Sttering Column Deploy Status | Sttering Column Deploy Status : | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Check Column Stored Position Reached

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

1129 Check Column Position Reached

Check Column Position Reached Function shall set Deploy status as required based on the steering column rake position , Tele position and State Selection Signal

Satisfied by:

* Functions:
  + Check Column Stored Position Reached

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: 1129 | | | | | | | |
| **Rationale** | To verify if the Steering Column reached Desired Positon | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function 1547195112.jpg **Request Airbag Inhibit**

Airbag to be disabled (turned off) when Stowable Steering Feature is active (turned on)

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Request Airbag Inhibit | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Feature state selection command  StateSelectionSignal | Feature state selection command :  FeatStateSelCmd | | |  |  |  |
| Review in model  Airbag Inhibit status  DriverAirbagInhibitStatus | Airbag Inhibit status :  AirbagDrv\_D\_Actv | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Request Airbag Inhibit

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Request Airbag Inhibit | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Airbag Inhibit request  DriverAirbagRequest | Airbag Inhibit request :  AirbagDrv\_B\_RqDactv | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Request Airbag Inhibit

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-10 Driver Airbag Inhibit Request

Request Airbag Inhibit Function shall send AirbagInhbtRq when it receives FeatStateSelCmd=WORK or FeatStateSelCmd=Rest provided that AirbagInhbtStatus=DEINHIBITED

Satisfied by:

* Functions:
  + Request Airbag Inhibit

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-10 | | | | | | | |
| **Rationale** | To Inhibit Driver Airbag for Feature Transition into WORK /DRIVE Modes | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function -955916502.jpg **Request Locomotion Inhibit**

When the Stowable Steering Wheel/Deploy Tray Table Feature is active (turned on) the vehicle to be not allowed to move.

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Request Locomotion Inhibit | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Feature state selection cmd  StateSelectionSignal | Feature state selection cmd :  FeatStateSelCmd | | |  |  |  |
| Review in model  Work state Availability status  HMIFeedback | Work state Availability status :  WorkStateAvailabilityStatus | | |  |  |  |
| Review in model  Drive state Availability status  HMIFeedback | Drive state Availability status :  DriveStateAvaiStatus | | |  |  |  |
| Review in model  Locomotion Inhibit status  LocomotionInhibitStatus | Locomotion Inhibit status :  LocomotionInhibitStat | | |  |  |  |
| Review in model  User Input  UserInput | User Input :  UserIn | | |  |  |  |
| Review in model  Rest state Availability status  HMIFeedback | Rest state Availability status :  RestStateAvailabilityStatus | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Request Locomotion Inhibit

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Request Locomotion Inhibit | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Locomotion Inhibit Request  LocomotionRequest | Locomotion Inhibit Request :  RequestLocomotionInhibit | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Request Locomotion Inhibit

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-9 Locomotion Inhibit Request

Request Locomotion Inhibit function shall send RequestLocomotionInhibit when it receives FeatStateSelCmd=WORK or FeatStateSelCmd=Rest provided that

1. LocomotionInhibitStat=DEINHIBITED

2. WorkstateAvailabilityStatus=true

3.RestStateAvailabilityStatus=True

4. DrivestateAvailabilityStatus= False

5. UserInput=Work or UserInput=REST

Satisfied by:

* Functions:
  + Request Locomotion Inhibit

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-9 | | | | | | | |
| **Rationale** | To Inhibit Locomotion for Feature Transition into WORK /DRIVE Modes | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function -1580418661.jpg **Request Driver Airbag DisInhibit**

Airbag to be enabled (turned on) when Stowable Steering Feature is Inactive (turned off)

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Request Driver Airbag DisInhibit | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Deploy Status  TrayPostionStatus | Tray Table Deploy Status :  TrayTableDeployStat | | |  |  |  |
| Review in model  Sttering Column Deploy Status | Sttering Column Deploy Status : | | |  |  |  |
| Review in model  Feat state selec command  StateSelectionSignal | Feat state selec command :  FeatStateSelCmd | | |  |  |  |
| Review in model  Airbag Inhibit status  DriverAirbagInhibitStatus | Airbag Inhibit status :  AirbagDrv\_D\_Actv | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Request Driver Airbag DisInhibit

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Request Driver Airbag DisInhibit | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Airbag DeInhibit Request  DriverAirbagRequest | Airbag DeInhibit Request :  AirbagDrv\_B\_RqDactv | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Request Driver Airbag DisInhibit

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-11 Driver Airbag DeInhibit Request

Driver Airbag DeInhibit Request Function shall send AirbagInhbtRq when it receives FeatStateSelCmd=DRIVE provided that AirbagInhbtStatus=INHIBITED

Satisfied by:

* Functions:
  + Request Driver Airbag DisInhibit

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-11 | | | | | | | |
| **Rationale** | To EnsureDriver Airbag is DeInhibited before entering Drive Mode | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function -1632452656.jpg **Request Locomotion Inhibit Release**

When the Stowable Steering Wheel/Deploy Tray Table Feature is not in use (turned off) the vehicle to be allowed to move.

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Request Locomotion Inhibit Release | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Deploy Status  TrayPostionStatus | Tray Table Deploy Status :  TrayTableDeployStat | | |  |  |  |
| Review in model  Driver Airbag Inhibit status  DriverAirbagInhibitStatus | Driver Airbag Inhibit status :  AirbagDrv\_D\_Actv | | |  |  |  |
| Review in model  Steering Column Deploy Status | Steering Column Deploy Status : | | |  |  |  |
| Review in model  Feat state Selection cmd  StateSelectionSignal | Feat state Selection cmd :  FeatStateSelCmd | | |  |  |  |
| Review in model  Locmotion Inhibit status  LocomotionInhibitStatus | Locmotion Inhibit status :  LocomotionInhibitStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Request Locomotion Inhibit Release

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Request Locomotion Inhibit Release | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  DisInhibit Locomotion Request Release  LocomotionRequest | DisInhibit Locomotion Request Release :  RequestLocomotionInhibitRelease | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Request Locomotion Inhibit Release

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-12 Locomotion DeInhibit Request

Request Locomotion Inhibit Release function shall send RequestLocomotionDeInhibit when it receives FeatStateSelCmd=DRIVE provided that

1. LocomotionInhibitStat=INHIBITED

2. AirbagInhibitstatus=DeInhibited

3.SteeringcloumnSatus=Deploued

4. TrayDeployStatus=Deployed

3.RestStateAvailabilityStatus=True

4. DrivestateAvailabilityStatus= False

5. UserInput=Work or UserInput=

Satisfied by:

* Functions:
  + Request Locomotion Inhibit Release

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-12 | | | | | | | |
| **Rationale** | To Ensure Locomotion is DeInhibited before entering Drive Mode | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function -1482488104.jpg **store rest state column position**

The steering wheel column memory position for the driver when the Stowable Steering Wheel/Deploy Tray Table feature in not in use.

##### Function Interfaces

###### Inputs

(No inputs have been defined)

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: store rest state column position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  stored column position rest  SteeringColumnStatus | stored column position rest :  StoredColumnPositionRest | | |  |  |  |
| Review in model  Stored Column Position status  SteeringColumnStatus | Stored Column Position status :  StoredColumnPositionStatus | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function store rest state column position

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

#### Technology Function -1105549362.jpg **Stow Steering Column**

The steering column allowed to return to the correct driving position when the Stowable Steering Wheel/Deply Tray Table feature not in use.

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Stow Steering Column | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  stored column position work  SteeringColumnStatus | stored column position work :  StoredColumnPositionWork | | |  |  |  |
| Review in model  Inhibit status  InhibitStatus | Inhibit status :  InhbtStat | | |  |  |  |
| Review in model  Feature state selection cmd  StateSelectionSignal | Feature state selection cmd :  FeatStateSelCmd | | |  |  |  |
| Review in model  Steering Column Tele Position  SteeringColumnTelePosition | Steering Column Tele Position :  SteClmnPosTele | | |  |  |  |
| Review in model  Steering Column Rake position  SteeringColumnRakePosition | Steering Column Rake position :  SteClmnPosRake | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Stow Steering Column

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Stow Steering Column | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  SC Stow Command  SteeringColumnRequest | SC Stow Command :  MoveSteClmTelescopeToSelectedPos | | |  |  |  |
| Review in model  SC stow Rake Cmd  SteeringColumnRequest | SC stow Rake Cmd :  CmdSteClmnRakeToSelectedPos | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Stow Steering Column

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

826 Tele/ Rake Ramp Start/ Stop

Feature Module (GFM3\_SCM) shall Actuate the Tele and Rake Motors by Ramping up or down the voltage while starting / Stopping Motors lest too much current go through the motors

Satisfied by:

* Functions:
  + Deploy Steering Column
  + Stow Steering Column

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: 826 | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Alsakka, Rania (RALSAKKA) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 2 - Medium | **Status** | In-Progress |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

1131 Stow Steering Column

Stow Steering Column Function shall Set

Command Tele to Selected = Stow and

Command Rake to Selected = Stow

Provided that

FeatStateSelCmd= Work||Rest

SteeringColumnTelePos=Deployed

SteeringColumnRakePos=Deployed

StoredWorkPosition=Work

Satisfied by:

* Functions:
  + Stow Steering Column

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: 1131 | | | | | | | |
| **Rationale** | To issue a request to Stow Steering Column | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function -643756268.jpg **Unlock Tray Table**

Function responsible for Unlock the tray table from its stowed position

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Unlock Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Inhibit status  InhibitStatus | Inhibit status :  InhbtStat | | |  |  |  |
| Review in model  Work state Availability status  HMIFeedback | Work state Availability status :  WorkStateAvailabilityStatus | | |  |  |  |
| Review in model  Feature state selection command  StateSelectionSignal | Feature state selection command :  FeatStateSelCmd | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Unlock Tray Table

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Unlock Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Unlock Command  TrayMoveCommand | Tray Unlock Command :  TrayTableUnlockCmd | | |  |  |  |
| Review in model  Tray Table Lock status  TrayLockStatus | Tray Table Lock status :  TrayTableLockStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Unlock Tray Table

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-4 Control Tray Locking Functionality

SCMB shall Command the Tray Locking solenoid for Locking /Unlocking Tray via Hard wire by sending TrayTableLockCmd and TrayTableUnlockCmd

Satisfied by:

* Functions:
  + Lock Tray Table
  + Unlock Tray Table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-4 | | | | | | | |
| **Rationale** | To Lock and Unlock the Tray Table as per Request from PSM | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

IR-20 Unlock Tray Table

Unlock Tray Table Function shall set TrayTableUnlockCommand=True

Provided that

FeatStateSelcmd=WORK

InhbtStatus=INHIBITED

WorkStateAvailabilityStatus=TRUE

Satisfied by:

* Functions:
  + Unlock Tray Table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-20 | | | | | | | |
| **Rationale** | Command to Unlock Tray Table | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function 1982906757.jpg **Lock Tray Table**

function to Lock the tray table in its stowed position

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Lock Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table position  TrayPostionStatus | Tray Table position :  TrayTableCrossCarPos | | |  |  |  |
| Review in model  Feature state Sel command  StateSelectionSignal | Feature state Sel command :  FeatStateSelCmd | | |  |  |  |
| Review in model  Tray Table ForeAft Position  TrayPostionStatus | Tray Table ForeAft Position :  TrayTableForeAftPos | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Lock Tray Table

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Lock Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Lock Command  TrayMoveCommand | Tray Table Lock Command :  TrayTableLockCmd | | |  |  |  |
| Review in model  Tray Table Lock status  TrayLockStatus | Tray Table Lock status :  TrayTableLockStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Lock Tray Table

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-4 Control Tray Locking Functionality

SCMB shall Command the Tray Locking solenoid for Locking /Unlocking Tray via Hard wire by sending TrayTableLockCmd and TrayTableUnlockCmd

Satisfied by:

* Functions:
  + Lock Tray Table
  + Unlock Tray Table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-4 | | | | | | | |
| **Rationale** | To Lock and Unlock the Tray Table as per Request from PSM | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

IR-21 Lock Tray Table

Lock Tray Table Function shall set TrayTableLockCommand=True

Provided that

FeatStateSelcmd=DRIVE||REST

TrayTableCrossCarPos=Stowed

Satisfied by:

* Functions:
  + Lock Tray Table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-21 | | | | | | | |
| **Rationale** | Command to Lock Tray Table | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function 1841299232.jpg **check Inhibit Status**

To verify that the airbag has been disabled (turned off). Airbag to be disabled when Stowable Steering Feature is active

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: check Inhibit Status | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Locmotion Inhibit Status  LocomotionInhibitStatus | Locmotion Inhibit Status :  LocomotionInhibitStat | | |  |  |  |
| Review in model  Airbag Inhibit Status  DriverAirbagInhibitStatus | Airbag Inhibit Status :  AirbagDrv\_D\_Actv | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function check Inhibit Status

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: check Inhibit Status | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Inhibit status  InhibitStatus | Inhibit status :  InhbtStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function check Inhibit Status

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

1130 Check Inhibit Status

Check Inhibit status shall output

1. InhbtStat (Inhibit Status) = Inhibited

provided that

LocomotionInhibtStat=Inhibited

AirbagInhbtStat=Inhibited

or

2.InhbtStat (Inhibit Status) = DeInhibited

provided that

LocomotionInhibtStat=DeInhibited

AirbagInhbtStat=DeInhibited

Satisfied by:

* Functions:
  + check Inhibit Status

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: 1130 | | | | | | | |
| **Rationale** | To Evaulate the Drive Control Status Internally (Locmotion and Driver Airbag) | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function 1907490155.jpg **Request Maneuver Driver Seat To Stored Position**

Allow the seat to move to the stored memory location

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Request Maneuver Driver Seat To Stored Position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Feature state selection command  StateSelectionSignal | Feature state selection command :  FeatStateSelCmd | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Request Maneuver Driver Seat To Stored Position

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Request Maneuver Driver Seat To Stored Position | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Seat Position Move command  SeatMovementRequest | Seat Position Move command :  SeatPosMoveCmd | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Request Maneuver Driver Seat To Stored Position

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-8 Seat Movement Request

When ' Request Maneuver Driver Seat to store position' function receives FeatStateSelCmd it shall set SeatPosMovCmd Accordingly

Satisfied by:

* Functions:
  + Request Maneuver Driver Seat To Stored Position

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-8 | | | | | | | |
| **Rationale** | Requesting Driver Seat to move to desired position | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function 1303037876.jpg **Command Tray Table Stow**

Allow the tray table to move to a stowed position when not in use by the occupant

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Command Tray Table Stow | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Lock status  TrayLockStatus | Tray Table Lock status :  TrayTableLockStat | | |  |  |  |
| Review in model  Tray table Position  TrayPostionStatus | Tray table Position :  TrayTableCrossCarPos | | |  |  |  |
| Review in model  Feat state selection command  StateSelectionSignal | Feat state selection command :  FeatStateSelCmd | | |  |  |  |
| Review in model  Tray Table Fore Aft position  TrayPostionStatus | Tray Table Fore Aft position :  TrayTableForeAftPos | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Command Tray Table Stow

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Command Tray Table Stow | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table stow Command  TrayMoveCommand | Tray Table stow Command :  TrayTableStowCmd | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Command Tray Table Stow

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-22 Stow Tray Table

Command Tray Table stow Function shall set TrayTableStowCmd=TRUE ,provided that

FeatStateSelCmd==REST||DRIVE

TrayTableLockStatus=UNLOCKED

TrayTableCrossCarPosition=Stowed

Satisfied by:

* Functions:
  + Command Tray Table Stow

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-22 | | | | | | | |
| **Rationale** | Command to Stow Tray Table | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Iaquinto, Jonathan JIAQUIN2) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function -48004802.jpg **Check battery SOC**

Component function of SCMB for checking Battery SOC precondition

##### Function Interfaces

###### Inputs

(No inputs have been defined)

###### Outputs

(No outputs have been defined)

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

#### Technology Function -235444868.jpg **Check Vehicle Speed**

Component function responsible for evaluating vehicle speed as precondition before arbitrating modes by SCMB

##### Function Interfaces

###### Inputs

(No inputs have been defined)

###### Outputs

(No outputs have been defined)

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

### BCM

BCM

#### Technology Function -235444868.jpg **Provide Battery SOC**

Provide Battery State of Charge

##### Function Interfaces

###### Inputs

(No inputs have been defined)

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Provide Battery SOC | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Battery State of charge  VehicleStatus | Battery State of charge :  BattStateOfChrg | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Provide Battery SOC

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-14 Battery SOC

Battery Management System (BMS) shall provide Battery SOC(state of Charge) to SCMB through BCM

Satisfied by:

* Functions:
  + Provide Battery SOC

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-14 | | | | | | | |
| **Rationale** | Feature Controller would Verify the Battery SOC before the state transitions | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** |  |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 2 - Medium | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

### Sliding Track

Sliding Track

### Tray Actuator

Tray Actuator

#### Technology Function -2132447320.jpg **Deploy Tray Table**

Component Function of tray table motor / actuator for deploying the tray table

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Deploy Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Deploy Table command  TrayMoveCommand | Deploy Table command :  TrayTableDeployCmd | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Deploy Tray Table

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Deploy Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Deploy Status  TrayPostionStatus | Tray Table Deploy Status :  TrayTableDeployStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Deploy Tray Table

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

#### Technology Function -1987757361.jpg **Stow Tray Table**

Tray Table Function responsible for Moving Tray Table

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Stow Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table stow command  TrayMoveCommand | Tray Table stow command :  TrayTableStowCmd | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Stow Tray Table

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Stow Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Deploy Status  TrayPostionStatus | Tray Table Deploy Status :  TrayTableDeployStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Stow Tray Table

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

#### Technology Function 894666143.jpg **Move Tray Table**

Function in Actuator responsible for Tray Table Actuation

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Move Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Table Stow command  TrayMoveCommand | Table Stow command :  TrayTableStowCmd | | |  |  |  |
| Review in model  Tray table Deploy command  TrayMoveCommand | Tray table Deploy command :  TrayTableDeployCmd | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Move Tray Table

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Move Tray Table | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Tray Table Deploy status  TrayPostionStatus | Tray Table Deploy status :  TrayTableDeployStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Move Tray Table

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

1133 Tray Movement Deploying

when Move Tray Table function receives TrayTableDeployCmd it shall move the Tray table to Deployed position provided that the Tray is in the Instrument Panel Assembly and Locked

Satisfied by:

* Functions:
  + Move Tray Table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: 1133 | | | | | | | |
| **Rationale** | To Arbitrate Tray Table Position according to request received | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Kim, Yoon (ykim33) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

IR-5 Tray Movement Stowing

when Move Tray Table function receives TrayTableStowCmd it shall move the Tray table to stowed position provided that the Tray is in the center position

Satisfied by:

* Functions:
  + Move Tray Table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-5 | | | | | | | |
| **Rationale** | Tray Tabel Stowing | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Kim, Yoon (ykim33) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

### BMS

BMS

#### Technology Function -235444868.jpg **Provide Battery SOC**

Provide Battery State of Charge

##### Function Interfaces

###### Inputs

(No inputs have been defined)

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Provide Battery SOC | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Battery State of charge  VehicleStatus | Battery State of charge :  BattStateOfChrg | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Provide Battery SOC

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-14 Battery SOC

Battery Management System (BMS) shall provide Battery SOC(state of Charge) to SCMB through BCM

Satisfied by:

* Functions:
  + Provide Battery SOC

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-14 | | | | | | | |
| **Rationale** | Feature Controller would Verify the Battery SOC before the state transitions | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** |  |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 2 - Medium | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

### Rotating Arm

Rotating Arm

### PCM

PCM

#### Technology Function 328869918.jpg **DisInhibit Locomotion**

Power train Commanding to DeInhibit Locomotion

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: DisInhibit Locomotion | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Locomotion Inhibit release Request  LocomotionRequest | Locomotion Inhibit release Request :  RequestLocomotionInhibitRelease | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function DisInhibit Locomotion

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: DisInhibit Locomotion | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Locomotion Inhibit Status  LocomotionInhibitStatus | Locomotion Inhibit Status :  LocomotionInhibitStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function DisInhibit Locomotion

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-1 Locomotion status

The PCM shall provide the Locomotion Inhibit status(LocomotionInhibitStat) to SCMB via FD1 CAN when it receives RequestLocomotionInhibit and RequestLocomotionInhibitRelease

Satisfied by:

* Functions:
  + DisInhibit Locomotion
  + Inhibit Locomotion

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-1 | | | | | | | |
| **Rationale** | Feature Contoller intends to verify the Inhibition of Locomotion status before transitioning from drive to other Mode | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Thompson, Scott (sthom340) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function -844304042.jpg **Inhibit Locomotion**

Component Function within Power train (PCM) responsible for Commanding to Inhibit Locomotion

##### Function Interfaces

###### Inputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs: Inhibit Locomotion | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Subscriber Interface** | **Connection**  (*Optional)* |
| Review in model  Lomotion Inhibit Request  LocomotionRequest | Lomotion Inhibit Request :  RequestLocomotionInhibit | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Inputs | | | |

Table 5‑2: Input Signal mappings of Function Inhibit Locomotion

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Inhibit Locomotion | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Locomotion Inhibit Status  LocomotionInhibitStatus | Locomotion Inhibit Status :  LocomotionInhibitStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Inhibit Locomotion

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

IR-1 Locomotion status

The PCM shall provide the Locomotion Inhibit status(LocomotionInhibitStat) to SCMB via FD1 CAN when it receives RequestLocomotionInhibit and RequestLocomotionInhibitRelease

Satisfied by:

* Functions:
  + DisInhibit Locomotion
  + Inhibit Locomotion

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: IR-1 | | | | | | | |
| **Rationale** | Feature Contoller intends to verify the Inhibition of Locomotion status before transitioning from drive to other Mode | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** | Thompson, Scott (sthom340) |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** | 1 - High | **Status** | Ready for Review |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

#### Technology Function 1053856772.jpg **Provide Transmission status**

Function sending the Transmission status

##### Function Interfaces

###### Inputs

(No inputs have been defined)

###### Outputs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outputs: Provide Transmission status | | | | | | |
| **Logical Signal Name** | **Technical Signal Name** | | | **Mapping Details** *(Conditional)* | **Publisher Interface** | **Connection**  (*Optional)* |
| Review in model  Park status  VehicleStatus | Park status :  PrkStat | | |  |  |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.1 | End of Outputs | | | |

Table 5‑3: Output Signal mappings of Function Provide Transmission status

###### Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Logical Parameter Name** | **Technical Parameter Name** | **Mapping Details** *(Conditional)* | **Method** | **Method Details** |
| Name should be a Word reference to the “*Logical Parameters*” name bookmark in the Data Dictionary | Name should be a Word reference to the “*Technical Parameters*” name bookmark in the Data Dictionary | If mapping is not 1:1 you might reference a Mapping description object from the *Mappings* 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 5‑2: 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 5‑3: Component Specific Requirements

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

Table 5‑4: Inherited Requirements

###### Component Specific Requirements

## 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 | How to fully capture Wake/Sleep requirements. Currently we have a mismatch between what is captured in old EuCD SRD requirements and what is captured in AIS Publisher Interfaces (Publishing Network Sleep Inhibitor, Network Wake Up) |  | Open | Extend AIS attributes? |
| 2 | Clarify how to export Message list entries from CMDB in VSEM |  | Open |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |

Table 6‑1: Open Concerns

# Revision History

No Revision History found.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Revision | Date | Description | Approved by | Responsible |
| A |  | Initial version |  | Jbaden1 |
|  |  |  |  |  |

## 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

DriverAirbagInhibitStatus

Status of the Driver Airbag Inhibition

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **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 DriverAirbagInhibitStatus

DriverAirbagRequest

Request sent to the Driver Airbag system / Passive Restraint System for either Inhibit or Deinhibit

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **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 DriverAirbagRequest

HMIFeedback

Feedback given to HMI

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **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 HMIFeedback

LocomotionInhibitStatus

Status of the Locomotion Inhibition

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **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 LocomotionInhibitStatus

LocomotionRequest

Request to Powertrain / Locomotion to Inhibit /Deinhibit

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **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 LocomotionRequest

SeatMovementRequest

Command to Move seat which goes to the Driver seat System

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **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 SeatMovementRequest

SeatPosition

Current Seat Position from the Driver Seat System

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **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 SeatPosition

SteeringColumnRakePosition

Steering Column Position in Rake Position

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **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 SteeringColumnRakePosition

SteeringColumnRequest

Request to Move steering Column with respect to selected Mode

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **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 SteeringColumnRequest

SteeringColumnTelePosition

Steering Column Position in Tele Position

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **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 SteeringColumnTelePosition

TrayLockStatus

Tray lock status is given by Tray Lock sensor

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **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 TrayLockStatus

TrayPostionStatus

Tray Position status is the feedback for Tray position given by Tray position Sensor

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **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 TrayPostionStatus

UserInput

Input given by user through HMI

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **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 UserInput

UserModeSelection

Mode selection information from User

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **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 UserModeSelection

VehicleConfig

Configuration of the Feature and Vehicle Specific

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **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 VehicleConfig

VehicleStatus

This Signal is the collectivity approval signal which includes Parking status, battery state of charge and Vehicle Speed

|  |  |  |
| --- | --- | --- |
| **ASIL** | | Choose an item. |
| **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 VehicleStatus

### Logical Parameters

### Technical Signals

LearnNotificaiton

Feedback to user about the new positions learned of steering column and tray

|  |  |  |
| --- | --- | --- |
| **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 LearnNotificaiton

RequestLocomotionInhibitRelease

Request to De Inhibit the Locomotion

|  |  |  |
| --- | --- | --- |
| **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 RequestLocomotionInhibitRelease

UserIn

User Input

|  |  |  |
| --- | --- | --- |
| **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 UserIn

MoveSteClmnTelescopeToDrvPos

Command to Move steering Column to Drive position

|  |  |  |
| --- | --- | --- |
| **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 MoveSteClmnTelescopeToDrvPos

CurntSeatPos

Current seat position

|  |  |  |
| --- | --- | --- |
| **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 CurntSeatPos

TrayTableObstructionStat

Tray Table obstruction status

|  |  |  |
| --- | --- | --- |
| **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 TrayTableObstructionStat

TrayTableCrossCarPos

Tray Table position (+- 12V Signal)

|  |  |  |
| --- | --- | --- |
| **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 TrayTableCrossCarPos

Ssw/DttStateScreenNotification

signal containing the information to convey on HMI about the mode

|  |  |  |
| --- | --- | --- |
| **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 Ssw/DttStateScreenNotification

SeatPosMoveRq

Request to Move Driver seat

|  |  |  |
| --- | --- | --- |
| **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 SeatPosMoveRq

StoredColumnPositionWork

Memory position for Steering Column at work mode

|  |  |  |
| --- | --- | --- |
| **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 StoredColumnPositionWork

TrayTableForeAftPos

Tray Table Fore Aft Position

|  |  |  |
| --- | --- | --- |
| **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 TrayTableForeAftPos

MoveSteClmTelescopeToSelectedPos

Command to Move steering column to selected position

|  |  |  |
| --- | --- | --- |
| **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 MoveSteClmTelescopeToSelectedPos

StoredSeatMemoryPositonRest

Memory position for Driver seat at Rest Mode

|  |  |  |
| --- | --- | --- |
| **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 StoredSeatMemoryPositonRest

FeatStateSelCmd

State Selection signal / Feature state selection command is the data of what mode user selected

|  |  |  |
| --- | --- | --- |
| **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 FeatStateSelCmd

SteClmnPosRake

Steering Column position in Rake Direction

|  |  |  |
| --- | --- | --- |
| **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 SteClmnPosRake

RequestLocomotionInhibit

Request to Inhibit the Locomotion

|  |  |  |
| --- | --- | --- |
| **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 RequestLocomotionInhibit

SeatPosMoveCmd

Signal to Move seat with respect to the mode selected

|  |  |  |
| --- | --- | --- |
| **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 SeatPosMoveCmd

CmdSteClmnRakeToDrvPos

Command to Move steering Column to Drive Position

|  |  |  |
| --- | --- | --- |
| **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 CmdSteClmnRakeToDrvPos

DrvrAirbagDisinhbtRq

Request to De Inhibit the Airbag

|  |  |  |
| --- | --- | --- |
| **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 DrvrAirbagDisinhbtRq

TrayTableStowCmd

Command signal to Stow Tray

|  |  |  |
| --- | --- | --- |
| **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 TrayTableStowCmd

CmdSteClmnRakeToSelectedPos

Command to Move steering Column to Selected Position

|  |  |  |
| --- | --- | --- |
| **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 CmdSteClmnRakeToSelectedPos

DriveStateAvaiStatus

Drive state Availability status to user when the user intends to transit into Drive mode

|  |  |  |
| --- | --- | --- |
| **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 DriveStateAvaiStatus

RestStateAvailabilityStatus

Mode Availability status if user intends to transit to rest mode

|  |  |  |
| --- | --- | --- |
| **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 RestStateAvailabilityStatus

UserScreenNotification

Screen notification on HMI for User

|  |  |  |
| --- | --- | --- |
| **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 UserScreenNotification

StoredColumnPositionStatus

Status of storing Memory position for Steering Column

|  |  |  |
| --- | --- | --- |
| **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 StoredColumnPositionStatus

Ssw/DttStateStat

Current state of Feature

|  |  |  |
| --- | --- | --- |
| **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 Ssw/DttStateStat

TrayTableLockStat

Tray Table Lock status

|  |  |  |
| --- | --- | --- |
| **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 TrayTableLockStat

Veh\_V\_ActlBrk

Vehicle Velocity as seen by the brake

|  |  |  |
| --- | --- | --- |
| **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 Veh\_V\_ActlBrk

CurntClmPos

Current steering Column position

|  |  |  |
| --- | --- | --- |
| **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 CurntClmPos

InhbtStat

Inhibit status after Locomotion status and Driver Airbag Inhibit status verified

|  |  |  |
| --- | --- | --- |
| **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 InhbtStat

StoredColumnPositionRest

Memory position of steering Column in Rest mode

|  |  |  |
| --- | --- | --- |
| **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 StoredColumnPositionRest

StoredSeatPosRes

Seat Position status internal signal withing SCMB

|  |  |  |
| --- | --- | --- |
| **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 StoredSeatPosRes

BattStateOfChrg

Battery state of Charge

|  |  |  |
| --- | --- | --- |
| **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 BattStateOfChrg

TrayTableUnlockCmd

Command signal to Unlock Tray((Pulse -12V Digital signal )

|  |  |  |
| --- | --- | --- |
| **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 TrayTableUnlockCmd

TrayTableDeployCmd

Command signal to Deploy Tray

|  |  |  |
| --- | --- | --- |
| **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 TrayTableDeployCmd

BSBattSOC

High Voltage Battery state of charge ( A signal to be determined)

|  |  |  |
| --- | --- | --- |
| **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 BSBattSOC

UserScreenLowSliNotification

Notification on User screen for Low sli

|  |  |  |
| --- | --- | --- |
| **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 UserScreenLowSliNotification

StoredSeatMemoryPositionWork

Memory position for Driver seat at Work Mode

|  |  |  |
| --- | --- | --- |
| **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 StoredSeatMemoryPositionWork

StoredColumnMemoryPositionDrive

Memory of Column memory position

|  |  |  |
| --- | --- | --- |
| **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 StoredColumnMemoryPositionDrive

Tray/MtrLoad/ForceSensor

Tray Load status

|  |  |  |
| --- | --- | --- |
| **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 Tray/MtrLoad/ForceSensor

TrayTableLockCmd

Command signal to Lock Tray (Pulse +12V Digital signal )

|  |  |  |
| --- | --- | --- |
| **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 TrayTableLockCmd

AirbagDrv\_B\_RqDactv

Request to Inhibit and DeInhibit Airbag

1. Request (AirbagInhbtRq )

2. No Request (DrvrAirbagDisinhbtRq)

|  |  |  |
| --- | --- | --- |
| **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 AirbagDrv\_B\_RqDactv

SteClmnPosTele

Steering Column position in Tele Direction

|  |  |  |
| --- | --- | --- |
| **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 SteClmnPosTele

ManualOverRideCmd

This is the User Input to Manual Override the Tray Table

|  |  |  |
| --- | --- | --- |
| **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 ManualOverRideCmd

LocomotionInhibitStat

Inhibit status of Locomotion

|  |  |  |
| --- | --- | --- |
| **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 LocomotionInhibitStat

AirbagDrv\_D\_Actv

Inhibit status of Driver Airbag(AirbagInhbtStat)

1.NotAvailable

2.Off

3.On (Default)

4. Fault

|  |  |  |
| --- | --- | --- |
| **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 AirbagDrv\_D\_Actv

TrayTableDeployStat

Tray Table Deploy status

|  |  |  |
| --- | --- | --- |
| **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 TrayTableDeployStat

WorkStateAvailabilityStatus

Work state Availability status to user when the user intends to transit into work mode

|  |  |  |
| --- | --- | --- |
| **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 WorkStateAvailabilityStatus

SSW/DttScreenNotification

Feedback for user about the Mode Transition

|  |  |  |
| --- | --- | --- |
| **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 SSW/DttScreenNotification

StoredSeatMemoryPositionDrive

Memory position for Driver seat at Drive Mode

|  |  |  |
| --- | --- | --- |
| **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 StoredSeatMemoryPositionDrive

UserStateSelection

Feedback for User of what he selected

|  |  |  |
| --- | --- | --- |
| **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 UserStateSelection

Personalization settings

User personalization settings for Seat and steering column positions

|  |  |  |
| --- | --- | --- |
| **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 Personalization settings

PrkStat

Vehicle Parking status

|  |  |  |
| --- | --- | --- |
| **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 PrkStat

DisplayTrayTableInstructions

Instructions for how to use Tray Table for User

|  |  |  |
| --- | --- | --- |
| **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 DisplayTrayTableInstructions

#### 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

RequestLocomotionInhibitRelease

Request to De Inhibit the Locomotion

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of RequestLocomotionInhibitRelease

LocomotionInhibitStatus

Status of the Locomotion Inhibition

**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) |  |  |
| **INHIBITED** |  |
| **DEINHIBTED** |  |
| **Unit** | |  |

Table: Encoding Details of LocomotionInhibitStatus

SteeringColumnStatus

Position of the Steering Column provided by the steering column system

**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) |  |  |
| **STOWED** |  |
| **DEPLOYED** |  |
| **FAILED\_TO\_STOW** |  |
| **FAILED\_TO\_DEPLOY** |  |
| **OBSTACLE\_DETECTED** |  |
| **NOT\_AVAILABLE** |  |
| **Unit** | |  |

Table: Encoding Details of SteeringColumnStatus

HMIFeedback

Feedback given to HMI

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of HMIFeedback

TrayMoveRequest

Internal Request of Feature Controller to Move Tray Table

**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) |  |  |
| **DEPLOY** |  |
| **STOW** |  |
| **Unit** | |  |

Table: Encoding Details of TrayMoveRequest

MoveSteClmnTelescopeToDrvPos

Command to Move steering Column to Drive position

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of MoveSteClmnTelescopeToDrvPos

CurntSeatPos

Current seat position

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of CurntSeatPos

TrayTableObstructionStat

Tray Table obstruction 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) |  |  |
| **Unit** | |  |

Table: Encoding Details of TrayTableObstructionStat

TrayTableCrossCarPos

Tray Table position (+- 12V 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) |  |  |
| **Unit** | |  |

Table: Encoding Details of TrayTableCrossCarPos

SeatPosMoveRq

Request to Move Driver seat

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of SeatPosMoveRq

StoredColumnPositionWork

Memory position for Steering Column at work mode

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of StoredColumnPositionWork

TrayTableForeAftPos

Tray Table Fore Aft Position

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of TrayTableForeAftPos

CurrentSeatPosition

Driver seat system sending the information of current seat position

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of CurrentSeatPosition

SteClmnPosRake

Steering Column position in Rake Direction

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of SteClmnPosRake

SeatPosition

Current Seat Position from the Driver Seat System

**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) |  |  |
| **AT\_WORK** |  |
| **AT\_REST** |  |
| **AT\_DRIVE** |  |
| **AT\_PLAY** |  |
| **FAILED\_TO\_MOVE\_WORK** |  |
| **FAILED\_TO\_MOVE\_REST** |  |
| **FAILED\_TO\_MOVE\_DRIVE** |  |
| **FAILED\_TO\_MOVE\_PLAY** |  |
| **MOVING\_TO\_WORK** |  |
| **MOVING\_TO\_REST** |  |
| **MOVING\_TO\_DRIVE** |  |
| **MOVING\_TO\_PLAY** |  |
| **Unit** | |  |

Table: Encoding Details of SeatPosition

SteeringColumnRakePosition

Steering Column Position in Rake Position

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of SteeringColumnRakePosition

UserModeSelection

Mode selection information from User

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of UserModeSelection

DrvrAirbagDisinhbtRq

Request to De Inhibit the Airbag

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of DrvrAirbagDisinhbtRq

VehicleStatusValidity

This is the signal which contains the validity of the Vehicle status before Arbitrating into any Mode

**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) |  |  |
| **VALID** |  |
| **INVALID** |  |
| **Unit** | |  |

Table: Encoding Details of VehicleStatusValidity

UserInput

Input given by user through HMI

**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) |  |  |
| **WORKMODE** |  |
| **RESTMODE** |  |
| **PLAYMODE** |  |
| **NONE** |  |
| **NOT\_AVAILABLE** |  |
| **RESET** |  |
| **DRIVEMODE** |  |
| **ABORT** |  |
| **Unit** | |  |

Table: Encoding Details of UserInput

TrayTableStowCmd

Command signal to Stow Tray

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of TrayTableStowCmd

DriveStateAvaiStatus

Drive state Availability status to user when the user intends to transit into Drive mode

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of DriveStateAvaiStatus

Seat Position request

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of Seat Position request

RestStateAvailabilityStatus

Mode Availability status if user intends to transit to rest mode

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of RestStateAvailabilityStatus

UserScreenNotification

Screen notification on HMI for User

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of UserScreenNotification

TrayStatus

This status is decided and fed by the Feature systems based on Requests and Input feedbacks fed

**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) |  |  |
| **TRAY\_STOWED** |  |
| **TRAY\_FAILED\_TO\_STOW** |  |
| **TRAY\_DEPLOYED** |  |
| **TRAY\_FAILED\_TO\_DEPLOY** |  |
| **NOT\_APPLICABLE** |  |
| **TRAY\_LOCKED** |  |
| **TRAY\_UNLOCKED** |  |
| **TRAY\_FAILED\_TO\_LOCK** |  |
| **TRAY\_FAILED\_UNLOCK** |  |
| **OBSTACLE\_DETECTED** |  |
| **NO\_OBSTACLE\_DETECED** |  |
| **STOWING** |  |
| **DEPLOYING** |  |
| **LOCKING** |  |
| **UNLOCKING** |  |
| **Unit** | |  |

Table: Encoding Details of TrayStatus

TrayTableLockStat

Tray Table Lock 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) |  |  |
| **Unit** | |  |

Table: Encoding Details of TrayTableLockStat

RetrieveSettings

Driver personalized settings stored by user earlier

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of RetrieveSettings

CurntClmPos

Current steering Column position

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of CurntClmPos

UserPersonalizationRequest

Driver request of Personalization

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of UserPersonalizationRequest

StoredColumnPositionRest

Memory position of steering Column in Rest mode

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of StoredColumnPositionRest

StoredSeatPosRes

Seat Position status internal signal withing SCMB

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of StoredSeatPosRes

TrayLockStatus

Tray lock status is given by Tray Lock sensor

**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) |  |  |
| **TRAY\_LOCKED** |  |
| **TRAY\_UNLOCKED** |  |
| **TRAY\_FAILED\_TO\_LOCK** |  |
| **TRAY\_FAILED\_TO\_UNLOCK** |  |
| **Unit** | |  |

Table: Encoding Details of TrayLockStatus

TrayTableUnlockCmd

Command signal to Unlock Tray((Pulse -12V Digital 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) |  |  |
| **Unit** | |  |

Table: Encoding Details of TrayTableUnlockCmd

TrayTableDeployCmd

Command signal to Deploy Tray

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of TrayTableDeployCmd

DriverAirbagInhibitStatus

Status of the Driver Airbag Inhibition

**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) |  |  |
| **OFF(INHIBITED)** |  |
| **(ON)DEINHIBIT** |  |
| **NotAvailable** |  |
| **Faulty** |  |
| **Unit** | |  |

Table: Encoding Details of DriverAirbagInhibitStatus

UserScreenLowSliNotification

Notification on User screen for Low sli

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of UserScreenLowSliNotification

SteeringColumnStatusInternal

Status of SteeringColumn based on Feature Decisions and current steering Column Position

**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) |  |  |
| **STEERING\_COLUMN\_DEPLOYED** |  |
| **STEERING\_COLUMN\_FAILED\_TO\_DEPLOY** |  |
| **STEERING\_COLUMN\_STOWED** |  |
| **STEERING\_COLUMN\_FAILED\_TO\_STOW** |  |
| **Unit** | |  |

Table: Encoding Details of SteeringColumnStatusInternal

StoredColumnMemoryPositionDrive

Memory of Column memory position

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of StoredColumnMemoryPositionDrive

StoreSettings

Driver intended settings for personalization

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of StoreSettings

Tray/MtrLoad/ForceSensor

Tray Load 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) |  |  |
| **Unit** | |  |

Table: Encoding Details of Tray/MtrLoad/ForceSensor

ModeID

Mode which user requested to save the memory positions for

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of ModeID

CauseOfFailure

Cause for which status is not appropriate in the vehicle to arbitrate the feature mode

**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) |  |  |
| **TRAY\_ERROR** |  |
| **SC\_ERROR** |  |
| **NONE** |  |
| **DRIVER\_SEAT\_ERROR** |  |
| **Unit** | |  |

Table: Encoding Details of CauseOfFailure

SteClmnPosTele

Steering Column position in Tele Direction

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of SteClmnPosTele

AirbagDrv\_B\_RqDactv

Request to Inhibit and DeInhibit Airbag

1. Request (AirbagInhbtRq )

2. No Request (DrvrAirbagDisinhbtRq)

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of AirbagDrv\_B\_RqDactv

StateSelectionSignal

Signal which contains the Mode that User selected after the Vehicle status is Valid

**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) |  |  |
| **WORK** |  |
| **PLAY** |  |
| **REST** |  |
| **DRIVE** |  |
| **ABORT** |  |
| **Unit** | |  |

Table: Encoding Details of StateSelectionSignal

ManualOverRideCmd

This is the User Input to Manual Override the Tray Table

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of ManualOverRideCmd

ModeAcceptenceStatus

This signal contains the information whats not available in the vehicle configuration

**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) |  |  |
| **TRAY\_UNAVAILABLE** |  |
| **OTHER** |  |
| **INVALID\_VEHICLE\_STATUS** |  |
| **DRIVE\_MODE\_SELECTED** |  |
| **WORK\_MODE\_SELECTED** |  |
| **REST\_MODE\_SELECTED** |  |
| **Unit** | |  |

Table: Encoding Details of ModeAcceptenceStatus

TrayOverloadStatus

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of TrayOverloadStatus

LocomotionInhibitStat

Inhibit status of Locomotion

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of LocomotionInhibitStat

AirbagDrv\_D\_Actv

Inhibit status of Driver Airbag(AirbagInhbtStat)

1.NotAvailable

2.Off

3.On (Default)

4. Fault

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of AirbagDrv\_D\_Actv

TrayTableDeployStat

Tray Table Deploy 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) |  |  |
| **Unit** | |  |

Table: Encoding Details of TrayTableDeployStat

WorkStateAvailabilityStatus

Work state Availability status to user when the user intends to transit into work mode

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of WorkStateAvailabilityStatus

Personalization settings

User personalization settings for Seat and steering column positions

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of Personalization settings

SteeringColumnRequest

Request to Move steering Column with respect to selected Mode

**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) |  |  |
| **DEPLOY** |  |
| **STOW** |  |
| **NONE** |  |
| **Unit** | |  |

Table: Encoding Details of SteeringColumnRequest

DisplayTrayTableInstructions

Instructions for how to use Tray Table for User

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of DisplayTrayTableInstructions

LearnNotificaiton

Feedback to user about the new positions learned of steering column and tray

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of LearnNotificaiton

UserModeSelectionFeedback

Feedback of User selection if tis failed or successfully selected

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of UserModeSelectionFeedback

UserPersonalizationFeedback

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of UserPersonalizationFeedback

UserIn

User Input

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of UserIn

TrayMoveCommand

Tray Move Command is the command signal which has various Tray Control requests in it.

**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) |  |  |
| **DEPLOY** |  |
| **STOW** |  |
| **NONE** |  |
| **ABORT** |  |
| **LOCK** |  |
| **UNLOCK** |  |
| **Unit** | |  |

Table: Encoding Details of TrayMoveCommand

SeatMovementStatusInternal

Status of the Seat movement according to the current position and external position

**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) |  |  |
| **SEAT\_MOVED** |  |
| **SEAT\_FAILED\_TO\_MOVE** |  |
| **SEAT\_MOVING** |  |
| **Unit** | |  |

Table: Encoding Details of SeatMovementStatusInternal

Ssw/DttStateScreenNotification

signal containing the information to convey on HMI about the mode

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of Ssw/DttStateScreenNotification

Drivability Status

The logical signal which validates all systems component status and has the calculated the validity to enter into drive mode

**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) |  |  |
| **ALLOW\_DC\_DEINHIBITION** |  |
| **DONT\_ALLOW\_DC\_DEINHIBITION** |  |
| **Unit** | |  |

Table: Encoding Details of Drivability Status

MoveSteClmTelescopeToSelectedPos

Command to Move steering column to selected position

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of MoveSteClmTelescopeToSelectedPos

StoredSeatMemoryPositonRest

Memory position for Driver seat at Rest Mode

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of StoredSeatMemoryPositonRest

FeatStateSelCmd

State Selection signal / Feature state selection command is the data of what mode user selected

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of FeatStateSelCmd

SeatPosMoveCmd

Signal to Move seat with respect to the mode selected

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of SeatPosMoveCmd

RequestLocomotionInhibit

Request to Inhibit the Locomotion

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of RequestLocomotionInhibit

CmdSteClmnRakeToDrvPos

Command to Move steering Column to Drive Position

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of CmdSteClmnRakeToDrvPos

TrayObstructionStatus

Status of any obstacles present on the Work Surface /Tray

**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) |  |  |
| **OBSTACLE\_DETECTED** |  |
| **NO\_OBSTACLE\_DETECTED** |  |
| **FAILED\_TO\_DETECT\_OBSTACLE** |  |
| **Unit** | |  |

Table: Encoding Details of TrayObstructionStatus

Seat and Profile 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) |  |  |
| **Unit** | |  |

Table: Encoding Details of Seat and Profile Status

ModeTransitionFeedback

Feature Mode transition feedback for user

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of ModeTransitionFeedback

DriverAirbagRequest

Request sent to the Driver Airbag system / Passive Restraint System for either Inhibit or Deinhibit

**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) |  |  |
| **Request(INHIBIT\_DRIVER\_AIRBAG\_REQUEST)** |  |
| **No\_Request (DEINHIBIT\_DRIVER\_AIRBAG\_REQUEST)** |  |
| **Unit** | |  |

Table: Encoding Details of DriverAirbagRequest

SteeringColumnTelePosition

Steering Column Position in Tele Position

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of SteeringColumnTelePosition

CmdSteClmnRakeToSelectedPos

Command to Move steering Column to Selected Position

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of CmdSteClmnRakeToSelectedPos

HMIInsWar

HMI Instructions to Stow and Warning display if Tray is not pushed in properly

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of HMIInsWar

VehicleConfig

Configuration of the Feature and Vehicle Specific

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of VehicleConfig

StoredColumnPositionStatus

Status of storing Memory position for Steering Column

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of StoredColumnPositionStatus

Ssw/DttStateStat

Current state of Feature

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of Ssw/DttStateStat

Lock Vs Unlock

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of Lock Vs Unlock

Veh\_V\_ActlBrk

Vehicle Velocity as seen by the brake

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of Veh\_V\_ActlBrk

LocomotionRequest

Request to Powertrain / Locomotion to Inhibit /Deinhibit

**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) |  |  |
| **INHIBIT\_LOCOMOTION\_REQUEST** |  |
| **DEINHIBIT\_LOCOMOTION\_REQUEST** |  |
| **Unit** | |  |

Table: Encoding Details of LocomotionRequest

InhibitStatus

Inhibit status of driver control which is verified by the feature systems

**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) |  |  |
| **DC\_INHIBITED** |  |
| **DC\_FAILED\_TO\_INHIBIT** |  |
| **DC\_DEINHIBITED** |  |
| **DC\_FAILED\_TO\_DEINHIBIT** |  |
| **Unit** | |  |

Table: Encoding Details of InhibitStatus

InhbtStat

Inhibit status after Locomotion status and Driver Airbag Inhibit status verified

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of InhbtStat

Termination Signal

Logical signal for termination of Mode Arbitration when system did not act according to requests

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of Termination Signal

BattStateOfChrg

Battery state of Charge

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of BattStateOfChrg

BSBattSOC

High Voltage Battery state of charge ( A signal to be determined)

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of BSBattSOC

StoredSeatMemoryPositionWork

Memory position for Driver seat at Work Mode

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of StoredSeatMemoryPositionWork

TrayTableLockCmd

Command signal to Lock Tray (Pulse +12V Digital 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) |  |  |
| **Unit** | |  |

Table: Encoding Details of TrayTableLockCmd

TrayPostionStatus

Tray Position status is the feedback for Tray position given by Tray position Sensor

**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) |  |  |
| **DEPLOYED** |  |
| **STOWED** |  |
| **FAILED\_TO\_DEPLOY** |  |
| **FAILED\_TO\_STOW** |  |
| **IN\_MOTION** |  |
| **Unit** | |  |

Table: Encoding Details of TrayPostionStatus

SeatMovementRequest

Command to Move seat which goes to the Driver seat System

**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) |  |  |
| **WORK** |  |
| **REST** |  |
| **DRIVE** |  |
| **NONE** |  |
| **Unit** | |  |

Table: Encoding Details of SeatMovementRequest

TrayMotorLoad

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of TrayMotorLoad

StateOfFeature

Current state of Feature and other warnings

**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) |  |  |
| **WORK\_STATE\_ENTERED** |  |
| **FAILED\_TO\_ENTER\_WORK\_STATE** |  |
| **REST\_STATE\_ENTERED** |  |
| **FAILED\_TO\_ENTER\_REST\_STATE** |  |
| **PLAY\_STATE\_ENTERED** |  |
| **FAILED\_TO\_ENTER\_PLAY\_STATE** |  |
| **DRIVE\_STATE\_ENTERED** |  |
| **FAILED\_TO\_ENTER\_DRIVE\_STATE** |  |
| **REQUESTED\_MODE\_ARBITRATION\_TERMINATED** |  |
| **REQUESTED\_MODE\_NOT\_AVAILABLE** |  |
| **Unit** | |  |

Table: Encoding Details of StateOfFeature

VehicleStatus

This Signal is the collectivity approval signal which includes Parking status, battery state of charge and Vehicle Speed

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of VehicleStatus

SSW/DttScreenNotification

Feedback for user about the Mode Transition

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of SSW/DttScreenNotification

UserStateSelection

Feedback for User of what he selected

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of UserStateSelection

StoredSeatMemoryPositionDrive

Memory position for Driver seat at Drive Mode

**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) |  |  |
| **Unit** | |  |

Table: Encoding Details of StoredSeatMemoryPositionDrive

PrkStat

Vehicle Parking 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) |  |  |
| **Unit** | |  |

Table: Encoding Details of PrkStat

### Technology State Machines

Document ends here.