

**Research & Vehicle Technology**

**“Infotainment Systems Product Development”**

**Feature: Settings in the Infotainment Centerstack Module (Global)**

**Subsystem Part Specific Specification (SPSS)**

Version: v1.18

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**Version Date: November 27, 2019**

**FORD CONFIDENTIALF**

**Revision History**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Version** | **Notes** | | |
| **Jan 23rd, 2017** | **0.1** | **Initial Draft Release** | |  |
|  |  |  | |  |
| **March 6th, 2017** | **0.2** |  | | |
|  | IIR-REQ-251250/B-Logical Signal to HS3 CAN dB signal name translation table | | | <jmyslin2> added traffic sign recognition signals used to not allow the user to select the traffic sign recognition HMI settings |
|  | VS-SR-REQ-232098/J-Feature Based Message Protocol usage for Settings in the Infotainment Centerstack Display Module | | | <jmyslin2> Added clarifications in track changes for what to do in the HMI if a Settings Feature Server is not responding to a query or set command |
|  | VS-SR-REQ-232237/F-FBMP Feature.St received from any FBMP Feature Settings Server module | | | <jmyslin2> Clarified requirement that Centerstack HMI Client receives the Feature.St even if not for a Set or Query operation |
|  | VS-SR-REQ-251193/A-Traffic Sign Recognition Settings HMI not user selectable | | | <jmyslin2> New requirement. This requirement specifies when the Traffic Sign Recognition settings are not user selectable |
| |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | | |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | | | |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | | |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | |
| **March 28th, 2017** | **0.3** | |  | |
|  | IIR-REQ-251250/C-Logical Signal to HS3 CAN dB signal name translation table | | | <jmyslin2> Updated requirement to remove HMIAudioMode since Queries will now only be done for Settings in the Centerstack after Ignition\_Status changes to Run |
|  | VS-SR-REQ-232098/K-Feature Based Message Protocol usage for Settings in the Infotainment Centerstack Display Module | | | <jmyslin2> Updated requirement to clarify for a crank event |
|  | VS-SR-REQ-234428/E-General Settings at Start-up | | | <jmyslin2> Updated General Settings queary at start-up so that it is only done after Ingnition\_Status changes to Run |
| |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | | |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | | | | |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | |
| **April 5th, 2017** | **0.4** | |  | |
|  | VS-SR-REQ-232098/L-Feature Based Message Protocol usage for Settings in the Infotainment Centerstack Display Module | | | <jmyslin2> Updated so that reference most recent Feature Based Message Protocol which is needed to go along with this Settings in the Centerstack spec |
|  | FBMP-SR-REQ-238230/F-Enhanced Memory - Active Personality Profile change using Feature Based Message Protocol | | | <jmyslin2> spec clarication (no content change) |
|  | VS-SR-REQ-232245/F-Cruise Control | | | <jmyslin2> fixed a typo |
|  | VS-SR-REQ-259080/A-HMI Activation during Run - General Settings | | | <jmyslin2> New requirement |
|  | VS-SR-REQ-234316/D-Duration - Remote Start | | | <jmyslin2> Updated requirement to say for the Active Remote Start (enabled/disable) HMI the OFF/Disable settings uses the 10 minutes as the setting for OFF |
| |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | | |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | | | | |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | |
| **May 8, 2017** | **1.0** | | **Initial Release** |  |
|  | VS-SR-REQ-233862/G-Less Than Warning Threshold - Traffic Sign Recognition | | | <jmyslin2> Added Clarification for the TsrVlUnitMsgTxt\_D\_Rq signals usage |
| VS-SR-REQ-233867/G-Greater than Warning Threshold - Traffic Sign Recognition | | | <jmyslin2> Added Clarification for the TsrVlUnitMsgTxt\_D\_Rq signals usage |
|  |  |  | |  |
| **June 1, 2017** | **1.0.1** |  | | |
|  | VS-SR-REQ-232098/M-Feature Based Message Protocol usage for Settings in the Infotainment Centerstack Display Module | | | <jmyslin2> removed HMI error handling for Query requests and deferred to the HMI specification |
|  | VS-SR-REQ-242439/B-EV+ Mode | | | <jmyslin2> EV+ Mode setting is deleted |
|  | VS-SR-REQ-267623/A-Heater Programming - Park Heater | | | <jmyslin2> New Requirement |
|  |  |  | |  |
| **August 9, 2017** | **1.1** |  | | |
|  | VS-SR-REQ-271525/A-Lane Keeping Aid | | | <Jmyslin2> New Requirement for Lane Keeping Aid |
|  | VS-SR-REQ-271526/A-Lane Keeping Alert | | | <Jmyslin2> New Requirement for Lane Keeping Alert |
|  | VS-FUN-REQ-233809/B-Traffic Sign Recognition | | | <jmyslin2> Updated for Speed Limit Information |
|  | VS-SR-REQ-233812/D-Enable/Disable (Traffic Sign Recognition / Speed Limit Information) Feature | | | <jmyslin2> Updated requirement to include Speed Limit Information |
|  | VS-SR-REQ-233862/H-Less Than Warning Threshold - (Traffic Sign Recognition / Speed Limit Information) | | | <jmyslin2> Updated for Speed Limit Information |
|  | VS-SR-REQ-251193/B-Traffic Sign Recognition Settings / Speed Limit Information HMI not user selectable | | | <jmyslin2> Updated to include Speed Limit Information |
|  | VS-FUN-REQ-272504/A-Speed Limit Information | | | <jmyslin2> Added Speed Limit Information Function |
|  | VS-SR-REQ-233812/D-Enable/Disable (Traffic Sign Recognition / Speed Limit Information) Feature | | | <jmyslin2> Updated requirement to include Speed Limit Information |
|  | VS-SR-REQ-239164/C-Tow Haul | | | <Jmyslin2> Updated Tow Haul setting encodings to match the new encodings provided by the HMI team |
|  | VS-FUN-REQ-272332/A-Grade Assist | | | <jmyslin2> New Grade Assist function |
|  | VS-SR-REQ-272333/A-Grade Assist | | | <jmyslin2> New Requirement - Grade Assist |
|  | VS-SR-REQ-234061/D-Auto Engine OFF | | | <jmyslin2> Added note about possible HMI name |
|  | VS-SR-REQ-234339/C-Auto Highbeam / Adaptive Drivebeam | | | <jmyslin2> Updated to include Adative Highbeam |
|  | VS-SR-REQ-272030/A-Predictive Lighting | | | <jmyslin2> New Settings for Predictive Lighting |
|  | VS-SR-REQ-272687/A-Global Unlock | | | <jmyslin2> New global unlock setting |
|  | VS-SR-REQ-272694/A-Intelligent Access | | | <jmyslin2> New Intelligent Access locking setting |
|  | VS-FUN-REQ-272705/A-Air Suspension | | | <jmyslin2> New Setting requirement for Air Suspension |
|  | VS-SR-REQ-272706/A-Air Suspension | | | <jmyslin2> New requirement for Air Suspension |
|  | VS-FUN-REQ-272707/A-Auto Entry/Exit Height | | | <jmyslin2> New Setting requirement for Auto Entry/Exit Height |
|  | VS-SR-REQ-272708/A-Auto Entry/Exit Height | | | <jmyslin2> New requirement for Auto Entry/Exit Height |
|  |  |  | |  |
| **August 25, 2017** | **1.2** |  | | |
|  | VSv4-FRD-REQ-232097/E-Settings in the Infotainment Centerstack (Global - CGEA) | | | <jmyslin2> changed name to settings in the centerstack |
|  | IIR-REQ-251250/D-Logical Signal to HS3 CAN dB signal name translation table | | | <jmyslin2> Updated table to add BttLeft\_D\_RqDrv and BttRight\_D\_RqDrv for new BTT Lite feature |
|  | VS-IIR-REQ-243929/B-FBMP Interface requirements | | | <jmyslin2> Updated to add BTT Lite MD's |
|  | VS-FUN-REQ-234029/B-Park Aid | | | <jmyslin2> Per HMI team changed name from Rear Park Aid to Park Aid |
|  | VS-SR-REQ-234031/D-Park Aid | | | <jmyslin2> Per HMI changed name from Rear Park Aid to Park Aid |
|  | VS-FUN-REQ-273589/A-BTT Light (Blind Spot Trailer Tow) | | | <jmyslin2> Need Function added for BTT Lite |
|  | VS-SR-REQ-273590/A-Active Trailer Setting - BTT Lite | | | <jmyslin2> New requirement for new BTT Lite setting |
|  | VS-SR-REQ-273689/A-Trailer Length - BTT Lite | | | <jmyslin2> New requirement for new BTT Lite setting |
|  | VS-SR-REQ-273980/A-Pop-up Trailer Set-up Request - BTT Lite | | | <jmyslin2> New requirement for new BTT Lite setting |
|  | VS-FUN-REQ-234059/B-Auto Engine OFF / 30min Max Idle | | | <jmyslin2> Updated name per HMI group to 30 min max idle |
|  | VS-SR-REQ-234061/E-Auto Engine OFF / 30 min max idle | | | <jmyslin2> changed name to 30 min max idle from Auto Engine OFF per HMI group |
|  | VS-SR-REQ-234339/D-Auto Highbeam / Adaptive Drivebeam | | | <jmyslin2> Updated to add Glare Free |
|  | VS-FUN-REQ-273580/A-Passenger Airbag | | | <jmyslin2> Need function added for Passenger Airbag |
|  | VS-SR-REQ-273581/A-Passenger Airbag | | | <jmyslin2> New requirement for new passenger airbag setting |
|  | VS-FUN-REQ-273582/A-Engine Start/Stop Speed Threshold | | | <jmyslin2> Need Function added for Engine Start/Stop Speed Threshold |
|  | VS-SR-REQ-273583/A-Engine Start/Stop Speed Threshold | | | <jmyslin2> New requirement for new engine start/stop speed threshold setting |
|  | VS-FUN-REQ-274739/A-Tire Mobility Kit | | | <jmyslin2> Need function added for Tire Mobility |
|  | VS-SR-REQ-274740/A-Tire Mobility | | | <jmyslin2> New requirement for tire mobility setting |
|  |  |  | |  |
| **August 31, 2017** | **1.3** |  | | |
|  | IIR-REQ-251250/E-Logical Signal to HS3 CAN dB signal name translation table | | | <jmyslin2> Updated to include SUMA module Feature.St message |
|  | VS-SR-REQ-273980/B-Pop-up Trailer Set-up Request - BTT Lite | | | <jmyslin2> added in an update regarding the BTT Lite pop-up |
|  | VS-FUN-REQ-273582/B-Engine Start/Stop Speed Threshold (Auto Start/Stop Speed Threshold) | | | <jmyslin2> Name change per HMI group |
|  | VS-SR-REQ-273583/B-Engine Start/Stop Speed Threshold (Auto StartStop Speed Threshold) | | | <jmyslin2> Name updated per HMI |
|  | VS-SR-REQ-274740/B-Tire Mobility | | | <jmyslin2> Added SYNC HMI screen number |
|  |  |  | |  |
| **September 12, 2017** | **1.4** |  | | |
|  | VS-SR-REQ-233914/D-Enable/Disable Speed Warning - Traffic Sign Recognition / Speed Limit Information | | | <jmyslin2> Updated for Speed Limit Information |
|  | VS-FUN-REQ-272504/B-Speed Limit Information / Speed Sign Recognition | | | <jmyslin2> Updated name to include Speed Sign Recognition |
|  | VS-SR-REQ-239164/D-Tow Haul | | | <jmyslin2> Updated Tow Haul SYNC screen ID number |
|  | VS-SR-REQ-234232/D-Easy Entry / Easy Exit | | | <jmyslin2> updated SYNC Screen HMI number |
|  | VS-SR-REQ-238327/C-Power Running Board | | | <jmyslin2> updated the SYNC screen HMI number |
|  | VS-SR-REQ-272708/B-Auto Entry/Exit Height | | | <jmyslin2> Updated SYNC screen HMI number |
|  | VS-SR-REQ-273581/B-Passenger Airbag | | | <jmyslin2> added encoding for Passenger Airbag gray out |
|  |  |  | |  |
| **September 27, 2017** | **1.5** |  | | |
|  | STR-389746/I-Interface Requirements | | | <jmyslin2> added MD's |
|  | VS-IIR-REQ-243929/C-FBMP Interface requirements | | | <jmyslin2> added MD's |
|  | MD-REQ-243934/B-Disp\_Miles\_Kilometers.St | | | <jmyslin2> Clarification only |
|  | MD-REQ-276458/A-Vehicle\_Speed.St+ | | | <jmyslin2> created MD |
|  | MD-REQ-276458/B-Vehicle\_Speed.St | | | <jmyslin2> MD clarification |
|  | MD-REQ-276459/A-Vehicle\_Speed\_QF | | | <jmyslin2> created MD |
|  | MD-REQ-239857/B-TsrVlUnitMsgTxt\_D\_Rq | | | <jmyslin2> added clarification |
|  | MD-REQ-276700/A-IaccLamp\_D\_Rq | | | <jmyslin2> New MD |
|  | MD-REQ-276704/A-SLMde\_D\_Rqdsply | | | <jmyslin2> New MD |
|  | MD-REQ-276706/A-Aslicondsply\_D\_Rq | | | <jmyslin2> New MD |
|  | MD-REQ-274072/B-BTTLeft\_D\_RqDrv | | | <jmyslin2> Removed FID in title |
|  | MD-REQ-274073/B-BTTRight\_D\_RqDrv | | | <jmyslin2> Removed FID in title |
|  | IIR-REQ-251250/F-Logical Signal to HS3 CAN dB signal name translation table | | | <jmyslin2> updated table with Vehicle Speed CAN signals |
|  | VS-FUN-REQ-234230/B-Easy Entry / Easy Exit (Seat Adjustment) | | | <jmyslin2> updated name to Seat Adjustment |
|  | VS-SR-REQ-234232/E-Easy Entry / Easy Exit (Seat Adjustment) | | | <jmyslin2> Update name to seat adjustment and SYNC wireframe number |
|  | VS-FUN-REQ-272707/B-Auto Entry/Exit Height (Easy Access Height) | | | <jmyslin2> Updated name to easy access height |
|  | VS-SR-REQ-272708/C-Auto Entry/Exit Height (Easy Access Height) | | | <jmyslin2> Update name to Easy Access Height and wireframe number |
|  | VS-FUN-REQ-276182/A-Cargo Loading | | | <jmyslin2> New Setting requirement for Cargo Loading |
|  | VS-SR-REQ-276183/A-Cargo Loading | | | <jmyslin2> New requirement for Cargo Loading setting |
|  | VS-SR-REQ-272706/B-Air Suspension | | | <jmyslin2> updated name to air suspension height |
|  |  |  | |  |
| **October 27, 2017** | **1.6** |  | | |
|  | VSv4-FRD-REQ-232097/F-Settings in the Infotainment Centerstack - Common Spec | | | <jmyslin2> no content change just called Common Spec |
| VS-SR-REQ-239158/E-Traction Control | | | <jmyslin2> Updated requirement in reference to Advance Trac |
| VS-SR-REQ-273581/C-Passenger Airbag | | | <jmyslin2> updated passenger airbag wireframe number |
|  |  |  | |  |
| **December 14, 2017** | **1.7** |  | | |
|  | VS-SR-REQ-232245/G-Cruise Control | | | <jmyslin2> added HMI settings ID |
|  | VS-SR-REQ-232285/F-Lane Keeping Mode | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-233578/E-Lane Keeping Intensity | | | <jmyslin2> add HMI Setting ID |
|  | VS-SR-REQ-233579/E-Lane Keeping Sensitivity | | | <jmyslin2> updated HMI Setting ID |
|  | VS-SR-REQ-271525/B-Lane Keeping Aid | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-271526/B-Lane Keeping Alert | | | <jmyslin2> added HMI Settings ID |
|  | VS-SR-REQ-239185/F-Pre-Collision Assist function - Enable / Disable | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-233575/G-Active Braking - Pre-Collision Assist | | | <jmyslin2> added FCW Active Braking HMI Setting ID |
|  | VS-SR-REQ-233577/I-Warning Sensitivity - Pre-Collision Assist | | | <jmyslin2> Added FCW Alert Sensitivy HMI Setting ID |
|  | VS-SR-REQ-233812/E-Enable/Disable Traffic Sign Recognition / Speed Limit Information Feature | | | <jmyslin2> added active traffic sign recognition HMI Setting ID |
|  | VS-SR-REQ-233914/E-Enable/Disable Speed Warning - Traffic Sign Recognition / Speed Limit Information | | | <jmyslin2> add HMI Setting ID for activate speed warning |
|  | VS-SR-REQ-233813/D-Enable/Disable Speed Warning Chime - Traffic Sign Recognition | | | <jmyslin2> added HMI Setting ID for Over Speed Chime TSR |
|  | VS-SR-REQ-233862/I-Less Than Warning Threshold - (Traffic Sign Recognition / Speed Limit Information) | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-233867/I-Greater than Warning Threshold - Traffic Sign Recognition | | | <jmyslin2> added HMI Setting ID for TSR greater than warning threshold |
|  | VS-SR-REQ-233944/E-Blindspot Detection (vehicle - non-trailer) | | | <jmyslin2> added HMI Setting ID for blind spot |
|  | VS-SR-REQ-233948/D-Cross Traffic Alert | | | <jmyslin2> added HMI Setting ID to Cross Traffic Alert |
|  | VS-SR-REQ-233951/D-Wrong Way Alert | | | <jmyslin2> added HMI Setting ID for Wrong Way Alert |
|  | VS-SR-REQ-234015/D-Driver Alert | | | <jmyslin2> added HMI Setting ID for Driver Alert Setting |
|  | VS-SR-REQ-234028/D-Trailer Sway | | | <jmyslin2> add HMI Setting ID for Trailer Sway setting |
|  | VS-SR-REQ-234031/E-Park Aid | | | <jmyslin2> added HMI Setting ID to Park Aid |
|  | VS-SR-REQ-239158/F-Traction Control | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-239160/C-Hill Decent Control | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234005/D-Hill Start Assist | | | <jmyslin2> added HMI Setting ID for Hill Start Assist |
|  | VS-SR-REQ-239164/E-Tow Haul | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-272333/B-Grade Assist | | | <jmyslin2> created HMI Setting ID for Grade Assist |
|  | VS-SR-REQ-273590/B-Active Trailer Setting - BTT Lite | | | <jmyslin2> added HMI Setting ID for BTT Active Trailer |
|  | VS-SR-REQ-273689/B-Trailer Length - BTT Lite | | | <jmyslin2> add HMI Setting ID for BTT Lite Trailer Length |
|  | VS-SR-REQ-273583/C-Engine Start/Stop Speed Threshold (Auto StartStop Speed Threshold) | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-280535/D-Handling in Drive / Drive Control manual transmission / Driver Select Transmission | | | <jmyslin2> HMI team changed wireframe numbers so updated with new number |
|  | VS-SR-REQ-281380/B-Handling in Sport - Drive Control | | | <jmyslin2> update wire frame number since SYNC team changed the numbers |
|  | VS-SR-REQ-281381/B-Performance in Sport - Drive Control | | | <jmyslin2> added feature number |
|  | VS-SR-REQ-280533/B-Steering in Drive / Steering with Manual Transmission - Adaptive Steering | | | <jmyslin2> updated SYNC HMI number since SYNC HMI team changed the wireframe number |
|  | VS-SR-REQ-280548/B-Steering in Sport - Adaptive Steering | | | <jmyslin2> updated SYNC HMI numbers since SYNC HMI team changed the number |
|  | VS-SR-REQ-280549/B-Adaptive Steering | | | <jmyslin2> updated SYNC HMI numbers since HMI team changed their numbers |
|  | VS-SR-REQ-234035/E-Tire Pressure Unit | | | <jmyslin2> added HMI setting ID |
|  | VS-SR-REQ-234039/J-Measure Units | | | <jmyslin2> added HMI setttings ID |
|  | VS-SR-REQ-234061/F-Auto Engine OFF / 30 min max idle | | | <jmyslin2> added HMI Setting ID for 30 min max idle |
|  | VS-SR-REQ-234235/D-Park Lock Control | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234238/D-Silent Mode | | | <jmyslin2> add HMI Setting ID |
|  | VS-SR-REQ-234285/D-Ask on Exit - Alarm | | | <jmyslin2> add HMI Setting ID |
|  | VS-SR-REQ-234286/C-Sensor Set - Alarm | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234289/C-Park Slot - Chimes | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234290/C-Information - Chimes | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234312/G-Climate Control (Heater / AC) - Remote Start | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234313/G-Seats and Steering Wheel - Remote Start | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234316/E-Duration - Remote Start | | | <jmyslin2> added HMI Settings ID |
|  | VS-SR-REQ-234319/C-Global Window Open | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234320/C-Global Window Close | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234331/C-Courtesy Wiper | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234332/C-Rain Sensing Wipers | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234333/C-Reverse Wipers | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234336/C-Power Liftgate | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234339/E-Auto Highbeam / Adaptive Drivebeam / Glare Free | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234340/C-Daytime Running Lights | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234341/C-Welcome Lighting | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234342/C-Adaptive Headlights | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234343/C-Adaptive Headlight Set-Up | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234344/C-Autolamp Delay | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234347/C-AutoLock | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234348/C-AutoUnlock | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234349/C-Mislock | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234351/D-Lock Trim Switch Inhibit | | | <jmyslin2> HMI Setting ID |
|  | VS-SR-REQ-234353/C-Audible Locking Feedback | | | <jmyslin2> added HMI Setting iD |
|  | VS-SR-REQ-234354/C-Exterior Lights Feedback - Locking | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234357/D-Remote Unlock | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-272694/B-Intelligent Access | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234360/C-Auto Fold Mirrors | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234361/C-Reverse Tilt Mirrors | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234364/D-Continue Heat - Park Heater | | | <jmyslin2> add HMI setting ID |
|  | VS-SR-REQ-267623/B-Heater Programming - Park Heater | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234378/E-Programming Single Time - Park Heater | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234393/F-Programming Time 1 - Park Heater | | | <jmyslin2> added HMI setting ID's |
|  | VS-SR-REQ-234394/E-Programming Time 2 - Park Heater | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-262500/B-Aux Heater | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-273581/D-Passenger Airbag | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-274740/C-Tire Mobility | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-238327/D-Power Running Board | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-234232/F-Easy Entry / Easy Exit (Seat Adjustment) | | | <jmyslin2> added HMI Setting ID for seat adjustment |
|  | VS-SR-REQ-272708/D-Auto Entry/Exit Height (Easy Access Height) | | | <jmyslin2> added HMI setting ID |
|  | VS-SR-REQ-272706/C-Air Suspension | | | <jmyslin2> added HMI Setting ID |
|  | VS-SR-REQ-279098/B-Gauge Color / Primary Color - MyColor | | | <jmyslin2> added feature number |
|  | VS-SR-REQ-279099/B-Halo Color / Secondary Color - MyColor | | | <jmyslin2> added feature number |
|  | VS-SR-REQ-280522/B-Color Wheel 1 - MyColor | | | <jmyslin2> added feature number |
|  | VS-SR-REQ-280523/B-Color Wheel 2 - MyColor | | | <jmyslin2> added feature number |
|  | VS-SR-REQ-280524/B-Color Wheel 3 - MyColor | | | <jmyslin2> added feature number |
|  | VS-SR-REQ-279104/B-Ambient Lighting - MyColor | | | <jmyslin2> added feature number |
|  | VS-SR-REQ-280525/B-Ambient Color - MyColor | | | <jmyslin2> added feature number |
|  | VS-SR-REQ-280526/B-Ambient Dim - MyColor | | | <jmyslin2> add feature number |
|  | VS-SR-REQ-280528/B-Power Decklid / Liftgate | | | <jmyslin2> updated SYNC HMI wireframe ID per change by HMI team |
|  | VS-SR-REQ-280538/B-Auto Regen | | | <jmyslin2> Added feature number |
|  | VS-SR-REQ-280679/B-Quiet Start - Exhaust Mode | | | <jmyslin2> added feature number |
|  | VS-SR-REQ-280683/B-Set Quiet Time - Exhaust Mode | | | <jmyslin2> added feature number |
|  | VS-SR-REQ-280685/B-Rev Match (Engine Revolution Match) | | | <jmyslin2> added Rev Match feature number |
|  |  |  | |  |
| **April 25, 2018** | **1.8** |  | | |
|  | IIR-REQ-251250/G-Logical Signal to HS3 CAN dB signal name translation table | | | <jmyslin2> Added VDM to list of FBMP messages that the centerstack will need to support  Added CCM to list of FBMP messages that centerstack will need to support (for FCW settings) |
|  |  |  | |  |
| **May 17, 2018** | **1.9** |  | | |
|  | IIR-REQ-251250/H-Logical Signal to HS3 CAN dB signal name translation table+ | | | <jmyslin2> added what CCM module stood for. No content change |
|  | IIR-REQ-251250/I-Logical Signal to HS3 CAN dB signal name translation table | | | <jmyslin2> added logical to physical mapping for the DDM module |
|  | VS-SR-REQ-280670/B-Effort - Trailer Brake | | | <jmyslin2> corrected feature number from E10 to E11 (E10 already on Trailer Brake Mode |
|  |  |  | |  |
| **June 13, 2018** | **1.10** |  | | |
|  | VS-SR-REQ-234031/F-Park Aid (not long term) | | | <jmyslin2> udpated with a clarification note. No content change so no software change |
|  |  |  | |  |
| **August 28, 2018** | **1.11** |  | | |
|  | VS-SR-REQ-232098/O-Feature Based Message Protocol usage for Settings in the Infotainment Centerstack Display Module | | | <jmyslin2> updated comments for not showing feature settings selections at start-up if no response from feature server |
|  | VS-SR-REQ-232237/G-FBMP Feature.St received from any FBMP Feature Settings Server module | | | <jmyslin2> No content change |
|  | VS-SR-REQ-312391/A-Long Term Park Aid Disable | | | <jmyslin2> New Requirement for Long Term Park Aid |
|  | VS-SR-REQ-273689/C-Trailer Length - BTT Lite | | | jmyslin2: Updated with an example an imperial value being rounded to metric value for trailer length.  Update Trailer Length encoding since was off by 0.1 meter |
|  | VS-SR-REQ-234428/F-General Settings at Start-up | | | jmyslin2 - no content change. Clarification added |
|  | VS-SR-REQ-234336/D-Power Liftgate | | | jmyslin2: No content change. Duplicate of VS-280528-Power Decklid / Liftgate |
|  | VS-SR-REQ-280528/C-Power Decklid / Liftgate | | | jmyslin2: added 201 for HMI Settings ID |
|  | VS-SR-REQ-298602/A-Handsfree Liftgate | | | <jmyslin2> New Requirement for Handsfree Liftgate |
|  |  |  | |  |
| **October 4, 2018** | **1.12** |  | | |
|  | MD-REQ-274072/C-BTTLeft\_D\_RqDrv | | | <jmyslin2> No change, ignore the revision |
|  | MD-REQ-274073/C-BTTRight\_D\_RqDrv | | | <jmyslin2> No change, ignore the revision |
|  | VS-SR-REQ-273980/C-Pop-up Trailer Set-up Request - BTT Lite | | | <jmyslin2> updated requirement allowing BTT Lite module to close the BTT Lite pop-up |
|  | VS-SR-REQ-238327/E-Power Running Board | | | <jmyslin2> deleted power running boards from Settings in the Centerstack SPSS. Now defined in a separate feature specification without using feature based message protocol |
|  |  |  | |  |
| **October 11, 2018** | **1.13** |  | | |
|  | VS-SR-REQ-331385/A-Single Tolerance Warning Threshold - Traffic Sign Recognition / Speed Limit Information | | | <jmyslin2> New requirement for single tolerance HMI for Traffic Sign Recognition and Speed Limit Information |
|  | VS-SR-REQ-331385/A-Single Tolerance Warning Threshold - Traffic Sign Recognition / Speed Limit Information | | | <jmyslin2> New requirement for single tolerance HMI for Traffic Sign Recognition and Speed Limit Information |
|  | VS-SR-REQ-273689/D-Trailer Length - BTT Lite | | | <jmyslin2> made a note regarding selecting a faulty trailer if HMI call it out. Clarification only, no content change |
|  |  |  | |  |
| **December 4, 2018** | **1.14** |  | | |
|  | IIR-REQ-251250/J-Logical Signal to HS3 CAN dB signal name translation table | | | <jmyslin2> added TjaMsgTxt\_D\_Rq signal for highway assist |
|  | VS-SR-REQ-232098/P-Feature Based Message Protocol usage for Settings in the Infotainment Centerstack Display Module | | | <jmyslin2> added additional reference to FBMP were calls out querying the active menu first. No content change |
|  | STR-389748/D-Functional Definition | | | <jmyslin2> Added additional settings section |
|  | VS-SR-REQ-232245/H-Cruise Control | | | <jmyslin2> No content change. Removed Tolerance from this requirement and created a dedicated requirement for it. |
|  | VS-SR-REQ-333002/A-Tolerance - Cruise Control | | | <jmyslin2> roke out tolerance from 232245 to its own separate requirement. Added new HMI settings ID |
|  | VS-SR-REQ-232284/H-Speed Limiter - Manual / Intelligent | | | <jmyslin2> No content change. Removed Tolerance from this requirement |
|  | VS-SR-REQ-332970/A-Speed Limiter - Intelligent Offset Tolerance | | | <jmyslin2> No content change. Broke out the Tolernace from a combined requirement into a new requirement. |
|  | VS-SR-REQ-233914/F-Enable/Disable Speed Warning - Traffic Sign Recognition / Speed Limit Information | | | <jmyslin2> No Change ignore revision bump |
|  | VS-SR-REQ-233862/J-Less Than Warning Threshold - (Traffic Sign Recognition / Speed Limit Information) | | | <jmyslin2> Updated to include when Null or NoDataExists is selected |
|  | VS-SR-REQ-233867/J-Greater than Warning Threshold - Traffic Sign Recognition | | | <jmyslin2> updated to reference what to do when Null or NoDataExists is selected |
|  | VS-SR-REQ-273980/D-Pop-up Trailer Set-up Request - BTT Lite | | | <jmyslin2> updated requirement so BTT Lite pop-up jumps ahead and queries the BTT Lite feature numbers before showing the pop-up |
|  | VS-SR-REQ-272030/B-Predictive Lighting | | | <jmyslin2> added a clarification to clarify a SYNC HMI rule. No content change |
|  | STR-598209/A-Additional Settings - FBMP based settings | | | <jmyslin2> Since HMI is changing from the lead program for Settings in the Centerstack putting new settings under this heading |
|  | VS-SR-REQ-333163/A-Settings Start-Up | | | <jmyslin2> New requirement for additional settings |
|  | VS-SR-REQ-333164/A-HMI Activation during Run | | | <jmyslin2> New requirement for HMI settings |
|  | VS-FUN-REQ-332901/A-Speed Limit | | | <jmyslin2> New Speed Limit function - replaces TSR and Speed Limiter |
|  | VSv2-SR-REQ-332978/A-Limiter with Speed Signs - Speed Limit | | | <jmyslin2> New Limiter with Speed Signs |
|  | VSv2-SR-REQ-332979/A-Speed Sign Warning - Speed Limit | | | <jmyslin2> updated to add Speed Warning Sign label |
|  | VSv2-SR-REQ-332980/A-Tolerance - Speed Limit | | | <jmyslin2> updated for Speed Limit single tolerance |
|  | VSv2-FUN-REQ-332984/A-Cruise Control - Variant 2 | | | <jmyslin2> New Cruise Control vairant 2 |
|  | VSv2-SR-REQ-333001/A-Cruise Control - Variant 2 | | | <jmyslin2> New Cruise Control variant 2 requirement |
|  | VS-SR-REQ-333005/A-with Lane Centering | | | <jmyslin2> New with Lane Centering setting |
|  | VS-SR-REQ-333008/A-with Smart Offerings | | | <jmyslin2> New with Smart Offerings setting |
|  | VS-SR-REQ-333009/A-with Speed Signs | | | <jmyslin2> New with Smart Signs setting |
|  | VS-FUN-REQ-333131/A-Tire Pressure Reset / Tire Monitor | | | <jmyslin2> New Tire Monitor function |
|  | VS-SR-REQ-333089/A-Tire Pressure Reset / Tire Monitor | | | <jmyslin2> New requirement for Tire Monitor |
|  | VS-FUN-REQ-333128/A-Border Crossing | | | <jmyslin2> New Border Crossing function |
|  | VS-SR-REQ-333100/A-Border Crossing | | | <jmyslin2> New requirement for Border Crossing |
|  | VS-FUN-REQ-333136/A-Ecocoach | | | <jmyslin2> New Ecocoach settings function |
|  | VS-SR-REQ-333154/A-Ecocoach | | | <jmyslin2> New requirement for Ecocoach setting |
|  | VS-SR-REQ-333155/A-Eco Advices | | | <jmyslin2> New requirement for Eco Advices |
|  | VS-SR-REQ-333156/A-Coasting Support | | | <jmyslin2> New requirement for Coasting Support |
|  | VS-FUN-REQ-333107/A-Speedometer | | | <jmyslin2> New Speedometer function |
|  | VS-SR-REQ-333114/A-Speedometer MPH | | | <jmyslin2> New requirement for Speedometer MPH setting |
|  | VS-SR-REQ-333162/A-Speedometer KPH | | | <jmyslin2> New requirement for Speedometer KPH setting |
|  | VS-FUN-REQ-333158/A-Brake Coach | | | <jmyslin2> New requirement for Brake Coach Function |
|  | VS-SR-REQ-333159/A-Brake Coach | | | <jmyslin2> New requirement for Brake Coach setting |
|  | VS-FUN-REQ-333160/A-Neutral Tow | | | <jmyslin2> New Neutral Tow Function |
|  | VS-SR-REQ-333161/A-Neutral Tow | | | <jmyslin2> New requirement for Neutral Tow Setting |
|  | VS-FUN-REQ-333185/A-Nav Repeater in Cluster | | | <jmyslin2> New Function for Nav Repeater in the Cluster |
|  | VS-SR-REQ-333186/A-Nav Repeater in the Cluster | | | <jmyslin2> New requirement for Nav Repeater in the Cluster Setting |
|  | VS-FUN-REQ-333189/A-Maps in the Cluster | | | <jmyslin2> New Function for Maps in the Cluster |
|  | VS-SR-REQ-333192/A-Maps in the Cluster | | | <jmyslin2> New requirement for Maps in the Cluster Setting |
|  |  |  | |  |
| **February 1, 2019** | **1.15** |  | | |
|  | IIR-REQ-251250/K-Logical Signal to HS3 CAN dB signal name translation table | | | <jmyslin2> deleted TjaMsgTxt\_D\_Rq from logical to physical list as no longer supported |
|  | VS-SR-REQ-234316/F-Duration - Remote Start | | | <jmyslin2> added clarification to the requirement. No content change |
|  | VSv2-SR-REQ-332978/B-Limiter with Speed Signs - Speed Limit | | | <jmyslin2> No content change. Just added another potential name. HMI Settings ID ties to the HMI itself so just added for clarification |
|  | VS-SR-REQ-333005/B-with Lane Centering | | | <jmyslin2> No content change. Just added another potential name. HMI Settings ID ties to the HMI itself so just added for clarification |
|  | VS-SR-REQ-333009/B-with Speed Signs | | | <jmyslin2> No content change. Just added another potential name. HMI Settings ID ties to the HMI itself so just added for clarification |
|  | VS-FUN-REQ-333107/B-Speedometer | | | <jmyslin2> added requirment for major speed scall by market |
|  | VS-SR-REQ-333114/B-Speedometer MPH | | | <jmyslin2> Updated requirement on clarification on when to use based on market |
|  | VS-SR-REQ-333162/B-Speedometer KPH | | | <jmyslin2> updated requirement for clarification on configurations when to use |
|  | VS-SR-REQ-341178/A-Mapping Table - Speedometer Major Units | | | <jmyslin2> Added requirement for Cluster speedometer major units |
|  | VS-FUN-REQ-333160/B-Neutral Tow | | | <jmyslin2> updated Neutral Tow function |
|  | MD-REQ-342193/A-TrnGearNtmAllow\_B\_Stat | | | <jmyslin2> New MD for Neutral Tow |
|  | VS-SR-REQ-333161/B-Neutral Tow | | | <jmyslin2> updated Neutral Tow settings requirement |
|  |  |  | |  |
| **February 5, 2019** | **1.16** |  | | |
|  | **Content change:** | | |  |
|  | MD-REQ-343175/A-MetricActv\_B\_Actl | | | <jmyslin2> added MetricActv\_B\_Actl MD |
|  | IIR-REQ-251250/L-Logical Signal to HS3 CAN dB signal name translation table | | | <jmyslin2> updated to include MetricActv\_B\_Actl |
|  | VS-SR-REQ-333002/B-Tolerance - Cruise Control | | | <jmyslin2> updated to change the usage of the tolerance signal for units shown from using Measure Unit to the signal MetricActv\_B\_Actl |
|  | VS-SR-REQ-332970/B-Speed Limiter - Intelligent Offset Tolerance | | | <jmyslin2> Updated requirement to use MetricActv\_B\_Actl signal instead of measure units for cruise control speed units |
|  | VS-SR-REQ-234039/K-Measure Units | | | <jmyslin2> Updated requirement to state Measure Units setting is used for distance units for other settings (not speed units) |
|  | **Clarification only:** | | |  |
|  | MD-REQ-239857/C-TsrVlUnitMsgTxt\_D\_Rq | | | <jmyslin2> Clarification only. Changed KPM to Km/h |
|  | VS-SR-REQ-233862/K-Less Than Warning Threshold - (Traffic Sign Recognition / Speed Limit Information) | | | <jmyslin2> Clarification only. Changed KPH to Km/h |
|  | VS-SR-REQ-233867/K-Greater than Warning Threshold - Traffic Sign Recognition | | | <jmyslin2> Clarification only. Change KPH to Km/h |
|  | VS-FUN-REQ-332901/B-Speed Limit - Variant 2 (variant 2 of TSR, SLI and Speed Limiter) | | | <jmyslin2> No content change - updated name only to make more clair mutually exclusive with TSR, Speed Limit Information and Sleed Limiter |
|  | VSv2-SR-REQ-332980/B-Tolerance - Speed Limit | | | <jmyslin2> Clarification only. Changed KPH to Km/h |
|  | VS-SR-REQ-333114/C-Speedometer MPH | | | <jmyslin2> Clarification only. Changed KPH to Km/h |
|  | VS-SR-REQ-333162/C-Speedometer Km/h | | | <jmyslin2> Clarification only. Changed KPH to Km/h |
|  | VS-SR-REQ-341178/B-Mapping Table - Speedometer Major Units | | | <jmyslin2> Clarification only. Changed KPH to Km/h |
|  |  |  | |  |
| **February 14, 2019** | **1.16.1** | **Updated Comment in v1.11 Release** | | |
|  | VS-SR-REQ-273689/C-Trailer Length - BTT Lite | | | Chohdi Mhohdi: Comment below added back in since part of the rev comment below was accidently deleted. No content change just adding the correct rev comment below which was updated in version 1.11 originally.  jmyslin2: Updated with an example an imperial value being rounded to metric value for trailer length.  New: Update Trailer Length encoding since was off by 0.1 meter |
|  |  |  | |  |
| **May 28, 2019** | **1.17** |  | | |
|  | VS-SR-REQ-234286/D-Sensor Set - Alarm | | | <jmyslin2> New HMI name, updated to match for Alarm |
|  | STR-401443/F-Requirements | | | <jmyslin2> added new settings for locks |
|  | VS-SR-REQ-350467/A-Walk Away Lock | | | <jmyslin2> New requirement for walk-away lock |
|  | VS-SR-REQ-350468/A-Walk Away Lock Feedback | | | <jmyslin2> New requirement for walk away lock feedback |
|  | VS-SR-REQ-350469/A-Double Lock Reminder Feedback | | | <jmyslin2> New requirement for double lock reminder feedback |
|  |  |  | |  |
| **November 27, 2019** | **1.18** |  | | |
|  | MD-REQ-369894/A-EngOilLife\_Pc\_Actl | | | <jmyslin2> New engine oil life percentage signal |
|  | IIR-REQ-251250/M-Logical Signal to HS3 CAN dB signal name translation table | | | <jmyslin2> updated requirement to add Feature2.Rq, Feature2.St and Oil Life Percentage signals |
|  | STR-389748/E-Functional Definition | | | <jmyslin2> Updated to include new section in spec for Settings with dedicated Feature2.Rq and Feature2.St signals |
|  | VS-SR-REQ-251193/C-Traffic Sign Recognition Settings / Speed Limit Information HMI not user selectable | | | <jmyslin2> Clarification only, added overview |
|  | VS-SR-REQ-234028/E-Trailer Sway | | | <jmyslin2> No change. Ignore revision of requirement since nothing change. |
|  | VS-SR-REQ-234039/L-Measure Units | | | <jmyslin2> Updated measure units to support BEV HMI displays |
|  | VS-SR-REQ-280669/B-Mode - Trailer Brake | | | <jmyslin2> Updated requirement to support Trailer Settings SPSS |
|  | VS-SR-REQ-280670/C-Effort - Trailer Brake | | | <jmyslin2> Updated requirement to support Trailer Settings SPSS |
|  | VS-SR-REQ-280679/C-Quiet Start - Exhaust Mode | | | jmyslin2 - requirement obsolete |
|  | VS-SR-REQ-280683/C-Set Quiet Time - Exhaust Mode | | | <jmyslin2> requirement obsolete. See updated comments |
|  | VS-FUN-REQ-333136/B-Ecocoach | | | <jmyslin2> added new EcoCoach - Eco Mode setting requirement |
|  | VS-SR-REQ-364517/A-EcoCoach - Eco Mode | | | <jmyslin2> New EcoCoach in Eco Mode requirement |
|  | STR-598208/B-Requirements - shift by wire version of Neutral Tow | | | jmyslin2 - updated title |
|  | VS-SR-REQ-333161/C-Neutral Tow | | | jmyslin2 - made updates to the Neutral Tow requirement |
|  | VS-SR-REQ-333186/B-Nav Repeater in the Cluster | | | <jmyslin2> No content chanage, clarification only with the name |
|  | STR-683554/A-Cluster Settings with dedicated FBMP messages | | | <jmyslin2> New section of spec for settings that use Feature2.Rq and Feature2.St |
|  | VS-SR-REQ-362577/A-Cluster and Centerstack Settings HMI Client dedicated Feature2.Rq/Feature2.St FBMP message usage | | | <jmyslin2> New settings in the centerstack requirement for dedicated Cluster FBMP message |
|  | VS-SR-REQ-364389/A-Settings Start-up | | | <jmyslin2> new requirement |
|  | VS-SR-REQ-364390/A-HMI Activation during Run | | | <jmyslin2> New Requirement |
|  | VS-FUN-REQ-364615/A-Engine Oil Temp | | | <jmyslin2> New Engine Oil Temp function |
|  | VS-SR-REQ-364614/A-Engine Oil Temp Life Gauge - Cluster menu | | | <jmyslin2> New Engine Oil Temp Life setting |
|  | VS-FUN-REQ-364616/A-Power Gauge | | | <jmyslin2> New Power Gauge function |
|  | VS-SR-REQ-365515/A-Power Gauge - Cluster Menu | | | <jmyslin2> New Power Gauge setting requirement |
|  | VS-FUN-REQ-365516/A-Tachometer | | | <jmyslin2> New Tachometer function |
|  | VS-SR-REQ-365517/A-Tachometer Gauge - Cluster menu | | | <jmyslin2> Tachometer Gauge setting |
|  | VS-FUN-REQ-365529/A-Oil Life | | | <jmyslin2>new Oil Life function |
|  | VS-SR-REQ-365551/A-Oil Life Percentage | | | <jmyslin2> New Oil Life Percentage requirement |
|  | VS-SR-REQ-365550/A-Oil Life Reset | | | <jmyslin2> New Oil Life Reset requirement |
|  | VS-FUN-REQ-365643/A-Cluster IoD menu configurations | | | <jmyslin2> New function for Cluster IoD configuration menu items |
|  | VS-SR-REQ-365685/A-Calm Screen - Cluster IoD config | | | <jmyslin2> New Cluster IoD config setting |
|  | VS-SR-REQ-365686/A-Trip 1 - Cluster IoD config | | | <jmyslin2> New Trip 1 IoD config setting |
|  | VS-SR-REQ-365687/A-Trip 2 - Cluster IoD config | | | <jmyslin2> New Trip 2 Cluster IoD setting |
|  | VS-SR-REQ-365688/A-This Trip - Cluster IoD config | | | <jmyslin2> New This Trip Cluster IoD config setting |
|  | VS-SR-REQ-365689/A-Fuel Economy - Cluster IoD config | | | <jmyslin2> New Fuel Economy Cluster IoD config setting |
|  | VS-SR-REQ-365690/A-Electric Efficiency - Cluster IoD config | | | <jmyslin2> new Electric Efficiency Cluster IoD config |
|  | VS-SR-REQ-365691/A-Eco Behaviors - Cluster IoD config | | | <jmyslin2> New Eco Behaviors Cluster IoD config setting |
|  | VS-SR-REQ-365692/A-EV Coach - Cluster IoD config | | | <jmyslin2> new EV Coach Cluster IoD config setting |
|  | VS-SR-REQ-365696/A-Auto Start Stop - Cluster IoD config | | | <jmyslin2> new Auto Start Stop Cluster IoD config setting |
|  | VS-SR-REQ-365697/A-Seatbelt Status - Cluster IoD config | | | <jmyslin2> New seatbelt status cluster IoD config setting |
|  | VS-SR-REQ-365701/A-TPMS - Cluster IoD config | | | <jmyslin2> New TPMS Cluster IoD config setting |
|  | VS-SR-REQ-365706/A-Eco Coach - Cluster IoD config | | | <jmyslin2> New Eco Coach / Eco Behaviours Cluster IoD config setting |
|  | VS-SR-REQ-365722/A-Now Playing (Audio / Phone) - Cluster IoD config | | | <jmyslin2> New Now Playing (Audio / Phone) Cluster IoD config |
|  | VS-SR-REQ-365740/A-Nav / Compass - Cluster IoD config | | | <jmyslin2> New Nav / Compass Cluster IoD config setting |
|  | VS-SR-REQ-365741/A-Average Speed - Cluster IoD config | | | <jmyslin2> New Average Speed Cluster IoD config requirement |
|  | VS-SR-REQ-365743/A-Battery Charge - Cluster IoD config | | | <jmyslin2> New Battery Charge - Cluster IoD config setting |
|  | VS-SR-REQ-365744/A-ADAS - Cluster IoD config | | | <jmyslin2> ADAS Cluster IoD config setting |
|  | VS-SR-REQ-365745/A-Maps / Augmented Reality - Cluster IoD config | | | <jmyslin2> New Maps / Augmented Realituy Cluster IoD config setting |
|  | VS-SR-REQ-369132/A-Classic View - Cluster IoD config | | | <jmyslin2> New Classic View Cluster IoD config setting |
|  | VS-FUN-REQ-365765/A-Cluster Trip 1 menu | | | <jmyslin2> New Cluster Trip 1 menu function |
|  | VS-SR-REQ-365846/A-Cluster Trip 1 Menu Reset | | | <jmyslin2> New requirement for Cluster Trip 1 menu reset |
|  | VS-SR-REQ-365847/A-Set to Default - configure Cluster Trip 1 view | | | <jmyslin2> New requirement to set to default Cluster Trip 1 view |
|  | VS-SR-REQ-365855/A-Trip 1 Odometer - configure Cluster Trip 1 view | | | <jmyslin2> New Trip Odometer - configure Cluster Trip 1 view setting |
|  | VS-SR-REQ-365858/A-Trip 1 Timer - configure Cluster Trip 1 view | | | <jmyslin2> New settings requirmeent for Trip 1 timer |
|  | VS-SR-REQ-365860/A-Average Speed - configure Cluster Trip 1 view | | | <jmyslin2> New average speed configure cluster trip 1 view setting requirement |
|  | VS-SR-REQ-365864/A-Average Fuel - configure Cluster Trip 1 view | | | <jmyslin2> new settings requirement for average fuel for cluster trip 1 view |
|  | VS-SR-REQ-365865/A-Instantaneous Fuel - configure Cluster Trip 1 view | | | <jmyslin2> new settings requirement for Instantaneous fuel - configure cluster trip 1 view |
|  | VS-FUN-REQ-365845/A-Cluster Trip 2 menu | | | <jmyslin2> New Cluster Trip 2 menu function |
|  | VS-SR-REQ-365866/A-Cluster Trip 2 Menu Reset | | | <jmyslin2> New requirement for Cluster Trip 2 menu reset |
|  | VS-SR-REQ-365867/A-Set to Default - configure Cluster Trip 2 view | | | <jmyslin2> New Set to Default - configure Cluster trip 2 view |
|  | VS-SR-REQ-365877/A-Trip 2 Odometer - configure Cluster Trip 2 view | | | jmyslin2 - New setting Trip 2 odometer - configure cluster trip 2 view |
|  | VS-SR-REQ-365878/A-Trip 2 Timer - configure Cluster Trip 2 view | | | <jmyslin2> New Trip 2 Timer - configure cluster trip 2 view requirement |
|  | VS-SR-REQ-365880/A-Average Speed - configure Cluster Trip 2 view | | | <jmyslin2> New requirement for Average Speed - configure Cluster Trip 2 view |
|  | VS-SR-REQ-365884/A-Average Fuel - configure Cluster Trip 2 view | | | <jmyslin2> New settings requirement for Average Fuel - configure Cluster Trip 2 view |
|  | VS-SR-REQ-365885/A-Instantaneous Fuel - configure Cluster Trip 2 view | | | <jmyslin2> New setting requirement for Instantaneous Fuel - configure Cluster Trip 2 view |
|  | VS-FUN-REQ-369169/A-Classic View - Cluster Speedo view | | | <jmyslin2> New Classic View Speedo function |
|  | VS-SR-REQ-369170/A-Classic View - Cluster Speedo view - Cluster Menu | | | <jmyslin2> New Classic View Speedo view setting |

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# Architectural Design

## Interface Requirements

### VS-IIR-REQ-243929/C-FBMP Interface requirements

#### MD-REQ-243930/A-Feature\_St

Message Type: Status

Represents the current status of a feature (feature selected, feature setting, etc.).

Included Parameters:

FeatureID

Configuration

PersIndex

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Literals** | **Value** | **Description** |
| FeatureID | **-** | **-** | Active feature number |
|  |  | 0x0000 – 0xFFFF |  |
| Configuration | **-** | **-** | Active configuration value |
|  |  | 0x0000 – 0xFFFF |  |
| PersIndex | **-** | **-** | Indicates which personality profile is active |
|  | PERS\_1 | 0x0 |  |
|  | PERS\_2 | 0x1 |  |
|  | PERS\_3 | 0x2 |  |
|  | PERS\_4 | 0X3 |  |
|  | VEHICLE | 0X4 |  |
|  | Not Used | 0x5 |  |
|  | Not Used | 0x6 |  |
|  | Not Used | 0x7 |  |

#### MD-REQ-243931/A-Feature\_Rq

Message Type: Request

Represents the request to command a feature change (select new feature, change feature setting, query features, etc.).

Included Parameters:

Operation

FeatureID

Configuration

PersIndex

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Literals** | **Value** | **Description** |
| Operation | **-** | **-** | Type of operation being requested |
|  | Null | 0x0 |  |
|  | Query | 0x1 |  |
|  | Set | 0x2 |  |
|  | Upload | 0x3 |  |
|  | Restore | 0x4 |  |
|  | Copy | 0x5 |  |
|  | NotUsed | 0x6 – 0x7 |  |
| FeatureID | **-** | **-** | Feature number being requested |
|  |  | 0x0000 – 0xFFFF |  |
| Configuration | **-** | **-** | Configuration value being requested |
|  |  | 0x0000 – 0xFFFF |  |
| PersIndex | **-** | **-** | Indicates which personality profile is being accessed |
|  | PERS\_1 | 0x0 |  |
|  | PERS\_2 | 0x1 |  |
|  | PERS\_3 | 0x2 |  |
|  | PERS\_4 | 0X3 |  |
|  | VEHICLE | 0X4 |  |
|  | Not Used | 0x5 |  |
|  | Not Used | 0x6 |  |
|  | Not Used | 0x7 |  |

### MD-REQ-243934/B-Disp\_Miles\_Kilometers.St

**Message Type:** Status

Signal from the Vehicle Settings Server stating what the setting is for Distance units.

|  |  |  |  |
| --- | --- | --- | --- |
| **Logical Signal Name** | **Literals** | **Value** | **Description** |
| Disp\_Miles\_Kilometers.St | Metric (kilometers) | 0x0 |  |
| Imperial (miles) | 0x1 |  |

### MD-REQ-016222/B-IgnKeyType\_D\_Actl (TcSE ROIN-200609-4)

Message Type: Status

This signal represents the MyKey system status and is provided to all affected system components to configure their local modes.

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Literals** | **Value** | **Description** |
| IgnKeyType\_D\_Actl | - | - | Type of key that is in the ignition |
|  | KeyReadInProgress | 0x0 | Key(s) will be read now |
|  | KeyInIgnStandardKey | 0x1 | Admin (full) mode |
|  | KeyInIgnMyKey | 0x2 | MyKey restricted mode |
|  | Key\_Not\_Prgrm\_Read\_Failure | 0x3 | Key not programmed |
|  | Unknown | 0xE | Disable MyKey System mode |
|  | Invalid | 0xF | Initial value |

### MD-REQ-276458/B-Vehicle\_Speed.St

**Message Type**: Status

Signal with the current status of the Vehicle Speed

|  |  |  |  |
| --- | --- | --- | --- |
| **Logical Signal Name** | **Literals** | **Value** | **Description** |
| Vehicle\_Speed.St | See info-CAN database for signal details | See info-CAN database for signal details |  |

### MD-REQ-276459/A-Vehicle\_Speed\_QF

**Message Type**: Status

Signal with the Vehicle Speed Quality Factor

|  |  |  |  |
| --- | --- | --- | --- |
| **Logical Signal Name** | **Literals** | **Value** | **Description** |
| Vehicle\_Speed\_QF | Faulty | 0x0 |  |
| No\_Data\_Exists | 0x1 |
| Not\_Within\_Specifications | 0x2 |
| OK | 0x3 |

### MD-REQ-239857/C-TsrVlUnitMsgTxt\_D\_Rq

**Message Type**: Request

Traffic Sign Recognition signal indicating if the Traffic Sign Recognition settings should be in Km/h or MPH.

Note: This signal only applies for Traffic Sign Recognition settings.

|  |  |  |  |
| --- | --- | --- | --- |
| **Logical Signal Name** | **Literals** | **Value** | **Description** |
| TsrVlUnitMsgTxt\_D\_Rq | Null | 0x0 |  |
| Km/h | 0x1 |  |
| MPH | 0x2 |  |
| NoDataExists | 0x3 |  |

### MD-REQ-276700/A-IaccLamp\_D\_Rq

**Message Type**: Request

Intelligent Adaptive Cruise Control signal used by Traffic Sign Recognition / Speed Limit Information for Settings in the Centerstack

|  |  |  |  |
| --- | --- | --- | --- |
| **Logical Signal Name** | **Literals** | **Value** | **Description** |
| IaccLamp\_D\_Rq | DoNotDisplayIIaccIcon | 0x0 |  |
| DisplayIaccIcon | 0x1 |  |
| NotUsed | 0x2 |  |
| NotUsed | 0x3 |  |

### MD-REQ-276704/A-SLMde\_D\_Rqdsply

**Message Type**: Request

Intelligent Speed Assist signal used by Traffic Sign Recognition / Speed Limit Information for Settings in the Centerstack

|  |  |  |  |
| --- | --- | --- | --- |
| **Logical Signal Name** | **Literals** | **Value** | **Description** |
| SLMde\_D\_Rqdsply | NoSpeed\_LimiterSymbol | 0x0 |  |
| AutoSpeed\_LimiterSymbol | 0x1 |  |
| ManualSpeed\_LimiterSymbol | 0x2 |  |
| NotUsed | 0x3 |  |

### MD-REQ-276706/A-Aslicondsply\_D\_Rq

**Message Type**: Request

Intelligent Speed Assist signal used by Traffic Sign Recognition / Speed Limit Information for Settings in the Centerstack

|  |  |  |  |
| --- | --- | --- | --- |
| **Logical Signal Name** | **Literals** | **Value** | **Description** |
| Aslicondsply\_D\_Rq | Off | 0x0 |  |
| On\_Passive | 0x1 |  |
| On\_Active | 0x2 |  |
| Override | 0x3 |  |

### MD-REQ-274072/C-BTTLeft\_D\_RqDrv

**Message Type**: Request

BTT Lite (Blind spot Trailer Tow Lite) left side detection signal sent to tell if the BTT Lite pop-up should be shown in the Centerstack HMI

|  |  |  |  |
| --- | --- | --- | --- |
| **Logical Signal Name** | **Literals** | **Value** | **Description** |
| BttLeft\_D\_RqDrv | Null | 0x0 |  |
| No Request | 0x1 |  |
| Request | 0x2 | Used for pop-up |
| Not Used | 0x3 |  |

### MD-REQ-274073/C-BTTRight\_D\_RqDrv

**Message Type**: Request

BTT Lite (Blind spot Trailer Tow Lite) right side detection signal sent to tell if the BTT Lite pop-up should be shown in the Centerstack HMI

|  |  |  |  |
| --- | --- | --- | --- |
| **Logical Signal Name** | **Literals** | **Value** | **Description** |
| BttRight\_D\_RqDrv | Null | 0x0 |  |
| No Request | 0x1 |  |
| Request | 0x2 | Used for pop-up |
| Not Used | 0x3 |  |

### MD-REQ-343175/A-MetricActv\_B\_Actl

**Message Type**: Status

This signal provides the MPH or Km/h speed setting unit to use (see setting function for details and applicability)

|  |  |  |  |
| --- | --- | --- | --- |
| **Logical Signal Name** | **Literals** | **Value** | **Description** |
| MetricActv\_B\_Actl | Inactive | 0x0 | MPH |
| Active | 0x1 | Km/h |

### MD-REQ-369894/A-EngOilLife\_Pc\_Actl

Message Type: Status

Status signal from the Engine Oil Life Server with the oil life percentage until the oil life has expired

|  |  |  |  |
| --- | --- | --- | --- |
| **Logical Signal Name** | **Literals** | **Value** | **Description** |
| EngOilLife\_Pc\_Actl | 0 percent oil life | 0x0 |  |
| 1 percent oil life | 0x1 |  |
| 2 percent oil life | 0x2 |  |
| … | … |  |
| 99 percent oil life | 0x63 |  |
| 100 percent oil life | 0x64 |  |

## IIR-REQ-251250/M-Logical Signal to HS3 CAN dB signal name translation table

|  |  |  |
| --- | --- | --- |
| **Transmitter** | **Logical Signal Name** | **HS3 CAN dB signal name** |
| Centerstack Settings HMI Client (APIM, CHR..) | Feature.Rq : Operation | CtrStkDsplyOp\_D\_Rq |
| Feature.Rq : FeatureID | CtrStkFeatNoActl |
| Feature.Rq : Configuration | CtrStkFeatConfigActl |
| Feature.Rq : PersIndex | CtrStkPersIndex\_D\_Actl |
| Feature2.Rq : Operation | CtrStkDsplyOp2\_D\_Rq |
| Feature2.Rq : FeatureID | CtrStkFeat2NoActl |
| Feature2.Rq : Configuration | CtrStkFeat2ConfigActl |
| Feature2.Rq : PersIndex | CtrStkPersIndex2\_D\_Actl |
| Cluster Feature Settings Server / Settings Gateway\_Translator Module | Feature.St : FeatureID | FeatNoIpcActl |
| Feature.St : Configuration | FeatConfigIpcActl |
| Feature.St : PersIndex | PersIndexIpc\_D\_Actl |
| Feature2.St : FeatureID | FeatNoIpc2Actl |
| Feature2.St : Configuration | FeatConfigIpc2Actl |
| Feature2.St : PersIndex | PersIndexIpc2\_D\_Actl |
| BCM Feature Settings Server  (Body Control Module) | Feature.St : FeatureID | FeatNoBcm\_No\_Actl |
| Feature.St : Configuration | FeatConfigBcmActl |
| Feature.St : PersIndex | PersIndexBcm\_D\_Actl |
| IPMA Feature Settings Server | Feature.St : FeatureID | FeatNoIpmaActl |
| Feature.St : Configuration | FeatConfigIpmaActl |
| Feature.St : PersIndex | PersIndexIpma\_D\_Actl |
| DSM Feature Settings Server  (Driver Seat Module) | Feature.St : FeatureID | FeatNoDsmActl |
| Feature.St : Configuration | FeatConfigDsmActl |
| Feature.St : PersIndex | PersIndexDsm\_D\_Actl |
| HCM Feature Settings Server  (Headlamp Control Module) | Feature.St : FeatureID | FeatNoHcm\_No\_Actl |
| Feature.St : Configuration | FeatConfigHcmActl |
| Feature.St : PersIndex | Signal does not exist. Treat as though PersIndex is equal to Vehicle |
| FCIM (HVAC) Feature Settings Server | Feature.St : FeatureID | FeatNoFcimActl |
| Feature.St : Configuration | FeatConfigFcimActl |
| Feature.St : PersIndex | PersIndexFcim\_D\_Actl |
| SCCM Feature Settings Server  (Steering Column Control module) | Feature.St : FeatureID | FeatNoSccmActl |
| Feature.St : Configuration | FeatConfigSccmActl |
| Feature.St : PersIndex | PersIndexSccm\_D\_Actl |
| SUMA Feature Settings Server  (Suspension Control Module) | Feature.St : FeatureID | FeatNoSumaActl |
| Feature.St : Configuration | FeatConfigSumaActl |
| Feature.St : PersIndex | PersIndexSuma\_D\_Actl |
| VDM Feature Settings Server  (Variable Dynamics Module) | Feature.St : FeatureID | FeatNoVdmActl |
| Feature.St : Configuration | FeatConfigVdmActl |
| Feature.St : PersIndex | PersIndexVdm\_D\_Actl |
| CCM Feature Settings Server  (CADS Control Module) | Feature.St : FeatureID | FeatNoCcmActl |
| Feature.St : Configuration | FeatConfigCcmActl |
| Feature.St : PersIndex | PersIndexCcm\_D\_Actl |
| DDM Feature Settings Server | Feature.St : FeatureID | FeatNoDdm\_No\_Actl |
| Feature.St : Configuration | FeatConfigDdmActl |
| Feature.St : PersIndex | PersIndexDdm\_D\_Actl |
| Applicable Traffic Sign Recognition module | TsrVlUnitMsgTxt\_D\_Rq | TsrVlUnitMsgTxt\_D\_Rq |
| MyKey Ignition Key Type Server | IgnitionKeyType | IgnKeyType\_D\_Actl |
|  |  |  |
| Speed Unit Server (Cluster) | MetricActv\_B\_Actl | MetricActv\_B\_Actl |
| Neutral Tow Server (PCM) | TrnGearNtmAllow\_B\_Stat | TrnGearNtmAllow\_B\_Stat |
| Distance Unit Server (Cluster) | Disp\_Miles\_Kilometers.St | Mc\_VehUntTrpCoUsrSel\_St |
|  | IaccLamp\_D\_Rq | IaccLamp\_D\_Rq |
|  | SLMde\_D\_Rqdsply | SLMde\_D\_Rqdsply |
|  | Aslicondsply\_D\_Rq | Aslicondsply\_D\_Rq |
| BTT Lite Server | BttLeft\_D\_RqDrv | BttLeft\_D\_RqDrv |
| BTT Lite Server | BttRight\_D\_RqDrv | BttRight\_D\_RqDrv |
|  | Vehicle\_Speed.St | Veh\_V\_ActlEng |
|  | Vehicle\_Speed\_QF | VehVActlEng\_D\_Qf |
|  | EngOilLife\_Pc\_Actl | EngOilLife\_Pc\_Actl |
|  |  |  |

The Centerstack Settings HMI client (ex APIM…) needs to support receiving Feature.St signals from any of the Feature.St signals in the above table.

* Note: the Centerstack Settings HMI Client needs to support any Feature.St it receives from Feature Settings Servers. At the time this spec was written the above table was the latest. Check the module CAN dB for any additional Feature.St signals that the Centerstack Settings HMI Client may receive.

## VS-CLD-REQ-232301/B-Centerstack Settings HMI Client

The Infotainment Centerstack Settings HMI Client is responsible for sending the Feature.Rq HMI selections to the Settings Gateway\_Translator Module / Feature Settings Server and updating its HMI based on the Feature.St responses

## VS-CLD-REQ-232302/A-Settings Gateway\_Translator Module

The Settings Gateway\_Translator module is responsible for being the interface between the Centerstack Settings HMI Client and the Feature Settings Servers

## VS-CLD-REQ-232303/A-Feature Settings Server

The Feature Settings Server is responsible for responding to the request for a particular feature and performing the feature operation

# General Requirements

This specification covers non-infotainment Settings not already covered in other SPSS specifications that will have those settings moving to the infotainment Centerstack module (ex SYNC, CHR). Most the settings in the specification resided in the Cluster and are being moved to the infotainment Centerstack module (ie Centerstack Settings HMI Client).

This specification is in addition to the “Vehicle Settings (Global) SPSS” and other Feature SPSS specifications where those Settings are already covered. When supporting Settings in the Centerstack the “Vehicle Setting (Global) SPSS” and “Vehicle Settings – Settings in the Infotainment Centerstack Module (Global)” shall both be used in addition to any other Feature SPSS with settings that are already supported by the infotainment Centerstack module.

For MyKey settings in the Centerstack feature reference the MyKey Settings in the Centerstack SPSS.

## VS-SR-REQ-232098/P-Feature Based Message Protocol usage for Settings in the Infotainment Centerstack Display Module

The definition of how to use Feature Based Message Protocol for Set and Query operations is defined in the Feature Based Message Protocol SPSS and shall be followed to support this Settings in the Centerstack SPSS specification.

To support this SPSS for Settings in the Centerstack the supplier will need an April 2017 or later version of the FBMP SPSS to accompany this spec.

For the features/functions in this Centerstack Settings SPSS specification the Centerstack Settings HMI Client shall use the Feature.Rq(Operation = Query) method at start-up described in the Feature Based Message Protocol SPSS. The Retry method shall be supported as defined in “FBMP-REQ-023025-Query request but no response form Feature Server (Query Retries)” in the case where there is no response from the Feature Server.

* If the Centerstack Setting HMI Client has not yet queried a setting at start-up (or have not received a response from a query) and the user goes to the HMI for the setting(s) then no settings selections can be shown (HMI to decide how to show that it does not know the setting selection – grey out, don’t show setting, etc). The settings cannot be saved from the previous ignition cycle. The setting selection (ex enabled/disabled selected) HMI can only show a setting as being selected if there was a response from the feature server.
* Note: additional error handling could be taken such as if the user enters a particular HMI settings screen the Centerstack HMI Client can always re-query any items that were missed at start-up.

For the features/functions in this Centerstack Settings SPSS specification the Centerstack Settings HMI Client shall use the Feature.Rq (Operation = Set) method as described in the Feature Based Message Protocol SPSS. The Retry method shall be supported as defined in “FBMP-REQ-023017-Set request but no response from Feature Server” in the case where there is no response from the Feature Server. Unless noted otherwise displaying centerstack settings HMI menu items such as what to do if Feature Client does not receive a response for a set operation or its retry is defined by the HMI specification (HMI team make final call on how to display if never get a response for a set command).

When the ignition\_status changes from OFF/ACC to RUN then the RUN query start-up method is used from the FBMP SPSS for all settings in this specification (FBMP-REQ-023024-Query Operation during Start-Up*)*. For these settings the Centerstack Setting Client shall support the following:

* If already queried everything in Run and the ignition\_status changes to OFF / ACC and back to Run then settings normally queried in Run would have to be re-queried again. When ignition\_status changes to OFF/ACC the menu settings that were queried in Run would be considered unknown.
* When Ignition\_Status changes to Crank it is considered a don’t care and the last Ignition\_Status state shall be assumed. For example if in Run with everything queried and the Ignition\_Status changes to Crank and back to Run then the settings would not need to be re-queried again.
* If a query event is in progress and a crank event happens then after the crank event finishes (Ignition\_Status goes from Crank/Start 🡪 Run) the Query shall resume were it left off.As noted in the FBMP SPSS specification if the user went to a specific Centerstack Settings menu before all the settings are queried at start-up then the active settings menu has priority and shall be queried next (if it wasn’t queried already earlier).
* When the query begins it is recommended to create a priority list on what items are queried first so the setting HMI can update the high priority items first:
  + It is recommended that Pre-Collision Assist, Lane Keeping System settings are queried first (any active safety items deemed higher priority or anything deemed high priority) followed by Driver Alerts (0x0808), Auto High Beam (0x080C), Global Window Open (0x0401), Global Window Close (0x0402)
  + After that the next to be queried is recommended to be any HMI settings that the customer is more likely to see first.
* Example: There is a setting or HMI item the user is likely to see (ie menu not buried many layers deep). It is recommended to query those at the beginning of the query list
* Example2: When the user enters an HMI screen if there is a list of 10 settings and if without scrolling you can only see the top 3 settings then it is recommended that those three items be higher on the query priority list since those are among the first that could be seen by the user.

Note: the priority list might vary by module since the HMI may be different on different modules.

* As noted in the FBMP SPSS specification (FBMP-REQ-023024-Query Operation at Start-Up) if the user went to a specific Centerstack Settings menu before all the settings are queried at start-up then the active settings menu has priority and shall be queried next (if it wasn’t queried already earlier). See FBMP SPSS for details.

The Centerstack Settings HMI Client shall be capable of performing multiple QUERY or SET actions at once. An input from the driver, for example, shall never be “lost” if the Centerstack Settings HMI Client is performing a QUERY.

For any FBMP Settings Server module that only responds to the Cluster FBMP Feature.Rq Set or Query operation signal and not the Centerstack FBMP Feature.Rq Set or Query operation signal then the Cluster will be the gateway/translator module. The Cluster will receive the Centerstack FBMP Feature.Rq message and then will send the corresponding Cluster FBMP Feature.Rq message to the respective module for a particular feature.

For any Settings feature in this specification that the Cluster doesn’t currently use Feature Based Message Protocol for when communicating with the feature server modules the Cluster shall:

* receive a Feature.Rq FBMP message from the Centerstack Settings HMI Client for the selected settings HMI and then the Cluster Gateway/Translator can use the existing Cluster strategy to communicate with the module feature servers to support the settings feature. The Cluster shall send the Feature.St to the Centerstack Settings HMI Client in response to the Feature.Rq so the Settings HMI can be updated.

Example diagram below with Cluster as the Gateway/Translator module for Settings:



## VS-SR-REQ-232106/G-Configuration of Settings HMI displayed in Centerstack

The Infotainment Centerstack module (ie Centerstack Settings HMI Client) shall have a configuration item for the different HMI setting options displayed to the user. This may vary by vehicle program and vary on vehicle program depending on the feature content supported on a particular vehicle.

Reference the HMI specifications which list the configurations (ex DE0X, Byte Y, Bit Z) for all the HMI settings (ie shows what HMI will be activated/deactivated for each configuration).

Reference the Infotainment Centerstack module Setting IDS (Infotainment Diagnostics Specification) for list of configuration settings.

If any conflict between configurations shown in the HMI and IDS bring to Ford’s attention.

## VS-SR-REQ-232237/G-FBMP Feature.St received from any FBMP Feature Settings Server module

The Centerstack Settings HMI Client which sends out the Centerstack FBMP Feature.Rq message shall be able to accept the response from any FBMP Feature Settings Server module that it receives the Feature.St response from (ex could be Cluster, BCM, FCIM…).

* Note: that is as long as Centerstack Settings HMI Client is a receiver of that server modules FBMP Feature.St message in their CAN dB.

The Centerstack Settings HMI Client shall update its HMI setting based on any Feature.St message from any feature server responsible for that setting (as long as the feature number in the Feature.St is a setting the Centerstack HMI Client supports). This could happen because of a Set or Query operation or if the feature server sends the Feature.St on event with a new value (ie without a Set or Query Feature.Rq).

## VS-SR-REQ-233588/D-HMI Settings MyKey Limited

Some settings might not be supported when a MyKey is being used as the key. For those settings the HMI shall not allow the user to select those settings when MyKey limited or may not show those settings at all.

Some settings are MyKey limited in the sense that the go to a default setting when a MyKey is used but still allow the MyKey user to adjust the setting. For those settings there would be no impact on the Centerstack Settings HMI Client since when key to Run with a MyKey the MyKey limited default values will be queried at start-up from the feature servers using Feature Based Message Protocol. The feature servers would respond back to the query with the MyKey default values.

Activating MyKey Settings Limit:

To activate MyKey limited settings, signal IgnKeyType\_D\_Actl must be KeyInIgnMyKey. The Centerstack Settings HMI Client shall monitor this signal to know when MyKey is active.

|  |  |  |  |
| --- | --- | --- | --- |
| **Signal Name** | **Encodings** | **Value** | **Description** |
| IgnitionKeyType | - | - | Type of key that is in the ignition |
|  | KeyReadInProgress | 0x0 | Key(s) will be read now |
|  | KeyInIgnStandardKey | 0x1 | Admin (full) mode |
|  | KeyInIgnMyKey | 0x2 | MyKey restricted mode |
|  | Unknown | 0xE | Disable MyKey System mode |
|  | Invalid | 0xF | Initial value |

## VS-SR-REQ-234228/C-Driver Distraction - Settings in the Centerstack

Reference applicable Driver Restrictions specification(s) to see if there are any driver restrictions on settings in the Centerstack.

* Reference the Driver Restrictions SPSS
* For SYNC Gen 3 also reference the HMI driver restriction specification (H21j\_SYNC\_GEN3\_Driver\_Restrictions specification)
* Any other Settings HMI specifications showing what is driver restricted

## VS-SR-REQ-234437/C-Carryover Settings functionality from other specifications

Settings that are described in other SPSS specifications (ex Vehicle Settings SPSS, Rear View Camera SPSS, Adjustable Chimes SPSS…) are not redefined hear unless noted otherwise. Follow the existing specifications on how those settings work.

For the different MyKey Settings reference the MyKey Settings in the Centerstack SPSS specification.

## FBMP-SR-REQ-238230/F-Enhanced Memory - Active Personality Profile change using Feature Based Message Protocol

If Enhanced Memory is supported, then after the ActivePersonality\_St changes to a new personality profile as defined in the Enhanced Memory SPSS, the FBMP Feature Client (ex Centerstack Settings HMI Client module) shall Query all the FBMP Feature Servers (ex Query all FBMP settings in centerstack) that use FBMP with the PersIndex set to the new personality profile. The query is performed 200 msec after the ActivePersonality\_St signal changes to the new profile (the 200 msec gives the Feature Settings Servers time to update to the new active personality before queried). If the active screen is displaying any FBMP settings, those settings shall be queried first.

* See Enhanced Memory requirement “ENMEM-REQ-099693-Display Data Refresh After Driver Profile Change” in the Enhanced Memory SPSS.

The FBMP Feature Settings Client (ex Centerstack Settings HMI Client module) shall save all FBMP settings the Feature Servers responds back with, regardless of what the PersIndex is set to for Enhanced Memory.

* Note: some Feature Servers using FBMP don’t support enhanced memory (or the FBMP SPSS). Since those features may not respond with a relevant PersIndex, the PersIndex shall be ignored by the FBMP Feature Setting Client.
* Note2: infotainment Feature Server modules supporting the infotainment FBMP SPSS, and not supporting Enhanced Memory, shall respond with PersIndex set to Vehicle per “FBMP-REQ-023037-PersIndex Definition”.

For FBMP Feature Server modules that do support Enhanced Memory, when a FBMP Feature Server module is being Queried, it shall respond back with the settings/data for whatever PersIndex the FBMP Feature Client is Querying regardless what is the Active Personality (ActivePersonality\_St) for Enhanced Memory.

## Specification Overview layout

For the individual settings in this specification they are organized into a Driver Assistance Settings, Vehicle Settings and General Settings section. This may or may not match the actual HMI. Follow the actual HMI specifications for how these are shown on the Centerstack display.

# Functional Definition

## Driver Assistance Settings

### General Requirements - Driver Assistance Settings

#### VS-SR-REQ-234426/D-Driver Assistance Settings Start-Up

Driver Assistance Settings shall be queried by the Centerstack Settings HMI Client when the Ignition\_Status changes from OFF/ACC to Run. See the FBMP SPSS for details on querying at start-up when ignition\_status changes to Run.

When Ignition\_Status changes from Run to OFF/ACC the infotainment Centerstack Driver Information Settings shall be considered unknown. The HMI should not show any settings selections when Driver Assistance Settings selection information is unknown.

#### VS-SR-REQ-234435/C-HMI Activation during Run - Driver Assistance Settings

Settings in this Driver Assistance Settings Function/Section can only be selected on the HMI when the Ignition\_Status = Run.

#### VS-SR-REQ-235185/B-Carryover Driver Information Assistance functionality

The Rear View Camera system interface and settings are defined in the “Rear View Camera SPSS”.

### VS-FUN-REQ-232286/B-Cruise Control

#### Requirements

##### VS-SR-REQ-232245/H-Cruise Control

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Cruise Control - Adaptive Speed Control Auto Setting | 0x081F | 0x00 | Normal Cruise |
| 0x01 | Adaptive Cruise |
| 0x02 | Intelligent |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 6 | 116 |

##### VS-SR-REQ-333002/B-Tolerance - Cruise Control

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Tolerance - Cruise Control Intelligent Adaptive Offset | 0x0860 | 0x00 | -30 |
| 0x01 | -29 |
| 0x02 | -28 |
| … | … |
| 0x3A | +28 |
| 0x3B | +29 |
| 0x3C | +30 |

For the “HMI selection / Configuration name” column above the unitless values (ex +1 tolerance, +2 tolerance) shall be assigned to Imperial (ex MPH) or Metric (ex Km/h) based on what the signal MetricActv\_B\_Actl is set to.

* When MetricActv\_B\_Actl = Inactive then MPH would be the unit shown in the HMI
* When MetricActv\_B\_Actl = Active then Km/h would be the unit shown in the HMI

Example if MetricActv\_B\_Actl = Active then 0x3C would represent +30 Km/h.

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 6 / 11 / 6b | 117, 1007 |

### VSv2-FUN-REQ-332984/A-Cruise Control - Variant 2

Cruise Control “VS-FUN-REQ-232286-Cruise Control” variant 1 is mutually exclusive with the Cruise Control in this variant 2 function. Which version to use is handled via configurations.

#### Requirements

##### VSv2-SR-REQ-333001/A-Cruise Control - Variant 2

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Cruise Control - Adaptive Speed Control Auto Setting | 0x081F | 0x00 | Cruise Control |
| 0x01 | Adaptive Cruise Control |
| 0x02 | Not Used |

Note: for variant 1 of feature number 0x081F see requirement “VS-REQ-23245-Cruise Control”.

|  |  |
| --- | --- |
| **SYNC Gen 4 Screen / ID HMI Number** | **HMI Setting ID** |
| 6b | 1003 |

##### VS-SR-REQ-333002/B-Tolerance - Cruise Control

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Tolerance - Cruise Control Intelligent Adaptive Offset | 0x0860 | 0x00 | -30 |
| 0x01 | -29 |
| 0x02 | -28 |
| … | … |
| 0x3A | +28 |
| 0x3B | +29 |
| 0x3C | +30 |

For the “HMI selection / Configuration name” column above the unitless values (ex +1 tolerance, +2 tolerance) shall be assigned to Imperial (ex MPH) or Metric (ex Km/h) based on what the signal MetricActv\_B\_Actl is set to.

* When MetricActv\_B\_Actl = Inactive then MPH would be the unit shown in the HMI
* When MetricActv\_B\_Actl = Active then Km/h would be the unit shown in the HMI

Example if MetricActv\_B\_Actl = Active then 0x3C would represent +30 Km/h.

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 6 / 11 / 6b | 117, 1007 |

##### VS-SR-REQ-333005/B-with Lane Centering

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Adaptive Cruise Control with Lane Centering / Highway Drive Assist | 0x0841 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 4 Screen / ID HMI Number** | **HMI Setting ID** |
| 6b | 1004 |

##### VS-SR-REQ-333008/A-with Smart Offerings

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Adaptive Cruise Control with Smart Offering | 0x0842 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 4 Screen / ID HMI Number** | **HMI Setting ID** |
| 6b | 1005 |

##### VS-SR-REQ-333009/B-with Speed Signs

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Adaptive Cruise Control with Speed Signs / with Speed Sign Recognition | 0x0843 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 4 Screen / ID HMI Number** | **HMI Setting ID** |
| 6b | 1006 |

### VS-FUN-REQ-232288/B-Speed Limiter

#### Requirements

##### VS-SR-REQ-232284/H-Speed Limiter - Manual / Intelligent

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Speed Limiter | 0x0D00 | 0x00 | Manual Mode (Intelligent Offset OFF) |
| 0x01 | Intelligent Mode (Intelligent Offset ON) |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 7 | 118 |

##### VS-SR-REQ-332970/B-Speed Limiter - Intelligent Offset Tolerance

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Intelligent Offset / Tolerance – Speed Limiter | 0x0D01 | 0x00 | 0 Tolerance / Intelligent Offset |
| 0x01 | +1 Tolerance / Intelligent Offset |
| 0x02 | +2 Tolerance / Intelligent Offset |
| 0x03 | +3 Tolerance / Intelligent Offset |
| 0x04 | +4 Tolerance / Intelligent Offset |
| 0x05 | +5 Tolerance / Intelligent Offset |
| 0x06 | +6 Tolerance / Intelligent Offset |
| 0x07 | +7 Tolerance / Intelligent Offset |
| 0x08 | +8 Tolerance / Intelligent Offset |
| 0x09 | +9 Tolerance / Intelligent Offset |
| 0x0A | +10 Tolerance / Intelligent Offset |

For the “HMI selection / Configuration name” column above the unitless values (ex +1 tolerance, +2 tolerance) shall be assigned to Imperial (ex MPH) or Metric (ex Km/h) based on what the signal MetricActv\_B\_Actl is set to.

* When MetricActv\_B\_Actl = Inactive then MPH would be the unit shown in the HMI
* When MetricActv\_B\_Actl = Active then Km/h would be the unit shown in the HMI

Example if MetricActv\_B\_Actl = Active then 0x01 would represent +1 Km/h Intelligent Offset.

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 7 / 11 | 119 |

### VS-FUN-REQ-233809/B-Traffic Sign Recognition

Note: Traffic Sign Recognition and Speed Limit Information are mutually exclusive. See HMI spec for the configurations for the HMI.

#### Requirements

##### VS-SR-REQ-233812/E-Enable/Disable Traffic Sign Recognition / Speed Limit Information Feature

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Activate Traffic Sign Recognition / Speed Limit Information Customer Enable | 0x0809 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 12 (TSR)  SYNC HMI supplement (SLI under TSR) | 130 |

##### VS-SR-REQ-233914/F-Enable/Disable Speed Warning - Traffic Sign Recognition / Speed Limit Information

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Activate Speed Warning – Traffic Sign recognition / Speed Limit Information | 0x080D | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 12 | 131 |

##### VS-SR-REQ-233813/D-Enable/Disable Speed Warning Chime - Traffic Sign Recognition

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Speed Warning Chime – Traffic Sign Recognition | 0x0830 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 12 | 132 |

##### VS-SR-REQ-233862/K-Less Than Warning Threshold - (Traffic Sign Recognition / Speed Limit Information)

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Less Than Warning Threshold (ex less than 65 Km/h) | 0x080E | 0x10 | 0 Tolerance / Intelligent Offset |
| 0x11 | +1 Tolerance / Intelligent Offset |
| 0x12 | +2 Tolerance / Intelligent Offset |
| 0x13 | +3 Tolerance / Intelligent Offset |
| … | … |
| 0x36 | +38 Tolerance / Intelligent Offset |
| 0x37 | +39 Tolerance / Intelligent Offset |
| 0x38 | +40 Tolerance / Intelligent Offset |

For this setting whether the display is in MPH or Km/h is not based on what Measure Units is set to but based on what the Traffic Sign Recognition / Speed Limit Information signal TsrVlUnitMsgTxt\_D\_Rq is set to. The TsrVlUnitMsgTxt\_D\_Rq signal is an event-periodic status signal and the status signal shall be used in Run to determine if the traffic sign recognition units are in Km/h or MPH.

* If the TsrVlUnitMsgTxt\_D\_Rq signal is missing for more than 5 seconds in Run then the traffic sign recognition units would be displayed in Km/h.

For the “HMI selection / Configuration name” column above the unitless values (ex +1 tolerance, +2 tolerance) shall be assigned to MPH or Km/h based on what the signal TsrVlUnitMsgTxt\_D\_Rq is set to.

* Example 1: if Km/h is selected then 0x12 would represent +2 Km/h Intelligent Offset.
* Example 2: If MPH is selected then 0x12 would represent +2 MPH Intelligent Offset.
* If 0x0 Null or 0x3 NoDataExists is selected, then the Centerstack Settings HMI Client shall use the last saved value of Km/h or MPH for units.

|  |  |  |
| --- | --- | --- |
| Signal Name | Encodings | Notes |
| TsrVlUnitMsgTxt\_D\_Rq | 0x0 Null |  |
| 0x01 Km/h |  |
| 0x02 MPH |  |
| 0x03 NoDataExists |  |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 12 / 11 (TSR)  SYNC HMI supplement (SLI under TSR) | 133 |

##### VS-SR-REQ-233867/K-Greater than Warning Threshold - Traffic Sign Recognition

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Greater than Warning Threshold (ex greater than 65 Km/h) | 0x0811 | 0x10 | 0 Tolerance / Intelligent Offset |
| 0x11 | +1 Tolerance / Intelligent Offset |
| 0x12 | +2 Tolerance / Intelligent Offset |
| 0x13 | +3 Tolerance / Intelligent Offset |
| … | … |
| 0x36 | +38 Tolerance / Intelligent Offset |
| 0x37 | +39 Tolerance / Intelligent Offset |
| 0x38 | +40 Tolerance / Intelligent Offset |

For this setting whether the display is in MPH or Km/h is not based on what Measure Units is set to but based on what the Traffic Sign Recognition / Speed Limit Information signal TsrVlUnitMsgTxt\_D\_Rq is set to. The TsrVlUnitMsgTxt\_D\_Rq signal is an event-periodic status signal and the status signal shall be used in Run to determine if the traffic sign recognition units are in Km/h or MPH.

* If the TsrVlUnitMsgTxt\_D\_Rq signal is missing for more than 5 seconds in Run then the traffic sign recognition units would be displayed in Km/h.

For the “HMI selection / Configuration name” column above the unitless values (ex +1 tolerance, +2 tolerance) shall be assigned to MPH or Km/h based on what the signal TsrVlUnitMsgTxt\_D\_Rq is set to.

* Example 1: if Km/h is selected then 0x12 would represent +2 Km/h Intelligent Offset.
* Example 2: If MPH is selected then 0x12 would represent +2 MPH Intelligent Offset.
* If 0x0 Null or 0x3 NoDataExists is selected, then the Centerstack Settings HMI Client shall use the last saved value of Km/h or MPH for units.

|  |  |  |
| --- | --- | --- |
| Signal Name | Encodings | Notes |
| TsrVlUnitMsgTxt\_D\_Rq | 0x0 Null |  |
| 0x01 Km/h |  |
| 0x02 MPH |  |
| 0x03 NoDataExists |  |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 12 / 11 (TSR)  SYNC HMI supplement (SLI under TSR) | 135 / 136 |

##### VS-SR-REQ-331385/A-Single Tolerance Warning Threshold - Traffic Sign Recognition / Speed Limit Information

When the HMI for Traffic Sign Recognition or Speed Limit information only has one tolerance setting in the HMI then:

* At start-up the Centerstack Settings HMI Client shall query both 0x080E and 0x0811.
* At start-up when the Centerstack Settings HMI Client queries 0x080E and 0x0811 the only value looked at to update the HMI for single tolerance setting is 0x080E.
  + Note: at the time this spec was written the reason the Centerstack Settings HMI Client has to query both settings is because the HUD module will need to see both 0x080E and 0x0811.
* When selecting a tolerance setting the Centerstack Settings HMI Client shall perform the Feature.Rq Set operation for both 0x080E and 0x0811 set to the same value. The set operation shall be put on the CAN bus for both 0x080E and 0x0811 within 100 msec of each other.

Reference requirements “VS-REQ-233862-Less Than Warning Threshold” and “VS-REQ-VS-REQ-233867-Greater Than Warning Threshold” for details on feature numbers 0x0811 and 0x080E.

##### VS-SR-REQ-251193/C-Traffic Sign Recognition Settings / Speed Limit Information HMI not user selectable

Overview:

The traffic sign recognition / speed limit information HMI settings are not selectable when either Intelligent Cruise Control or Intelligent Speed Limiter are active in the vehicle (activated on cruise control switch).

Requirement:

The table below describes what CAN signals to look at to decide when the traffic sign recognition / speed limit information settings HMI is not selectable. When the conditions in the table are true for a particular row then the traffic sign recognition / speed limit information settings HMI shall be not selectable. If none of the rows are true then the TSR / SLI Settings HMI shall be selectable.

Signals SLMde\_D\_Rqdsply and Aslicondsply\_D\_Rq are only applicable when Intelligent Speed Assist is configured enabled (see diagnostic spec for configuration, ex DE0X).

Signal IaccLamp\_D\_Rq is only applicable when Intelligent Adaptive Cruise Control is configured enabled (see diagnostic spec for configuration, ex DE0X).

|  |  |  |  |
| --- | --- | --- | --- |
| IaccLamp\_D\_Rq | SLMde\_D\_Rqdsply | Aslicondsply\_D\_Rq | TSR Setting HMI |
| 0x1 DisplayIaccIcon | N/A | N/A | TSR greyed out |
| N/A | 0x1 Auto Speed\_Limiter symbol | 0x1 On-Passive | TSR greyed out |
| N/A | 0x1 Auto Speed\_Limiter symbol | 0x2 On-Active | TSR greyed out |
| N/A | 0x1 Auto Speed\_Limiter symbol | 0x3 Override | TSR greyed out |
|  |  |  |  |

Note: when say TSR (traffic sign recognition) / SLI (speed limit information) greyed out the HMI team will decide how to show this (not necessarily greyed out but a way to show that TSR/SLI settings are not selectable). See HMI specs for details.

### VS-FUN-REQ-272504/B-Speed Limit Information / Speed Sign Recognition

Note:

* Traffic Sign Recognition and Speed Limit Information / Speed Sign Recognition are mutually exclusive.
* Speed Limit Information and Speed Sign Recognition are two HMI names for the same feature. The names can be used interchangeably.

#### Requirements

##### VS-SR-REQ-233812/E-Enable/Disable Traffic Sign Recognition / Speed Limit Information Feature

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Activate Traffic Sign Recognition / Speed Limit Information Customer Enable | 0x0809 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 12 (TSR)  SYNC HMI supplement (SLI under TSR) | 130 |

##### VS-SR-REQ-233914/F-Enable/Disable Speed Warning - Traffic Sign Recognition / Speed Limit Information

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Activate Speed Warning – Traffic Sign recognition / Speed Limit Information | 0x080D | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 12 | 131 |

##### VS-SR-REQ-233862/K-Less Than Warning Threshold - (Traffic Sign Recognition / Speed Limit Information)

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Less Than Warning Threshold (ex less than 65 Km/h) | 0x080E | 0x10 | 0 Tolerance / Intelligent Offset |
| 0x11 | +1 Tolerance / Intelligent Offset |
| 0x12 | +2 Tolerance / Intelligent Offset |
| 0x13 | +3 Tolerance / Intelligent Offset |
| … | … |
| 0x36 | +38 Tolerance / Intelligent Offset |
| 0x37 | +39 Tolerance / Intelligent Offset |
| 0x38 | +40 Tolerance / Intelligent Offset |

For this setting whether the display is in MPH or Km/h is not based on what Measure Units is set to but based on what the Traffic Sign Recognition / Speed Limit Information signal TsrVlUnitMsgTxt\_D\_Rq is set to. The TsrVlUnitMsgTxt\_D\_Rq signal is an event-periodic status signal and the status signal shall be used in Run to determine if the traffic sign recognition units are in Km/h or MPH.

* If the TsrVlUnitMsgTxt\_D\_Rq signal is missing for more than 5 seconds in Run then the traffic sign recognition units would be displayed in Km/h.

For the “HMI selection / Configuration name” column above the unitless values (ex +1 tolerance, +2 tolerance) shall be assigned to MPH or Km/h based on what the signal TsrVlUnitMsgTxt\_D\_Rq is set to.

* Example 1: if Km/h is selected then 0x12 would represent +2 Km/h Intelligent Offset.
* Example 2: If MPH is selected then 0x12 would represent +2 MPH Intelligent Offset.
* If 0x0 Null or 0x3 NoDataExists is selected, then the Centerstack Settings HMI Client shall use the last saved value of Km/h or MPH for units.

|  |  |  |
| --- | --- | --- |
| Signal Name | Encodings | Notes |
| TsrVlUnitMsgTxt\_D\_Rq | 0x0 Null |  |
| 0x01 Km/h |  |
| 0x02 MPH |  |
| 0x03 NoDataExists |  |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 12 / 11 (TSR)  SYNC HMI supplement (SLI under TSR) | 133 |

##### VS-SR-REQ-233867/K-Greater than Warning Threshold - Traffic Sign Recognition

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Greater than Warning Threshold (ex greater than 65 Km/h) | 0x0811 | 0x10 | 0 Tolerance / Intelligent Offset |
| 0x11 | +1 Tolerance / Intelligent Offset |
| 0x12 | +2 Tolerance / Intelligent Offset |
| 0x13 | +3 Tolerance / Intelligent Offset |
| … | … |
| 0x36 | +38 Tolerance / Intelligent Offset |
| 0x37 | +39 Tolerance / Intelligent Offset |
| 0x38 | +40 Tolerance / Intelligent Offset |

For this setting whether the display is in MPH or Km/h is not based on what Measure Units is set to but based on what the Traffic Sign Recognition / Speed Limit Information signal TsrVlUnitMsgTxt\_D\_Rq is set to. The TsrVlUnitMsgTxt\_D\_Rq signal is an event-periodic status signal and the status signal shall be used in Run to determine if the traffic sign recognition units are in Km/h or MPH.

* If the TsrVlUnitMsgTxt\_D\_Rq signal is missing for more than 5 seconds in Run then the traffic sign recognition units would be displayed in Km/h.

For the “HMI selection / Configuration name” column above the unitless values (ex +1 tolerance, +2 tolerance) shall be assigned to MPH or Km/h based on what the signal TsrVlUnitMsgTxt\_D\_Rq is set to.

* Example 1: if Km/h is selected then 0x12 would represent +2 Km/h Intelligent Offset.
* Example 2: If MPH is selected then 0x12 would represent +2 MPH Intelligent Offset.
* If 0x0 Null or 0x3 NoDataExists is selected, then the Centerstack Settings HMI Client shall use the last saved value of Km/h or MPH for units.

|  |  |  |
| --- | --- | --- |
| Signal Name | Encodings | Notes |
| TsrVlUnitMsgTxt\_D\_Rq | 0x0 Null |  |
| 0x01 Km/h |  |
| 0x02 MPH |  |
| 0x03 NoDataExists |  |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 12 / 11 (TSR)  SYNC HMI supplement (SLI under TSR) | 135 / 136 |

##### VS-SR-REQ-331385/A-Single Tolerance Warning Threshold - Traffic Sign Recognition / Speed Limit Information

When the HMI for Traffic Sign Recognition or Speed Limit information only has one tolerance setting in the HMI then:

* At start-up the Centerstack Settings HMI Client shall query both 0x080E and 0x0811.
* At start-up when the Centerstack Settings HMI Client queries 0x080E and 0x0811 the only value looked at to update the HMI for single tolerance setting is 0x080E.
  + Note: at the time this spec was written the reason the Centerstack Settings HMI Client has to query both settings is because the HUD module will need to see both 0x080E and 0x0811.
* When selecting a tolerance setting the Centerstack Settings HMI Client shall perform the Feature.Rq Set operation for both 0x080E and 0x0811 set to the same value. The set operation shall be put on the CAN bus for both 0x080E and 0x0811 within 100 msec of each other.

Reference requirements “VS-REQ-233862-Less Than Warning Threshold” and “VS-REQ-VS-REQ-233867-Greater Than Warning Threshold” for details on feature numbers 0x0811 and 0x080E.

##### VS-SR-REQ-251193/C-Traffic Sign Recognition Settings / Speed Limit Information HMI not user selectable

Overview:

The traffic sign recognition / speed limit information HMI settings are not selectable when either Intelligent Cruise Control or Intelligent Speed Limiter are active in the vehicle (activated on cruise control switch).

Requirement:

The table below describes what CAN signals to look at to decide when the traffic sign recognition / speed limit information settings HMI is not selectable. When the conditions in the table are true for a particular row then the traffic sign recognition / speed limit information settings HMI shall be not selectable. If none of the rows are true then the TSR / SLI Settings HMI shall be selectable.

Signals SLMde\_D\_Rqdsply and Aslicondsply\_D\_Rq are only applicable when Intelligent Speed Assist is configured enabled (see diagnostic spec for configuration, ex DE0X).

Signal IaccLamp\_D\_Rq is only applicable when Intelligent Adaptive Cruise Control is configured enabled (see diagnostic spec for configuration, ex DE0X).

|  |  |  |  |
| --- | --- | --- | --- |
| IaccLamp\_D\_Rq | SLMde\_D\_Rqdsply | Aslicondsply\_D\_Rq | TSR Setting HMI |
| 0x1 DisplayIaccIcon | N/A | N/A | TSR greyed out |
| N/A | 0x1 Auto Speed\_Limiter symbol | 0x1 On-Passive | TSR greyed out |
| N/A | 0x1 Auto Speed\_Limiter symbol | 0x2 On-Active | TSR greyed out |
| N/A | 0x1 Auto Speed\_Limiter symbol | 0x3 Override | TSR greyed out |
|  |  |  |  |

Note: when say TSR (traffic sign recognition) / SLI (speed limit information) greyed out the HMI team will decide how to show this (not necessarily greyed out but a way to show that TSR/SLI settings are not selectable). See HMI specs for details.

### VS-FUN-REQ-332901/B-Speed Limit - Variant 2 (variant 2 of TSR, SLI and Speed Limiter)

The functions “VS-FUN-233809-Traffic Sign Recognition”, “VS-FUN-272504-Speed Limit Information / Speed Sign Recognition” and “VS-FUN-232288-Speed Limiter” are mutually exclusive with this Speed Limit function. This is handled via configurations.

#### Requirements

##### VSv2-SR-REQ-332978/B-Limiter with Speed Signs - Speed Limit

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Limiter with Speed Signs  / Intelligent Speed Assist | 0x0D00 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: for variant 1 of this feature number 0x0D00 see SPSS requirement “VS-REQ-232284-Speed Limiter – Manual / Intelligent”.

|  |  |
| --- | --- |
| **SYNC Gen 4 Screen / ID HMI Number** | **HMI Setting ID** |
| 170 | 1001 |

##### VSv2-SR-REQ-332979/A-Speed Sign Warning - Speed Limit

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Speed Sign Warning | 0x080D | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: for variant 1 of this feature number 0x080D see SPSS requirement “VS-REQ-233914-Enable/Disable Speed Warning – Traffic Sign Recognition / Speed Limit Information”.

|  |  |
| --- | --- |
| **SYNC Gen 4 Screen / ID HMI Number** | **HMI Setting ID** |
| 170 | 1000 |

##### VSv2-SR-REQ-332980/B-Tolerance - Speed Limit

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Tolerance - Speed Limit | 0x080E | 0x10 | 0 Tolerance |
| 0x11 | +1 Tolerance |
| 0x12 | +2 Tolerance |
| 0x13 | +3 Tolerance |
| … | … |
| 0x36 | +38 Tolerance |
| 0x37 | +39 Tolerance |
| 0x38 | +40 Tolerance |

Note: for variant 1 of this feature number 0x080E see SPSS requirement “VS-REQ-Less Than Warning Threshold – (Traffic Sign Recognition / Speed Limit Information)”.

For this setting whether the display is in MPH or Km/h is not based on what Measure Units is set to but based on what the Traffic Sign Recognition / Speed Limit Information signal TsrVlUnitMsgTxt\_D\_Rq is set to. The TsrVlUnitMsgTxt\_D\_Rq signal is an event-periodic status signal and the status signal shall be used in Run to determine if the traffic sign recognition units are in Km/h or MPH.

* If the TsrVlUnitMsgTxt\_D\_Rq signal is missing for more than 5 seconds in Run then the traffic sign recognition units would be displayed in Km/h.

For the “HMI selection / Configuration name” column above the unitless values (ex +1 tolerance, +2 tolerance) shall be assigned to MPH or Km/h based on what the signal TsrVlUnitMsgTxt\_D\_Rq is set to.

* Example 1: if Km/h is selected then 0x12 would represent +2 Km/h Intelligent Offset.
* Example 2: If MPH is selected then 0x12 would represent +2 MPH Intelligent Offset.
* If 0x0 Null or 0x3 NoDataExists is selected, then the Centerstack Settings HMI Client shall use the last saved value of Km/h or MPH for units.

|  |  |  |
| --- | --- | --- |
| Signal Name | Encodings | Notes |
| TsrVlUnitMsgTxt\_D\_Rq | 0x0 Null |  |
| 0x01 Km/h |  |
| 0x02 MPH |  |
| 0x03 NoDataExists |  |

|  |  |
| --- | --- |
| **SYNC Gen 4 Screen / ID HMI Number** | **HMI Setting ID** |
| 170 | 1002 |

### VS-FUN-REQ-232290/B-Lane Keeping System

#### Requirements

##### VS-SR-REQ-232285/F-Lane Keeping Mode

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Lane Keeping Mode / Lane Keeping Mode Customer Enable | 0x0807 | 0x01 | Alert Only / LDW |
| 0x02 | Aid Only / LKA |
| 0x03 | Aid & Alert / LDW + LKA |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 9B | 120 |

##### VS-SR-REQ-233578/E-Lane Keeping Intensity

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Lane Keeping Intensity / LDW Haptic Intensity | 0x080B | 0x00 | Undefined / Not Used |
| 0x01 | Low |
| 0x02 | Normal / Medium |
| 0x03 | High |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 9C | 121 |

##### VS-SR-REQ-233579/E-Lane Keeping Sensitivity

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **Configuration Name /**  **HMI selection** |
| Lane Keeping Sensitivity | 0x0806 | 0x00 | Normal / Level 1 |
| 0x01 | Increased / Level 2 |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 9D | 122 |

##### VS-SR-REQ-271525/B-Lane Keeping Aid

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Lane Keeping Aid | 0x0870 | 0x00 | Off |
| 0x01 | On |
| 0x02 | Reduced / Basic |
| 0x03 | Enhanced / Plus |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| Reference SYNC HMI supplement for AID Lane Keeping System | 123 |

##### VS-SR-REQ-271526/B-Lane Keeping Alert

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

Example Lane Keeping Alert HMI (see HMI documents for actual HMI).

|  |  |  |
| --- | --- | --- |
| Alert | ○ | High |
|  | ● | Normal |
|  | ○ | Low |
|  | ○ | On |
|  | ○ | Off |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Alert  Lane Keeping Intensity / LDW Haptic Intensity | 0x080B | 0x00 | OFF |
| 0x01 | Low |
| 0x02 | Normal / Medium / ON |
| 0x03 | High |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| Reference SYNC HMI supplement for Alert LDW | 124 |

### VS-FUN-REQ-233569/B-Pre-Collision Assist

#### Requirements

##### VS-SR-REQ-239185/F-Pre-Collision Assist function - Enable / Disable

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** | **HMI MyKey Limited**  **Yes/No** |
| Pre-Collision Assist ON/OFF – FCW ON/OFF | 0x0804 | 0x00 | Disabled / FCW\_OFF | Yes |
| 0x01 | Enabled / FCW\_ON |

The Pre-Collision Assist ON/OFF setting menu selection is not shown in the HMI when a MyKey is used

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 10 | 125 |

##### VS-SR-REQ-233571/H-Distance Indication - Pre-Collision Assist

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** | **HMI MyKey Limited**  **Yes/No** |
| Distance Indication / Forward Distance Alerts\_ON/OFF | 0x080F | 0x00 | OFF / FDA\_OFF | Yes |
| 0x01 | ON / FDA\_ON |

The Distance Indication ON/OFF setting menu selection is not shown in the HMI when a MyKey is used

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 10 | 126 |

##### VS-SR-REQ-233575/G-Active Braking - Pre-Collision Assist

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** | **HMI MyKey Limited**  **Yes/No** |
| Active Braking / FCW\_BrakingOnOFF | 0x0840 | 0x00 | OFF / FCW\_BrakingOFF | No |
| 0x01 | ON / FCW BrakingOn |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 10 | 127 |

##### VS-SR-REQ-233576/H-Emergency Steering - Pre-Collision Assist

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** | **HMI MyKey Limited**  **Yes/No** |
| Evasive Steering / Emergency Steering | 0x0D50 | 0x00 | OFF / Disabled | No |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 10 | 128 |

##### VS-SR-REQ-233577/I-Warning Sensitivity - Pre-Collision Assist

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** | **HMI MyKey Limited**  **Yes/No** |
| Warning Sensitivity / FCW Sensitivity / Alert Sensitivity | 0x0802 | 0x00 | Not Used | No |
| 0x01 | Low / FCW\_Sensitivity\_1 |
| 0x02 | Normal / FCW\_Sensitivity\_2 |
| 0x03 | High / FCW\_Sensitivity\_3 |

Note: at the time this spec was written when a MyKey is used the Warning Sensitivity sets its default (see FCW specs for details). The MyKey user can still change the setting from the default. This has no effect on the Centerstack Setting HMI client since the default value is queried at start-up when the MyKey is turned to Run.

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 10 / 10B | 129 |

### VS-FUN-REQ-233942/A-Blindspot Detection

#### Requirements

##### VS-SR-REQ-233944/E-Blindspot Detection (vehicle - non-trailer)

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** | **HMI MyKey Limited**  **Yes/No** |
| Blind Spot Detection | 0x0920 | 0x00 | OFF / Disabled | Yes |
| 0x01 | ON / Enabled |

There is no HMI shown for this setting when a MyKey is used.

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 2 | 299 |

##### VS-SR-REQ-233945/C-Trailer Blindspot Detection

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** | **HMI MyKey Limited**  **Yes/No** |
| Trailer Blind Spot Detection | 0x0921 | 0x00 | OFF / Disabled | Yes |
| 0x01 | ON / Enabled |

There is no HMI shown for this setting when a MyKey is used.

|  |
| --- |
| **SYNC Gen 3 Screen / ID HMI Number** |
| 2 |

### VS-FUN-REQ-273589/A-BTT Light (Blind Spot Trailer Tow)

#### Requirements

##### VS-SR-REQ-273590/B-Active Trailer Setting - BTT Lite

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

This is used by the Centerstack Settings HMI Client to tell the BTT Lite Server via a Feature.Rq set command that a trailer was selected or that no active trailer was selected. The BTT Lite Server would respond back with the Feature.St response and the Centerstack Settings HMI Client would update its HMI based on this.

The Centerstack Settings HMI Client will know the active trailer setting at start-up when the Centerstack Settings HMI Client queries the BTT Lite Server.

The BTT Lite Server shall send any update to the active trailer to the Centerstack Settings HMI Client via the Feature.St message.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Trailer Active (BTT Lite) | 0x0930 | 0x00 | None / No Active Trailer |
| 0x01 | Trailer A Active |
| 0x02 | Trailer B Active |
| 0x03 | Trailer C Active |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 42, 48, 47 | 147 |

##### VS-SR-REQ-273689/D-Trailer Length - BTT Lite

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

Trailer A/B/C Length Feature.Rq is used by the Centerstack HMI Client to tell the BTT Lite Server via a Feature.Rq Set command what trailer length was selected (or faulty) and the BTT Lite server shall respond with the Feature.St with the updated trailer length (or faulty) setting.

The Centerstack Setting HMI Client will know at start-up the following when the Centerstack Settings HMI Client queries the BTT Lite Server:

* The Trailer Lengths
* Whether a particular trailer has not been set-up
* Whether a particular trailer is faulty (Trailer doesn’t meet size requirements)

If when editing the trailer length the trailer does not meet trailer length size requirement then:

1. The Centerstack HMI Client shall set Feature.Rq config equal to “Faulty” in the Feature.Rq Set command, and then
2. The BTT Lite Server shall respond with the Feature.St Cofiguration set to “Faulty”

Note: See HMI spec for whether the Centerstack HMI Client selects the trailer with invalid trailer length (ie 0x0930). If says select as active trailer then the faulty trailer (invalid trailer size) shall be made active.

If in trailer length edit mode after entering the trailer length once the BTT Lite Server responds back with the Feature.St for length if the trailer that was being edited needs to be automatically selected/activated without user input (this will be noted in the HMI if the edited length trailer should become the active trailer) then:

1. the Centerstack Settings HMI Client shall send a Feature.Rq Set command “Trailer Active (feature # 0x0930)” for the trailer that was being edited, and then
2. the BTT Lite Server shall respond back with the Feature.St with the active trailer.

Note: For SYNC Gen 3 steps 1 and 2 above are done when:

* 1. Get a pop-up to edit the trailer length (SYNC screen number 48)
  2. Select a trailer setting length that is not set-up on the “select trailer” HMI screen (SYNC screen number 42)
  3. Note: The active trailer is not automatically selected if the user changes trailer length from the “Change Trailer Length” HMI screen (SYNC screen number 43)
* See SYNC HMI for the latest. If SYNC HMI and SPSS contradict follow the HMI and bring issue of conflict to Ford’s attention

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Trailer A Length (BTT Lite) | 0x0931 | 0x00 | 0.0 meters |
| 0x01 | 0.1 meters |
| 0x02 | 0.2 meters |
| … | … |
| 0x7D | 12.5 meters |
| 0x7E | Trailer A Length not set-up / No Data Exists |
| 0x7F | Faulty (Trailer doesn’t meet size requirements) |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Trailer B Length (BTT Lite) | 0x0932 | 0x00 | 0.0 meters |
| 0x01 | 0.1 meters |
| 0x02 | 0.2 meters |
| … | … |
| 0x7D | 12.5 meters |
| 0x7E | Trailer B Length not set-up / No Data Exists |
| 0x7F | Faulty (Trailer doesn’t meet size requirements) |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Trailer C Length (BTT Lite) | 0x0933 | 0x00 | 0.0 meters |
| 0x01 | 0.1 meters |
| 0x02 | 0.2 meters |
| … | … |
| 0x7D | 12.5 meters |
| 0x7E | Trailer C Length not set-up / No Data Exists |
| 0x7F | Faulty (Trailer doesn’t meet size requirements) |

Whether the trailer lengths are in Imperial (ie Feet) or Metric (ex Meters) is based on what the Measure Units is set to. See VS-SR-REQ-234039-Measure Units for details.

* If the units are imperial then the Centerstack HMI Client will have to round the imperial value (feet) received to the closest metric length equivalent.
  + Ex. HMI the user selects 6ft on the HMI. When converted to metric that is 1.8288 meters. For Trailer A/B/C Length the configuration encoding would be rounded to 1.8 meters.

|  |  |  |
| --- | --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number**  **For Trailer Length set-up** | **SYNC Gen 3 Screen / ID HMI Number**  **For Faulty pop-up / Send Faulty setting** | **HMI Setting ID** |
| 46 | 45 | 148 |

##### VS-SR-REQ-273980/D-Pop-up Trailer Set-up Request - BTT Lite

The Centerstack Settings HMI Client shall initiate a BTT Lite trailer pop-up when BttLeft\_D\_RqDrv changes to Request OR BttRight\_D\_RqDrv changes to Request AND Ignition\_Status = Run.

* If a pop-up event occurs as defined above at start-up when all the settings feature ID’s are being queried (ignition = OFF 🡪 Run) and the feature numbers 0x930, 0x931, 0x932 and 0x933 have not yet been queried then:
  + The pop-up shall not be shown until feature numbers 0x930, 0x931, 0x932 and 0x933 have all been queried.
  + the next feature numbers to be queried are 0x930, 0x931, 0x932 and 0x933. This means that these feature numbers will jump ahead off all other feature numbers and be queried next. Once queried the BTT Lite trailer pop-up can be shown.

The Centerstack HMI client shall close any active BTT Lite trailer pop-up when:

* BttLeft\_D\_RqDrv != Request AND BttRight\_D\_RqDrv != Request, OR
* The HMI specification calls out closing the pop-up (ex press button on pop-up, speed limited etc)

If Ignition\_Status does not equal Run/Crank then the Centerstack HMI Client shall not show the BTT Lite pop-up.

See HMI specs for driver distraction requirements for BTT Lite.

* Ex. If the pop-up is shown and the vehicle speed increase above the limit for driver distraction the pop-up shall not be shown.
  + Note: If vehicle slows back down to below the limit for driver distraction (make sure hysteresis protection is added in) and BTTLeft\_D\_RqDrv or BTTRight\_D\_RqDrv equals Active then show the pop-up again.

Note (informational only – not to design to):

One or both of the BTTRight\_D\_RqDrv / BTTLeft\_D\_RqDrv signals are typically set to “Request” when a trailer is connected that wasn’t connected on the previous ignition cycle.

Example BTT Lite pop-up HMI (see HMI spec for actual HMI)



|  |
| --- |
| **SYNC Gen 3 Screen / ID HMI Number** |
| 48 |

##### MD-REQ-274072/C-BTTLeft\_D\_RqDrv

**Message Type**: Request

BTT Lite (Blind spot Trailer Tow Lite) left side detection signal sent to tell if the BTT Lite pop-up should be shown in the Centerstack HMI

|  |  |  |  |
| --- | --- | --- | --- |
| **Logical Signal Name** | **Literals** | **Value** | **Description** |
| BttLeft\_D\_RqDrv | Null | 0x0 |  |
| No Request | 0x1 |  |
| Request | 0x2 | Used for pop-up |
| Not Used | 0x3 |  |

##### MD-REQ-274073/C-BTTRight\_D\_RqDrv

**Message Type**: Request

BTT Lite (Blind spot Trailer Tow Lite) right side detection signal sent to tell if the BTT Lite pop-up should be shown in the Centerstack HMI

|  |  |  |  |
| --- | --- | --- | --- |
| **Logical Signal Name** | **Literals** | **Value** | **Description** |
| BttRight\_D\_RqDrv | Null | 0x0 |  |
| No Request | 0x1 |  |
| Request | 0x2 | Used for pop-up |
| Not Used | 0x3 |  |

### VS-FUN-REQ-233946/A-Cross Traffic Alert

#### Requirements

##### VS-SR-REQ-233948/D-Cross Traffic Alert

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** | **HMI MyKey Limited**  **Yes/No** |
| Cross Traffic Alert | 0x0922 | 0x00 | OFF / Disabled | Yes |
| 0x01 | ON / Enabled |

There is no HMI shown for this setting when a MyKey is used.

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 2 | 149 |

### VS-FUN-REQ-233949/A-Wrong Way Alert

#### Requirements

##### VS-SR-REQ-233951/D-Wrong Way Alert

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Wrong Way Alert | 0x0850 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 2 | 150 |

### VS-FUN-REQ-234013/A-Driver Alert

#### Requirements

##### VS-SR-REQ-234015/D-Driver Alert

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Driver Alert / DAS Customer Enable | 0x0808 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 2 | 152 |

### VS-FUN-REQ-234026/B-Trailer Sway

#### Requirements

##### VS-SR-REQ-234028/E-Trailer Sway

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Trailer Sway | 0x0E00 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |
| --- |
| **HMI Setting ID** |
| 153 |

### VS-FUN-REQ-234029/B-Park Aid

#### Requirements

##### VS-SR-REQ-234031/F-Park Aid (not long term)

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** | **HMI MyKey Limited**  **Yes/No** |
| Park Aid (~~Reverse Park Aid~~) | 0x0950 | 0x00 | OFF / Disabled | Yes |
| 0x01 | ON / Enabled |

There is no HMI shown for this setting when a MyKey is used.

Note: verify with HMI team if this is correct. This is probably the short term park aid setting that is only shown for one ignition cycle

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 2 | 155 |

### VS-FUN-REQ-312390/A-Long Term Park Aid Disable

#### Requirements

##### VS-SR-REQ-312391/A-Long Term Park Aid Disable

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Front Park Aid Long Term Disable | 0x0952 | 0x00 | OFF / Disable Switch |
| 0x01 | ON / Enable Switch |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Settings ID** |
| 64 | 301 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Rear Park Aid Long Term Disable | 0x0951 | 0x00 | OFF / Disable Switch |
| 0x01 | ON / Enable Switch |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Settings ID** |
| 64 | 300 |

### VS-FUN-REQ-239157/B-Traction Control

#### Requirements

##### VS-SR-REQ-239158/F-Traction Control

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** | **HMI MyKey Limited**  **Yes / No** |
| Traction Control | 0x0E01 | 0x00 | OFF / Disabled | Yes |
| 0x01 | ON / Enabled |

MyKey Limited Setting:

* Traction Control can only be adjusted by a MyKey user when admin user has selected “Selectable” for the MyKey user from the MyKey Settings HMI menu.
  + See MyKey Settings in the Centerstack SPSS for details on the CAN status signals to look at
* There shall be no Traction Control setting HMI for the MyKey user when the admin user selects “Traction Control Always ON” for the MyKey user from the MyKey Settings HMI menu.
  + See MyKey Settings in the Centerstack SPSS for details on the CAN status signals to look at

Note: if there is AdvanceTrac setting in place of Traction Control setting then AdvanceTrac would use the same feature number as above

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 2 | 221, 222 |

### VS-FUN-REQ-239159/B-Hill Decent Control

#### Requirements

##### VS-SR-REQ-239160/C-Hill Decent Control

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Hill Decent Control | 0x0E02 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 2 | 223 |

### VS-FUN-REQ-234003/A-Hill Start Assist

#### Requirements

##### VS-SR-REQ-234005/D-Hill Start Assist

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Hill Start Assist | 0x0E03 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 2 | 151 |

### VS-FUN-REQ-239163/A-Tow Haul

#### Requirements

##### VS-SR-REQ-239164/E-Tow Haul

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Tow Haul | 0x0D02 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |
| 0x02 | Automatic |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 2 / 39 | 224 |

### VS-FUN-REQ-242438/C-EV+ Mode

#### Requirements

##### VS-SR-REQ-242439/B-EV+ Mode

~~For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.~~

~~If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.~~

|  |  |  |  |
| --- | --- | --- | --- |
| **~~Feature Description~~** | **~~Feature Number~~** | **~~Configuration Number~~** | **~~HMI selection / Configuration Name~~** |
| ~~EV+ Mode~~ | ~~0x0907~~ | ~~0x00~~ | ~~OFF / Disabled~~ |
| ~~0x01~~ | ~~ON / Enabled~~ |

|  |
| --- |
| **~~SYNC Gen 3 Screen / ID HMI Number~~** |
| ~~2~~ |

### VS-FUN-REQ-272332/A-Grade Assist

#### Requirements

##### VS-SR-REQ-272333/B-Grade Assist

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Grade Assist | 0x0D04 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 2 | 154 |

### VS-FUN-REQ-273582/B-Engine Start/Stop Speed Threshold (Auto Start/Stop Speed Threshold)

#### Requirements

##### VS-SR-REQ-273583/C-Engine Start/Stop Speed Threshold (Auto StartStop Speed Threshold)

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Engine Start/Stop Speed Threshold (Auto Start/Stop Speed Threshold)  HEV Boost Sensitivity /Engine Start Stop Speed Threshold – (Mile Hybrids 48V) | 0x0D05 | 0x00 | Undefined / Not Used / Off |
| 0x01 | Low |
| 0x02 | Medium |
| 0x03 | High |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 40 | 226 |

### VS-FUN-REQ-280534/A-Drive Control (Selectable Drive Mode)

Note: Drive Control and Adaptive Steering are mutually exclusive (use some of the same feature numbers).

#### Requirements

##### VS-SR-REQ-280535/D-Handling in Drive / Drive Control manual transmission / Driver Select Transmission

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Gear in Drive – Continuously Controlled Damping  (Handling in Drive / Handling with Manual Transmission) | 0x0B00 | 0x00 | No Mode Selected |
| 0x01 | Comfort |
| 0x02 | Normal |
| 0x03 | Sport |

**Req**: this shall be used for the handling HMI that doesn’t show Drive or Sport for certain configurations.

* Ex when used (see HMI spec for actual HMI):

|  |  |
| --- | --- |
| **Drive Control** | submenu |
| comfort | radial |
| normal | radial |
| sport | radial |

|  |  |
| --- | --- |
| SYNC Gen 3 Screen / ID HMI Number | HMI Setting ID |
| 78 | 231 |

OR,

|  |  |
| --- | --- |
| **Driver Select Suspension** |  |
| Sport | radial |
| Normal | radial |
| Comfort | radial |

|  |  |
| --- | --- |
| SYNC Gen 3 Screen / ID HMI Number | HMI Setting ID |
| 105 | 238 |

The two HMI’s above would be handled by configurations

Note: see HMI settings ID to see the actual HMI. Above was just for an example for reference only

**Req**: this shall be used for the Handling HMI that shows gear in Drive for certain configurations.

* Ex when used (see HMI spec for actual HMI):

|  |  |
| --- | --- |
| **Drive Control** | submenu |
| **Handling in D** | submenu |
| comfort | radial |
| normal | radial |
| sport | radial |

Note: see HMI settings ID to see the actual HMI. Above was just for an example for reference only

The different HMI’s above and which to use would be covered by the configurations in the HMI spec.

|  |  |
| --- | --- |
| SYNC Gen 3 Screen / ID HMI Number | HMI Setting ID |
| 75 | 228 |

##### VS-SR-REQ-281380/B-Handling in Sport - Drive Control

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Gear in Sport – Continuously Controlled Damping  (Handling in Sport) | 0x0B01 | 0x00 | No Mode Selected |
| 0x01 | Comfort |
| 0x02 | Normal |
| 0x03 | Sport |

**Req**: this shall be used for the Handling HMI that shows gear in Sport.

* Ex when used (see HMI spec for actual HMI):

|  |  |
| --- | --- |
| **Drive Control** | submenu |
| **Handling in S** | submenu |
| **normal** | radial |
| **sport** | radial |

Note: see HMI setting ID to see the actual HMI. Above in an example for reference only

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 76 | 229 |

##### VS-SR-REQ-281381/B-Performance in Sport - Drive Control

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Performance in Sport – Continuously Controlled Damping | 0x0D07 | 0x00 | No Mode Selected |
| 0x01 | Comfort |
| 0x02 | Normal |
| 0x03 | Sport |

**Req**: this shall be used for the performance HMI that shows gear in.

* Ex when used (see HMI spec for actual HMI):

|  |  |
| --- | --- |
| **Drive Control** | submenu |
| **Performance in S** | submenu |
| **normal** | radial |
| **sport** | radial |

Note: see HMI setting ID to see the actual HMI. Above was just for an example for reference only

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 77 | 230 |

### VS-FUN-REQ-280532/A-Adaptive Steering

Note: Drive Control and Adaptive Steering are mutually exclusive (use some of the same feature numbers).

#### Requirements

##### VS-SR-REQ-280533/B-Steering in Drive / Steering with Manual Transmission - Adaptive Steering

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Steering in Drive / Steering with Manual Transmission | 0x0B00 | 0x00 | No Mode Selected |
| 0x01 | Comfort |
| 0x02 | Normal |
| 0x03 | Sport |

**Req**: this shall be used for the HMI that doesn’t show Drive or Sport.

* Ex when used (see HMI spec for actual HMI):

|  |  |
| --- | --- |
| **Adaptive steering** | submenu |
| normal | radial |
| sport | radial |

Note: see HMI settings ID to see the actual HMI. Above was just for an example

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Settings ID** |
| 82 | 235 |

**Req**: this shall be used for the steering HMI that shows gear in Drive.

* Ex when used (see HMI spec for actual HMI):

|  |  |
| --- | --- |
| **Adaptive steering** | submenu |
| **Steering in D** | submenu |
| comfort | radial |
| normal | radial |
| sport | radial |

Note: see HMI settings ID to see the actual HMI. Above was just for an example

The HMI’s above regarding what to use would be handled by the configurations in the HMI spec.

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Settings ID** |
| 80 | 233 |

##### VS-SR-REQ-280548/B-Steering in Sport - Adaptive Steering

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Steering in Sport | 0x0B01 | 0x00 | No Mode Selected |
| 0x01 | Comfort |
| 0x02 | Normal |
| 0x03 | Sport |

Req: this shall be used for the steering HMI that shows gear in Sport.

* Ex when used (see HMI spec for actual HMI):

|  |  |
| --- | --- |
| **Adaptive steering** | submenu |
| **Steering in S** | submenu |
| **normal** | radial |
| **sport** | radial |

Note: see HMI setting ID to see actual HMI. Above was just for an example for reference

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 79, 81 | 234 |

##### VS-SR-REQ-280549/B-Adaptive Steering

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Adaptive Steering | 0x0B02 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 79, 82 | 236, 237 |

## General Settings

### General Requirements - General Settings

#### VS-SR-REQ-234428/F-General Settings at Start-up

General Settings shall be queried by the Centerstack Settings HMI Client when the Ignition\_Status changes from OFF/ACC to Run. See the FBMP SPSS for details on querying at start-up when ignition\_status changes to Run.

When Ignition\_Status changes from Run to OFF/ACC the infotainment Centerstack General Settings defined in this General Settings section shall be considered unknown. The HMI should not show any General Settings HMI selections when General Settings selection information is unknown. In the General Settings HMI for Settings not defined in Settings in the Centerstack SPSS reference the HMI for whether these settings can be shown or not when ignition\_status does not equal Run.

#### VS-SR-REQ-259080/A-HMI Activation during Run - General Settings

Settings in General Settings Function/Section (not necessarily applicable to carryover functionality not covered in this spec) can only be selected on the HMI when the Ignition\_Status = Run.

#### VS-SR-REQ-232109/J-Carryover General Settings functionality from the Vehicle Settings SPSS

The functions in the “General Settings” section of this Settings in the Centerstack SPSS specification are only for the general setting items not already covered in the Vehicle Settings (Global) SPSS or some other specification.

The feature/function defined in the Vehicle Settings SPSS shall still be followed and all the requirements in the Vehicle Settings SPSS still apply unless noted otherwise. This includes but is not limited to:

1. 12/24 hour mode
2. Language selection
3. Distance Units (this is only if the HMI has two choices such as “Imperial” and “Metric”).
   1. If the HMI has three choices such as “1/100 km”, “km/l” and “Miles & Gallons” then use the system interface described in the Measure Units function in this specification.
4. Beep Settings
5. Master Reset
6. Temperature Units
7. Valet Mode settings

If there is no menu in the Cluster for these general settings which are in the Vehicle Settings SPSS (ex distance units, temperature units, language…) and the settings menu is only in the Centerstack all the internal requirements from the Vehicle Settings SPSS for the Cluster still apply. This would mean the Cluster would remain the feature server if it was already the server in the Vehicle Settings SPSS.

* For example if the Cluster is the Temperature Units server in the vehicle settings SPSS then it would still be the Temperature Units server without the menu in the Cluster. The Centerstack module (ex SYNC) would still request the temperature unit setting from the Cluster and the Cluster would respond as defined in the Vehicle Settings SPSS.

### VS-FUN-REQ-234033/B-Tire Pressure Units

#### Requirements

##### VS-SR-REQ-234035/E-Tire Pressure Unit

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Tire Pressure Unit | 0x0908 | 0x00 | psi |
| 0x01 | kPa |
| 0x02 | bar |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 34 | 104 |

### VS-FUN-REQ-234037/B-Measure Units

#### Requirements

##### VS-SR-REQ-234039/L-Measure Units

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Measure Units | 0x0901 | 0x00 | Miles and Gallons /  BEV: Miles and kWh (mi/kWh) |
| 0x01 | Miles and Gallons (UK only) / BEV: Miles and kWh (mi/kWh) (UK only) |
| 0x02 | Liter/100 km /  BEV: km and kWh (kWh/100km) |
| 0x03 | km/Liter /  BEV: km and kWH (km/kWh) |

If the Measure Units HMI supports a BEV (Battery Electric Vehicle) HMI (ex no Gallons or Liters shown) than the “BEV” units values shall be used above for feature number 0x0901.

When the Miles and Gallons HMI is selected the Centerstack Settings HMI Client shall send 0x00 Miles and Gallons to the Measure Units Feature Settings Server.

* The “0x01 Miles and Gallons (UK only) / BEV: Miles and kWh (mi/kWh) (UK only)” this will not be sent by the Centerstack Settings HMI Client when the Miles and Gallons HMI is selected by the user.
* The Feature Settings Server may respond back to Feature.Rq(Configuration = 0x0 Miles and Gallons / BEV: Miles and kWh (mi/kWh)) with either Feature.St(Configuration = 0x00 or 0x01) and the Centerstack Settings HMI Client shall treat them the same and update the Miles and Gallons HMI / BEV HMI for either response.

Unless noted otherwise what is set in Feature Number 0x0901 will be used by other Settings features with distance units (ex miles or kilometers) in this specification to display those HMI settings as Metric or Imperial units. Speed settings are not covered by Measure Units.

* “Miles and Gallons / BEV: Miles and kWh (mi/kWh)” set to “Imperial Distance Units for HMI”
* “Liter/100 km / BEV: km and kWh (kWh/100km)” or “km/Liter / BEV: km and kWH (km/kWh)” set to “Metric Distance units for HMI”

When the Cluster Measure Units feature server responds back to the Feature.Rq signal with the updated FBMP Feature.St signal the Cluster shall also update the non-FBMP Disp\_Miles\_Kilometers.st CAN Distance status signal below from the Vehicle Settings SPSS.

* “Miles and Gallons / BEV: Miles and kWh (mi/kWh)” set to “Imperial”
* “Liter/100 km / BEV: km and kWh (kWh/100km)” or “km/Liter / BEV: km and kWH (km/kWh)” set to “Metric”

MD-REQ-025451-Disp\_Miles\_Kilometers.St (TcSE ROIN-297373)

Message Type: Status

Status update from the Vehicle Settings Server stating what the setting is for Distance units (from the Vehicle Settings SPSS)

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Literals** | **Value** | **Description** |
| Mode | - | - |  |
|  | Inactive | int *Mode*  0x0: Metric (Kilometers)  0x1: Imperial (Miles) | Status update from the Vehicle settings server stating what the setting is for Distance units. |

Note:

* When Distance Units Setting HMI is “Metric” or “Imperial” use the interface defined in the Vehicle Settings (Global) SPSS.
* When Unit Settings HMI is “Miles & Gallon”, or “KM & Liters (Liter/100km)”, or “Km & Liters (km/liter)” then use the interface described in this requirement.

|  |
| --- |
| **HMI Settings ID** |
| 102 |

## Vehicle Settings

### General Requirements - Vehicle Settings

#### VS-SR-REQ-234430/D-Vehicle Settings Start-Up

The functions in this Vehicle Settings section shall be queried by the Centerstack Settings HMI Client

when the Ignition\_Status changes from OFF/ACC to Run. See the FBMP SPSS for details on querying at start-up when ignition\_status changes to Run.

When Ignition\_Status changes from Run to OFF/ACC the infotainment Centerstack Vehicle Settings shall be considered unknown. The HMI should not show any settings selections when Vehicle Settings selection information is unknown.

#### VS-SR-REQ-234434/C-HMI Activation during Run - Vehicle Settings

The functions listed in the Vehicle Settings section (not necessarily applicable to carryover functionality not covered in this spec) can only be selected on the HMI when the Ignition\_Status = Run.

#### VS-SR-REQ-234431/D-Carryover Vehicle Settings functionality in Vehicle Settings SPSS

The functions in the “Vehicle Settings” section of this Settings in the Centerstack SPSS specification are only for the items not already covered in the Vehicle Settings (Global) SPSS or other Centerstack Feature SPSS specifications.

The feature/function defined in the Vehicle Settings SPSS shall still be followed and all the requirements in the Vehicle Settings SPSS still apply unless noted otherwise. This includes but is not limited to:

1. Charge Port Light Ring setting
2. Charge Cord Unlock setting
3. Door KeyCode
4. Ambient Lighting

See Vehicle Setting SPSS, HMI spec, or other Centerstack Feature SPSS specifications for whether these carryover features not covered in this Settings in the Centerstack specification can be selected when ignition does not equal Run.

### VS-FUN-REQ-234059/B-Auto Engine OFF / 30min Max Idle

#### Requirements

##### VS-SR-REQ-234061/F-Auto Engine OFF / 30 min max idle

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Auto Engine OFF | 0x0D03 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: may also be called “30 min Max idle”. See HMI documents for actual name

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 13 | 156 |

### VS-FUN-REQ-234233/A-Park Lock Control

#### Requirements

##### VS-SR-REQ-234235/D-Park Lock Control

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Park Lock Control (electronic BTSI Manual Override) | 0x0414 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 13 | 160 |

### VS-FUN-REQ-234236/A-Silent Mode

#### Requirements

##### VS-SR-REQ-234238/D-Silent Mode

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Silent Mode | 0x0418 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 13 | 161 |

### VS-FUN-REQ-234283/A-Alarm

#### Requirements

##### VS-SR-REQ-234285/D-Ask on Exit - Alarm

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Ask on Exit – Perimeter Alarm | 0x041C | 0x00 | 0x00 OFF / Disabled |
| 0x01 | 0x01 ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 13 / 14 | 162 |

##### VS-SR-REQ-234286/D-Sensor Set - Alarm

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Sensor Set | 0x041D | 0x00 | All Sensors Active / Full Guard |
| 0x01 | Perimeter Sensing / Reduced Guard |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Motion Sensors | 0x041D | 0x00 | ON |
| 0x01 | OFF |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 14b | 163 |

### VS-FUN-REQ-234287/A-Chimes

#### Requirements

##### VS-SR-REQ-234289/C-Park Slot - Chimes

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Park Slot - Chimes | 0x0904 | 0x00 | 0x00 OFF / Disabled |
| 0x01 | 0x01 ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 15 | 164 |

##### VS-SR-REQ-234290/C-Information - Chimes

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Information - Chimes | 0x0905 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 15 | 165 |

### VS-FUN-REQ-234307/A-Remote Start

#### Requirements

##### VS-SR-REQ-234312/G-Climate Control (Heater / AC) - Remote Start

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Climate Control – Remote Start (Heater / AC) | 0x0509 | 0x00 | Auto |
| 0x01 | Last Setting |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Front Defrost – Remote Start | 0x0503 | 0x00 | OFF |
| 0x01 | ON |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Rear Defrost – Remote Start | 0x0504 | 0x00 | OFF |
| 0x01 | ON |

For the Climate Control Auto / Last Setting HMI if there are not separate Auto / Last Settings HMI selections for the Remote Start Front Defrost (0x0503) and Remote Start Rear Defrost (0x0504) then then the following shall be followed:

* When either “AUTO” or “Last Settings” is selected for the climate control HMI setting selection a series of Feature.Rq (Operation = SET) requests will be initiated in the order as shown below:
  + Climate “AUTO” Selected perform FBMP Feature.Rq Set operation in the following order:

1. Climate Control (ID 0x509) = Auto
2. Front Defrost (ID 0x503) = ON
3. Rear Defrost (ID 0x504) = ON

* Climate “Last Setting” selected perform FBMP Feature.Rq Set operation in the following order:

1. Climate Control (ID 0x509) = Last Setting
2. Front Defrost (ID 0x503) = ON
3. Rear Defrost (ID 0x504) = ON

* For the FBMP Feature.St response from the Remote Start feature server as soon as Climate Control (ID 0x509) is received, the response will be accepted and appropriate HMI setting selection (AUTO / Last Setting) in the Centerstack HMI will be updated. The Centerstack Settings HMI is not dependent on the 0x0503 and 0x0504 Feature.St responses from the Remote Start feature server and those Feature.St responses are treated as don’t cares.

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 17B | 167 |

##### VS-SR-REQ-234313/G-Seats and Steering Wheel - Remote Start

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Driver Heated/Cooled Seat – Remote Start | 0x0501 | 0x00 | Auto |
| 0x01 | OFF |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Passenger Heated/Cooled Seat – Remote Start | 0x0502 | 0x00 | Auto |
| 0x01 | OFF |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Heated Steering Wheel – Remote Start | 0x040A | 0x00 | Auto |
| 0x01 | OFF |

For Seats Only HMI or Seats and Steering Wheel HMI with one Auto / OFF HMI selection available for everything (no distinction of front driver seat, front passenger seat, steering wheel control) then the following strategy shall be used when an HMI selection is made:

* Remote Start “AUTO” selected then a series of FBMP Feature.Rq (Operation = SET) requests will be initiated in the order as shown below:
  + Driver Heated/Cooled Seat (0x0501) = Auto
  + Passenger Heated/Cooled Seat (0x0502) = Auto
  + Heated Steering Wheel (0x040A) = Auto
* Remote Start “OFF” selected then a series of FBMP Feature.Rq (Operation = SET) requests will be initiated in the order as shown below:
  + Driver Heated/Cooled Seat (0x0501) = OFF
  + Passenger Heated/Cooled Seat (0x0502) = OFF
  + Heated Steering Wheel (0x040A) = OFF
* For the Feature.St response once the Remote Start Server responds to the 0x0501 FBMP Feature.Rq Set command with the 0x0501 Feature.St value requested then the HMI can be updated to show the new setting as called out in the 0x0501 Feature.St response (the 0x0502 and 0x0503 values can be ignored).

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 17c / 17d | 168, 169 |

##### VS-SR-REQ-234316/F-Duration - Remote Start

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Duration – Remote Start | 0x0406 | 0x00 | OFF |
| 0x01 | 5 min |
| 0x02 | 10 min |
| 0x03 | 15 min |

Note: If there is HMI for “Activate Remote Start (Enable/Disable) or System (Enable/Disable) etc” then the duration feature number is used for this setting as follows:

* The OFF/Disable Remote Start HMI setting uses the configuration number is 0x00 OFF.
* The ON/Enable Remote Start HMI setting uses the configuration number, 0x02 10 min,

Note: the Activate Remote Start setting HMI would be shown as enabled whenever remote start is active (ie duration at 5 min, 10 min or 15 min). The Active Remote Start setting HMI would be shown as disabled when remote start is not active (ie Duration set to OFF).

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 17 / 17e | 166, 170 |

##### VS-SR-REQ-234315/C-Quiet Start - Remote Start

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Quiet Start – Remote Start | 0x0505 | 0x00 | OFF |
| 0x01 | ON |

|  |
| --- |
| **SYNC Gen 3 Screen / ID HMI Number** |
| No SYNC HMI at the time this SPSS was written |

### VS-FUN-REQ-234317/A-Windows

#### Requirements

##### VS-SR-REQ-234319/C-Global Window Open

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Global Window Open / Remote Open | 0x0401 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 20 | 195 |

##### VS-SR-REQ-234320/C-Global Window Close

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Global Window Close / Remote Close | 0x0402 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 20 | 196 |

### VS-FUN-REQ-234329/A-Wipers

#### Requirements

##### VS-SR-REQ-234331/C-Courtesy Wiper

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Courtesy Wiper | 0x0407 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 21 | 197 |

##### VS-SR-REQ-234332/C-Rain Sensing Wipers

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Rain Sensing Wipers | 0x0408 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 21 | 198 |

##### VS-SR-REQ-234333/C-Reverse Wipers

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Rear Reverse Gear Wipe | 0x0409 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 21 | 199 |

### VS-FUN-REQ-234334/A-Power Liftgate

#### Requirements

##### VS-SR-REQ-234336/D-Power Liftgate

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **~~Feature Description~~** | **~~Feature Number~~** | **~~Configuration Number~~** | **~~HMI selection / Configuration Name~~** |
| ~~Power Liftgate~~ | ~~0x0C50~~ | ~~0x00~~ | ~~OFF / Disable Switch~~ |
| ~~0x01~~ | ~~ON / Enable Switch~~ |

~~Note: Same feature number used for both Power Liftgate and Power Decklid~~

Duplicate of “VS-REQ-280528-Power Decklid / Liftgate”. Please reference that requirement

|  |  |
| --- | --- |
| **~~SYNC Gen 3 Screen / ID HMI Number~~** | **~~HMI Setting ID~~** |
| ~~22~~ | ~~201~~ |

### VS-FUN-REQ-280527/A-Power Decklid / Liftgate

#### Requirements

##### VS-SR-REQ-280528/C-Power Decklid / Liftgate

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Power Decklid / Liftgate | 0x0C50 | 0x00 | OFF / Disable Switch |
| 0x01 | ON / Enable Switch |

Req: Whether the HMI shown for a Decklid or Liftgate the configuration would be shown in the HMI spec. For both those configurations use this feature number

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Settings ID** |
| 13, 22 | 232, 201 |

### VS-FUN-REQ-298601/A-Handsfree Liftgate

#### Requirements

##### VS-SR-REQ-298602/A-Handsfree Liftgate

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Handsfree Liftgate | 0x041E | 0x00 | OFF / Disable Switch |
| 0x01 | ON / Enable Switch |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Settings ID** |
| 22 | 305 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Power Decklid / Liftgate | 0x0C50 | 0x00 | OFF / Disable Switch |
| 0x01 | ON / Enable Switch |

Req: for 0x0C50 above when Hands Free Liftgate is configured ON then 0x0 would correlate with Manual and 0x01 would correlate with Automatic.

Req: Whether the HMI shown for a Decklid or Liftgate the configuration would be shown in the HMI spec. For both those configurations use this feature number

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Settings ID** |
| 22 | 304 |

### VS-FUN-REQ-234337/A-Lighting

#### Requirements

##### VS-SR-REQ-234339/E-Auto Highbeam / Adaptive Drivebeam / Glare Free

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Auto Highbeam / Adaptive Drive Beam / Glare Free | 0x080C | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: whether the HMI refers to Auto Highbeam or Glare Free/Adaptive Drivebeam depends on the configuration. See HMI spec for details on the configuration.

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 23 | 202, 203 |

##### VS-SR-REQ-234340/C-Daytime Running Lights

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Daytime Running Lights | 0x0415 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 23 | 204 |

##### VS-SR-REQ-234341/C-Welcome Lighting

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Welcome Lighting / Approach Detection | 0x0416 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 23 | 205 |

##### VS-SR-REQ-234342/C-Adaptive Headlights

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Adaptive Headlamps | 0x040E | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 23 | 206 |

##### VS-SR-REQ-234343/C-Adaptive Headlight Set-Up

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Adaptive Headlamp Set-Up | 0x040F | 0x00 | LHD (Left Hand Drive/Traffic) |
| 0x01 | RHD (Right Hand Drive/Traffic) |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 24 | 207 |

##### VS-SR-REQ-234344/C-Autolamp Delay

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Autolamp Delay | 0x040D | 0x00 | 0 seconds (Off) |
| 0x01 | 1 second |
| 0x02 | 2 seconds |
| … | … |
| 0xFF | 255 seconds |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 25 | 208 |

##### VS-SR-REQ-272030/B-Predictive Lighting

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Predictive Lighting / Advanced Front Lighting | 0x041B | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note:

Clarification of the SYNC HMI rule is pasted below in terms of system impact. Please reference the H31K HMI spec in case there are any updates to the rule. The version of the requirement below means that if predictive lighting is configured on with adaptive head lamps configured on that only feature number 0x040E Adaptive Headlamp will be used. Predictive Headlamps feature number 0x041B Predictive Lighting will not be used.

[H31k.R109.01] If vehicle is equipped with both Predictive Lighting and Adaptive Headlamps ( (DE08, Byte 1, Bit 4 Adaptive Head Lamp control function = 1, (Enabled) AND Predictive Lighting (DE08, Byte 11, Bit 7 Predictive Lighting = 1 (Enabled)), then the list item “Adaptive Headlamps” will turn both on/off.

|  |
| --- |
| **SYNC Gen 3 Screen / ID HMI Number** |
| N/A |

### VS-FUN-REQ-234345/A-Locks

#### Requirements

##### VS-SR-REQ-234347/C-AutoLock

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| AutoLock (drive away locking) | 0x0403 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 27 | 209 |

##### VS-SR-REQ-234348/C-AutoUnlock

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| AutoUnlock | 0x0404 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 27 | 210 |

##### VS-SR-REQ-234356/C-Relock

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Auto Relock | 0x0413 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |
| --- |
| **SYNC Gen 3 Screen / ID HMI Number** |
| 27 |

##### VS-SR-REQ-234349/C-Mislock

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Mis-lock feedback | 0x0411 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 27 | 211 |

##### VS-SR-REQ-234351/D-Lock Trim Switch Inhibit

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Lock Trim Switch Inhibit / Switch Inhibit | 0x0410 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 27 | 212 |

##### VS-SR-REQ-234353/C-Audible Locking Feedback

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Audible Locking Feedback | 0x0419 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 27 | 215 |

##### VS-SR-REQ-234354/C-Exterior Lights Feedback - Locking

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Exterior Lights Feedback - Locking | 0x041A | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 27 | 216 |

##### VS-SR-REQ-234357/D-Remote Unlock

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Remote Unlock:  One/Two Stage Unlocking | 0x0405 | 0x00 | All Doors / One Stage |
| 0x01 | Driver’s door / Two Stage |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 26 | 217 |

##### VS-SR-REQ-272687/B-Global Unlock

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| One/Two Stage Unlocking | 0x0405 | 0x00 | One Stage / All Doors / Global Unlock ON(enabled) |
| 0x01 | Two Stage / Drivers Door / Global Unlock OFF(disabled) |

Note: created separate requirement numbers for Global Unlock and Remote Unlock but they send the same feature numbers with different HMI labels. HMI labels are determined by configuration. See HMI document for configuration.

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 27 | 218 |

##### VS-SR-REQ-272694/B-Intelligent Access

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Intelligent Access / Key Free / Passive Entry Customer Enable | 0x0412 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 27 | 213, 214 |

##### VS-SR-REQ-350467/A-Walk Away Lock

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Walk Away Lock | 0x0420 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |
| --- |
| **HMI Setting ID** |
| 1034 |

##### VS-SR-REQ-350468/A-Walk Away Lock Feedback

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Walk Away Lock Feedback Audible | 0x0421 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |
| --- |
| **HMI Setting ID** |
| 1035 |

##### VS-SR-REQ-350469/A-Double Lock Reminder Feedback

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Double Lock Reminder Feedback | 0x0422 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |
| --- |
| **HMI Setting ID** |
| 1036 |

### VS-FUN-REQ-234358/A-Mirrors

#### Requirements

##### VS-SR-REQ-234360/C-Auto Fold Mirrors

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Auto Fold Mirrors | 0x0702 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 28 | 219 |

##### VS-SR-REQ-234361/C-Reverse Tilt Mirrors

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Reverse Tilt Mirrors | 0x0703 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 28 | 220 |

### VS-FUN-REQ-234362/B-Park Heater

#### Requirements

##### VS-SR-REQ-234364/D-Continue Heat - Park Heater

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Continue Heat – Park Heater | 0x0C70 | 0x00 | OFF / Disable |
| 0x01 | ON / Enable |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18 | 172 |

##### VS-SR-REQ-267623/B-Heater Programming - Park Heater

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Heater Programming – Park Heater | 0x0C91 | 0x00 | OFF / Disable |
| 0x01 | ON / Enable |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18b | 173 |

##### VS-SR-REQ-234378/E-Programming Single Time - Park Heater

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Programming Single Time – Park Heater | 0x0C71 | 0x00 | OFF / Disable |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18c | 174 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Hour - Programming Single Time | 0x0C72 | 0x00 | Hour 0 (12 AM) |
| 0x01 | Hour 1 (1 AM) |
| 0x02 | Hour 2 (2 AM) |
| 0x03 | Hour 3 (3 AM) |
| 0x04 | … |
| … | Hour 21 (9 PM) |
| 0x16 | Hour 22 (10 PM) |
| 0x17 | Hour 23 (11 PM) |

Whether time is displayed in 12 or 24 mode depends what HMI setting is set for 12/24 hour mode.

* Reference function “VS-FUN-REQ-025239-Set 12/24 hour mode setting” in the Vehicle Setting SPSS for details.

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18c, 19a | 175 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Minute - Programming Single Time | 0x0C73 | 0x00 | Minute 0 |
| 0x01 | Minute 1 |
| 0x02 | Minute 2 |
| 0x03 | Minute 3 |
| … | …. |
| 0x39 | Minute 57 |
| 0x3A | Minute 58 |
| 0x3B | Minute 59 |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18c, 19a | 175 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Year - Programming Single Time | 0x0C74 | 0x00 | 2016 |
| 0x01 | 2017 |
| 0x02 | 2018 |
| … | … |
| 0x51 | 2097 |
| 0x52 | 2098 |
| 0x53 | 2099 |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18c, 19b | 176 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Month - Programming Single Time | 0x0C75 | 0x00 | January |
| 0x01 | February |
| 0x02 | March |
| 0x03 | April |
| 0x04 | May |
| 0x05 | June |
| 0x06 | July |
| 0x07 | August |
| 0x08 | September |
| 0x09 | October |
| 0x0A | November |
| 0x0B | December |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18c, 19b | 176 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Day - Programming Single Time | 0x0C76 | 0x00 | Day 1  (1st day of the month) |
| 0x01 | Day 2 |
| 0x02 | Day 3 |
| 0x03 | Day 4 |
| … | … |
| 0x1C | Day 29 |
| 0x1D | Day 30 |
| 0x1E | Day 31 |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18c, 19b | 176 |

##### VS-SR-REQ-234393/F-Programming Time 1 - Park Heater

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Programming Time 1 – Park Heater | 0x0C77 | 0x00 | OFF / Disable |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18d | 177 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Hour - Programming Time 1 | 0x0C78 | 0x00 | Hour 0 (12 AM) |
| 0x01 | Hour 1 (1 AM) |
| 0x02 | Hour 2 (2 AM) |
| 0x03 | Hour 3 (3 AM) |
| 0x04 | … |
| … | Hour 21 (9 PM) |
| 0x16 | Hour 22 (10 PM) |
| 0x17 | Hour 23 (11 PM) |

Whether time is displayed in 12 or 24 mode depends what HMI setting is set for 12/24 hour mode. Reference function “VS-FUN-REQ-025239-Set 12/24 hour mode setting” in the Vehicle Setting SPSS for details.

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18d, 19a | 178 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Minute - Programming Time 1 | 0x0C79 | 0x00 | Minute 0 |
| 0x01 | Minute 1 |
| 0x02 | Minute 2 |
| 0x03 | Minute 3 |
| … | …. |
| 0x39 | Minute 57 |
| 0x3A | Minute 58 |
| 0x3B | Minute 59 |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18d, 19a | 178 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Programming Time 1 – Monday | 0x0C7A | 0x00 | OFF / Disable |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18d | 179 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Feature Description** | | **Feature Number** | **Configuration Number** | | **HMI selection / Configuration Name** | |
| Programming Time 1 – Tuesday | | 0x0C7B | 0x00 | | OFF / Disable | |
| 0x01 | | ON / Enabled | |
| **SYNC Gen 3 Screen / ID HMI Number** | | | **HMI Setting ID** | |
| 18d | | | 180 | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Programming Time 1 – Wednesday | 0x0C7C | 0x00 | OFF / Disable |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18d | 181 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Programming Time 1 – Thursday | 0x0C7D | 0x00 | OFF / Disable |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18d | 182 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Programming Time 1 – Friday | 0x0C7E | 0x00 | OFF / Disable |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18d | 183 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Programming Time 1 – Saturday | 0x0C7F | 0x00 | OFF / Disable |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18d | 184 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Programming Time 1 – Sunday | 0x0C80 | 0x00 | OFF / Disable |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18d | 185 |

##### VS-SR-REQ-234394/E-Programming Time 2 - Park Heater

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Programming Time 2 – Park Heater | 0x0C81 | 0x00 | OFF / Disable |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18d | 186 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Hour - Programming Time 2 | 0x0C82 | 0x00 | Hour 0 (12 AM) |
| 0x01 | Hour 1 (1 AM) |
| 0x02 | Hour 2 (2 AM) |
| 0x03 | Hour 3 (3 AM) |
| 0x04 | … |
| … | Hour 21 (9 PM) |
| 0x16 | Hour 22 (10 PM) |
| 0x17 | Hour 23 (11 PM) |

Whether time is displayed in 12 or 24 mode depends what HMI setting is set for 12/24 hour mode. Reference function “VS-FUN-REQ-025239-Set 12/24 hour mode setting” in the Vehicle Setting SPSS for details.

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18d, 19a | 187 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Minute - Programming Time 2 | 0x0C83 | 0x00 | Minute 0 |
| 0x01 | Minute 1 |
| 0x02 | Minute 2 |
| 0x03 | Minute 3 |
| … | …. |
| 0x39 | Minute 57 |
| 0x3A | Minute 58 |
| 0x3B | Minute 59 |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18d, 19a | 187 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Programming Time 2 – Monday | 0x0C84 | 0x00 | OFF / Disable |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18d | 188 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Feature Description** | | **Feature Number** | **Configuration Number** | | **HMI selection / Configuration Name** | |
| Programming Time 2 – Tuesday | | 0x0C85 | 0x00 | | OFF / Disable | |
| 0x01 | | ON / Enabled | |
| **SYNC Gen 3 Screen / ID HMI Number** | | | **HMI Setting ID** | |
| 18d | | | 189 | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Programming Time 2 – Wednesday | 0x0C86 | 0x00 | OFF / Disable |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18d | 190 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Programming Time 2 – Thursday | 0x0C87 | 0x00 | OFF / Disable |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18d | 191 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Programming Time 2 – Friday | 0x0C88 | 0x00 | OFF / Disable |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18d | 192 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Programming Time 2 – Saturday | 0x0C89 | 0x00 | OFF / Disable |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18d | 193 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Programming Time 2 – Sunday | 0x0C8A | 0x00 | OFF / Disable |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 18d | 194 |

### VS-FUN-REQ-262499/A-Aux Heater

#### Requirements

##### VS-SR-REQ-262500/B-Aux Heater

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Aux Heater – Fuel Operated Heater | 0x0C90 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 13 | 171 |

### VS-FUN-REQ-273580/A-Passenger Airbag

#### Requirements

##### VS-SR-REQ-273581/D-Passenger Airbag

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Passenger Airbag | 0x0E50 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |
| 0x02 | Gray Out Menu |

If Feature.st is set as “Passenger Airbag 0x0E50 = 0x2 Gray out Menu” then the passenger airbag menu setting shall be Grayed out and settings not selectable (see HMI spec for exact way the HMI is shown).

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 13 / 54 | 225 |

### VS-FUN-REQ-274739/A-Tire Mobility Kit

#### Requirements

##### VS-SR-REQ-274740/C-Tire Mobility

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Tire Mobility | 0x0909 | 0x00 | 1 Year |
| 0x01 | 2 Years |
| 0x02 | 3 Years |
| 0x03 | 4 Years |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 49 | 227 |

### VS-FUN-REQ-238326/A-Power Running Board

#### Requirements

##### VS-SR-REQ-238327/E-Power Running Board

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

No Longer Supported via feature based message protocol

|  |  |  |  |
| --- | --- | --- | --- |
| **~~Feature Description~~** | **~~Feature Number~~** | **~~Configuration Number~~** | **~~HMI selection / Configuration Name~~** |
| ~~Power Running Board~~ | ~~0x0C51~~ | ~~0x00~~ | ~~Auto~~ |
| ~~0x01~~ | ~~Off~~ |
| ~~0x02~~ | ~~Out~~ |

|  |  |
| --- | --- |
| **~~SYNC Gen 3 Screen / ID HMI Number~~** | **~~HMI Setting ID~~** |
| ~~51 / 29~~ | ~~159~~ |

### VS-FUN-REQ-234230/B-Easy Entry / Easy Exit (Seat Adjustment)

#### Requirements

##### VS-SR-REQ-234232/F-Easy Entry / Easy Exit (Seat Adjustment)

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Easy Entry / Easy Exit  (Seat Adjustment) | 0x0701 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 51 | 157 |

### VS-FUN-REQ-272707/B-Auto Entry/Exit Height (Easy Access Height)

#### Requirements

##### VS-SR-REQ-272708/D-Auto Entry/Exit Height (Easy Access Height)

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Auto Entry/Exit Height  (Easy Access Height) | 0x0B04 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 51 | 158 |

### VS-FUN-REQ-276182/A-Cargo Loading

#### Requirements

##### VS-SR-REQ-276183/A-Cargo Loading

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Cargo Loading | 0x0B05 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |
| --- |
| **SYNC Gen 3 Screen / ID HMI Number** |
| 51 |

### VS-FUN-REQ-272705/A-Air Suspension

#### Requirements

##### VS-SR-REQ-272706/C-Air Suspension

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Air Suspension  (Air Suspension Service) | 0x0B03 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 13 | 200 |

### VS-FUN-REQ-279097/A-MyColor

#### Requirements

##### VS-SR-REQ-279098/B-Gauge Color / Primary Color - MyColor

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Gauge Color / Primary Color - MyColor | 0x0940 | 0x0 | OFF |
| 0x1 | Ice Blue |
| 0x2 | White |
| 0x3 | Green / Highland Green |
| 0x4 | Purple |
| 0x5 | Blue |
| 0x6 | Orange |
| 0x7 | Red |
| 0x8 | MyColor1 |
| 0x9 | MyColor2 |
| 0xA | MyColor3 |

Req: This feature number and the configuration numbers are also used for both “Gauge Color” HMI and “Primary Color” HMI.

* See HMI specification for configuration used to distinguish between Gauge Color and Primary Color HMI.

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 100, 101, 102 | 241, 254 |

##### VS-SR-REQ-279099/B-Halo Color / Secondary Color - MyColor

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Halo Color / Secondary Color - MyColor | 0x0941 | 0x0 | OFF |
| 0x1 | Ice Blue |
| 0x2 | White |
| 0x3 | Green / Highland Green |
| 0x4 | Purple |
| 0x5 | Blue |
| 0x6 | Orange |
| 0x7 | Red |
| 0x8 | MyColor1 |
| 0x9 | MyColor2 |
| 0xA | MyColor3 |

Req: This feature number and the configuration numbers are also used for both “Halo Color” HMI and “Secondary Color” HMI.

* See HMI specification for configuration used to distinguish between Halo Color and Gauge Color HMI.

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Settings ID** |
| 100, 101, 102 | 243, 255 |

##### VS-SR-REQ-279101/B-Halo Lighting - MyColor

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Halo Lighting - MyColor | 0x0942 | 0x0 | OFF / Disabled |
| 0x1 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Settings ID** |
| 100 | 242 |

##### VS-SR-REQ-280522/B-Color Wheel 1 - MyColor

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Color Wheel 1 – MyColor | 0x0943 | 0x00 | OFF |
| 0x01 | Color 1 |
| 0x02 | Color 2 |
| 0x03 | Color 3 |
| cont. | …. |
| 0x18 | Color 24 |
| 0x19 | Color 25 |
| 0x1A | Color 26 |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 103 | 247 |

##### VS-SR-REQ-280523/B-Color Wheel 2 - MyColor

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Color Wheel 2 - MyColor | 0x0944 | 0x00 | OFF |
| 0x01 | Color 1 |
| 0x02 | Color 2 |
| 0x03 | Color 3 |
| cont. | …. |
| 0x18 | Color 24 |
| 0x19 | Color 25 |
| 0x1A | Color 26 |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 103 | 248 |

##### VS-SR-REQ-280524/B-Color Wheel 3 - MyColor

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Color Wheel 3 - MyColor | 0x0945 | 0x00 | OFF |
| 0x01 | Color 1 |
| 0x02 | Color 2 |
| 0x03 | Color 3 |
| cont. | …. |
| 0x18 | Color 24 |
| 0x19 | Color 25 |
| 0x1A | Color 26 |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 103 | 249 |

##### VS-SR-REQ-279104/B-Ambient Lighting - MyColor

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Ambient Lighting - MyColor | 0x0946 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 100, 101 | 244, 256 |

##### VS-SR-REQ-280525/B-Ambient Color - MyColor

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Ambient Color - MyColor | 0x0947 | 0x0 | OFF |
| 0x1 | Ice Blue |
| 0x2 | White |
| 0x3 | Green / Highland Green |
| 0x4 | Purple |
| 0x5 | Blue |
| 0x6 | Orange |
| 0x7 | Red |
| 0x8 | MyColor1 |
| 0x9 | MyColor2 |
| 0xA | MyColor3 |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 100, 101, 102 | 246, 258 |

##### VS-SR-REQ-280526/B-Ambient Dim - MyColor

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Ambient Dim - MyColor | 0x0948 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 100, 101, 104 | 245, 257 |

### VS-FUN-REQ-280537/A-Auto Regen

#### Requirements

##### VS-SR-REQ-280538/B-Auto Regen

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Auto Regen Control / Auto Regeneration Control | 0x0D06 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 13 | 237 |

### VS-FUN-REQ-280668/A-Trailer Brake

#### Requirements

##### VS-SR-REQ-280669/B-Mode - Trailer Brake

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

Note: If the Trailer Settings SPSS is used for this setting then follow the requirements in that SPSS for whether the Set and/or Query operation is supported.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Mode – Trailer Brake | 0x0E10 | 0x00 | Electric |
| 0x01 | EOH (Electric Over Hydraulic) |

|  |
| --- |
| **HMI Setting ID** |
| 239 |

##### VS-SR-REQ-280670/C-Effort - Trailer Brake

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

Note: If the Trailer Settings SPSS is used for this setting then follow the requirements in that SPSS for whether the Set and/or Query operation is supported.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Effort – Trailer Brake | 0x0E11 | 0x00 | Heavy |
| 0x01 | Medium |
| 0x02 | Light |

|  |
| --- |
| **HMI Setting ID** |
| 240 |

### VS-FUN-REQ-280671/A-Exhaust Mode

#### Requirements

##### VS-SR-REQ-280672/B-Exhaust Mode

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Exhaust Mode | 0x0D09 | 0x00 | Quiet / Stealth |
| 0x01 | Normal |
| 0x02 | Sport |
| 0x03 | Track |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 97 | 250 |

### VS-FUN-REQ-280678/A-Quiet Start - Exhaust Mode

#### Requirements

##### VS-SR-REQ-280679/C-Quiet Start - Exhaust Mode

Requirement obsolete. See the Vehicle Settings SPSS and function “VS-FUN-REQ-362897-Quiet Time for Exhaust Mode”

~~For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.~~

~~If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.~~

|  |  |  |  |
| --- | --- | --- | --- |
| **~~Feature Description~~** | **~~Feature Number~~** | **~~Configuration Number~~** | **~~HMI selection / Configuration Name~~** |
| ~~Quiet Start – Exhaust Mode~~ | ~~0x0D0A~~ | ~~0x00~~ | ~~OFF / Disabled~~ |
| ~~0x01~~ | ~~ON / Enabled~~ |

|  |  |
| --- | --- |
| **~~SYNC Gen 3 Screen / ID HMI Number~~** | **~~HMI Setting ID~~** |
| ~~98~~ | ~~251~~ |

### VS-FUN-REQ-280682/A-Set Quiet Time - Exhaust Mode

#### Requirements

##### VS-SR-REQ-280683/C-Set Quiet Time - Exhaust Mode

Requirement obsolete. See the Vehicle Settings SPSS and function “VS-FUN-REQ-362897-Quiet Time for Exhaust Mode”

~~For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.~~

~~If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.~~

|  |  |  |  |
| --- | --- | --- | --- |
| **~~Feature Description~~** | **~~Feature Number~~** | **~~Configuration Number~~** | **~~HMI selection / Configuration Name~~** |
| ~~Set Quiet Time – Exhaust Mode Start~~ | ~~0x0D0B~~ | ~~0x00~~ | ~~Hour 0 (12 AM)~~ |
| ~~0x01~~ | ~~Hour 1 (1 AM)~~ |
| ~~0x02~~ | ~~Hour 2 (2 AM)~~ |
| ~~0x03~~ | ~~Hour 3 (3 AM)~~ |
| ~~0x04~~ | ~~…~~ |
| ~~…~~ | ~~Hour 21 (9 PM)~~ |
| ~~0x16~~ | ~~Hour 22 (10 PM)~~ |
| ~~0x17~~ | ~~Hour 23 (11 PM)~~ |

~~Whether time is displayed in 12 or 24 mode depends what HMI setting is set for 12/24 hour mode.~~

~~Reference function “VS-FUN-REQ-025239-Set 12/24 hour mode setting” in the Vehicle Setting SPSS for details.~~

|  |  |  |  |
| --- | --- | --- | --- |
| **~~Feature Description~~** | **~~Feature Number~~** | **~~Configuration Number~~** | **~~HMI selection / Configuration Name~~** |
| ~~Set Quiet Time – Exhaust Mode End~~ | ~~0x0D0E~~ | ~~0x00~~ | ~~Hour 0 (12 AM)~~ |
| ~~0x01~~ | ~~Hour 1 (1 AM)~~ |
| ~~0x02~~ | ~~Hour 2 (2 AM)~~ |
| ~~0x03~~ | ~~Hour 3 (3 AM)~~ |
| ~~0x04~~ | ~~…~~ |
| ~~…~~ | ~~Hour 21 (9 PM)~~ |
| ~~0x16~~ | ~~Hour 22 (10 PM)~~ |
| ~~0x17~~ | ~~Hour 23 (11 PM)~~ |

~~Whether time is displayed in 12 or 24 mode depends what HMI setting is set for 12/24 hour mode.~~

~~Reference function “VS-FUN-REQ-025239-Set 12/24 hour mode setting” in the Vehicle Setting SPSS for details.~~

|  |  |
| --- | --- |
| **~~SYNC Gen 3 Screen / ID HMI Number~~** | **~~HMI Setting ID~~** |
| ~~98, 99~~ | ~~252~~ |

### VS-FUN-REQ-280684/A-Rev Match (Engine Revolution Match)

#### Requirements

##### VS-SR-REQ-280685/B-Rev Match (Engine Revolution Match)

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Rev Match (Engine Revolution Match) | 0x0D08 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 3 Screen / ID HMI Number** | **HMI Setting ID** |
| 96 | 253 |

## Additional Settings - FBMP based settings

### Additional Settings (FBMP based settings) - General Requirements

#### VS-SR-REQ-333163/A-Settings Start-Up

The Settings under Additional Settings (FBMP based) shall be queried by the Centerstack Settings HMI Client when the Ignition\_Status changes from OFF/ACC to Run. See the FBMP SPSS for details on querying at start-up when ignition\_status changes to Run.

When Ignition\_Status changes from Run to OFF/ACC the Settings shall be considered unknown. The HMI should not show any settings selections when Settings selection information is unknown.

#### VS-SR-REQ-333164/A-HMI Activation during Run

Settings in this Additional Settings (FBMP based settings) section can only be selected on the HMI when the Ignition\_Status = Run.

### VS-FUN-REQ-333131/A-Tire Pressure Reset / Tire Monitor

#### Requirements

##### VS-SR-REQ-333089/A-Tire Pressure Reset / Tire Monitor

For this feature when performing the “Set” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Tire Pressure Reset / Tire Monitor | 0x0960 | 0x00 | Null / Inactive |
| 0x01 | Reset  (Request from Centerstack Settings HMI Client) |
| 0x2 | Tire Pressure Reset Successful  (Response from the Feature Server) |
| 0x3 | Tire Pressure Not Reset  (Response from the Feature Server) |

The Centerstack Settings HMI Client shall not query this feature number at start-up as this is a reset function. If it was queried at start-up as an error state then the Tire Monitor feature Server would respond back with 0x0 Null / Inacitve.

If some kind of Notification/Pop-ups are supported on the Centerstack Settings HMI Client (ex Successful / Not Successful) then configuration numbers 0x2 and 0x3 would be used to indicate success or failure to reset. The Notification/Pop-up shall only occur when 0x2 or 0x3 is first set (periodic message on the bus of the same state would not re-initiate a pop-up).

|  |  |
| --- | --- |
| **SYNC Gen 4.0 Screen / ID HMI Number** | **HMI Setting ID** |
| TBD | 1012 |

### VS-FUN-REQ-333128/A-Border Crossing

#### Requirements

##### VS-SR-REQ-333100/A-Border Crossing

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Considerate Prompts - Border Crossing | 0x0961 | 0x00 | Reminder OFF |
| 0x01 | Reminder ON |

|  |  |
| --- | --- |
| **SYNC Gen 4.0 Screen / ID HMI Number** | **HMI Setting ID** |
| TBD | 1013 |

### VS-FUN-REQ-333136/B-Ecocoach

#### Requirements

##### VS-SR-REQ-333154/A-Ecocoach

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| EcoCoach /  Show EcoCoach in Go Mode | 0x0962 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 4.0 Screen / ID HMI Number** | **HMI Setting ID** |
| TBD | 1014 |

##### VS-SR-REQ-333155/A-Eco Advices

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Ecocoach - Eco Advices | 0x0963 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 4.0 Screen / ID HMI Number** | **HMI Setting ID** |
| TBD | 1015 |

##### VS-SR-REQ-333156/A-Coasting Support

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Ecocoach - Coasting Support | 0x0964 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 4.0 Screen / ID HMI Number** | **HMI Setting ID** |
| TBD | 1016 |

##### VS-SR-REQ-364517/A-EcoCoach - Eco Mode

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| EcoCoach in Eco Mode | 0x096E | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |
| --- |
| **HMI Setting ID** |
| 1077 |

### VS-FUN-REQ-333107/B-Speedometer

#### Requirements

##### VS-SR-REQ-333114/C-Speedometer MPH

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Speedometer MPH | 0x0965 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: the Speedometer MPH and Speedometer Km/h settings are mutually exclusive. Which setting to show is handled via configurations based on market. See table in requirement “VS-REQ-341178-Mapping Table – Speedometer Major Units” for details.

* Ex. If in the Canada the vehicle major speed scale is Km/h on the Cluster speedometer, then:
  + the Speedometer MPH setting would be configured enabled to be shown on the HMI, and
  + the Speedometer Km/h setting would not be shown

|  |
| --- |
| **HMI Setting ID** |
| 1017 |

##### VS-SR-REQ-333162/C-Speedometer Km/h

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Speedometer Km/h | 0x0966 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: the Speedometer MPH and Speedometer Km/h settings are mutually exclusive. Which setting to show is handled via configurations based on market. See table in requirement “VS-REQ-341178-Mapping Table – Speedometer Major Units” for details.

* Ex. If in the US the vehicle major speed scale is MPH on the Cluster speedometer, then:
  + the Speedometer Km/h setting would be configured enabled to be shown on the HMI, and
  + the Speedometer MPH setting would not be shown

|  |
| --- |
| **HMI Setting ID** |
| 1018 |

##### VS-SR-REQ-341178/B-Mapping Table - Speedometer Major Units

The table below maps the country to the Cluster major speedometer speed scale units (MPH or Km/h).

|  |  |
| --- | --- |
| Market | Cluster Speedometer major speed scale units |
| US and US Territories | MPH |
| UK | MPH |
| All other markets | Km/h |
|  |  |
|  |  |

### VS-FUN-REQ-333158/A-Brake Coach

#### Requirements

##### VS-SR-REQ-333159/A-Brake Coach

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Brake Coach /  Show Brake Coach in Go Mode | 0x0967 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 4.0 Screen / ID HMI Number** | **HMI Setting ID** |
| TBD | 1019 |

### VS-FUN-REQ-333160/B-Neutral Tow

#### MD-REQ-342193/A-TrnGearNtmAllow\_B\_Stat

Message Type: Status

Note: Status signal from the Neutral Tow Server indicating if the Neutral Tow HMI needs to be greyed out or not

|  |  |  |  |
| --- | --- | --- | --- |
| **Logical Signal Name** | **Literals** | **Value** | **Description** |
| TrnGearNtmAllow\_B\_Stat | No | 0x0 | Grey out HMI for Neutral Tow |
| Yes | 0x1 | This signal encoding does not cause the Neutral Tow Setting HMI to be greyed out |

#### Requirements - shift by wire version of Neutral Tow

##### VS-SR-REQ-333161/C-Neutral Tow

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Neutral Tow | 0x0968 | 0x00 | OFF / Disabled - not in Neutral Tow  (Response/Status from FBMP Feature Server) |
| 0x01 | ON / Enabled - in Neutral tow  (Response/Status from FBMP Feature Server) |
| 0x02 | Initialize for Neutral Tow  (Set Request from Centerstack Settings HMI Client) |

The Centerstack Setting HMI Client shall not Query feature numbers 0x0968 at start-up.

* Note: if query at start-up (if was last item queried by Centerstack Settings HMI Client) the FBMP Neutral Tow Server could potentially keep broadcasting the last state of Disabled which could cause issues with exiting the HMI flow at the incorrect time in the Neutral Tow screen flow.

The Centerstack Settings HMI Client shall grey out the Neutral Tow HMI setting whenever:

1. The Centerstack Settings HMI Client receives TrnGearNtmAllow\_B\_Stat = No, OR
2. The Centerstack Setting HMI Client receives the Neutral Tow feature number 0x0968 set to 0x01 ON/Enabled

Else

Don’t grey out the Neutral Tow “Initialize for Neutral Tow” setting in the HMI.

Note: How to show the greyed out setting is defined by the HMI. HMI may decide not to show the greyed out setting at all (ie remove neutral tow setting). Reference HMI specification for how greyed out setting is shown.

The Centerstack Setting HMI Client shall use the Set command to set feature number 0x0968 Neutral Tow to “0x02 Initialize for Neutral Tow” as defined by the HMI. See HMI for details such as HMI setting being pressed and held for 2 seconds before making the Set request

* Note: when do the Set command there may not be a response from the FBMP Neutral Tow Server module for up to 500 msec.

The Neutral Tow setting (ie Initialize for Neutral Tow) is only available to be selected when Neutral Tow is not greyed out.

The Centerstack Settings HMI Client shall never do a Set request for OFF/Disabled or On/Enabled.

The FBMP Neutral Tow Server shall respond to the Set request for Initialize for Neutral Tow request with either OFF/Disabled or ON/Enabled when the conditions are met to send a FBMP response. See FBMP Neutral Tow Server specification for details.

* Note: FBMP Neutral Tow Server also means “Gateway/Translator module” if it is the middle man for CAN signals to the Server module

HMI screen flow rules based on network signals:

* After the Centerstack Settings HMI client sends a Feature.Rq Set operation for feature number 0x0968 set to 0x02 Initialize for Neutral Tow and receives 0x00 OFF/Disabled from the FBMP Neutral Tow Server then the Centerstack Settings HMI Client shall display some sort of HMI for placing the vehicle in Neutral (see HMI spec for details)
* After the Centerstack Settings HMI client sends a Feature.Rq Set operation for feature number 0x0968 set to 0x02 Initialize for Neutral Tow and receives 0x01 ON/Enabled from the FBMP Neutral Tow Server then the Centerstack Settings HMI Client shall go to the appropriate HMI screen (see HMI spec for details) and grey out the Neutral Tow setting
* When the “Place Vehicle in Neutral” HMI is shown, that HMI screen shall be exited to the appropriate HMI screen whenever the Centerstack Settings HMI Client receives:
  1. TrnGearNtmAllow\_B\_Stat = No (setting greyed out), or
  2. Neutral Tow feature number 0x0968 set as enabled (setting greyed out), or
* If the signal TrnGearNtmAllow\_B\_Stat = No at any time, then exit the screen flow and the Neutral Tow setting shall be greyed out. See HMI for details
* When TrnGearNtmAllow\_B\_Stat = Yes and the last state Rx by the Centerstack Settings HMI Client of feature 0x0968 was 0x00 Disabled, then if the user exits the Neutral Tow HMI on the screen for “Place the Vehicle in Neutral” and re-enters the Neutral Tow settings screen the Initialize for Neutral Tow settings is allowed to be sent again using FBMP (if HMI supports).

|  |
| --- |
| **HMI Setting ID** |
| 1020 |

### VS-FUN-REQ-333185/A-Nav Repeater in Cluster

#### Requirements

##### VS-SR-REQ-333186/B-Nav Repeater in the Cluster

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Nav Repeater in the Cluster / Turn by Turn | 0x0969 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |
| --- |
| **HMI Setting ID** |
| 1021 |

### VS-FUN-REQ-333189/A-Maps in the Cluster

#### Requirements

##### VS-SR-REQ-333192/A-Maps in the Cluster

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Maps in the Cluster | 0x096A | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

|  |  |
| --- | --- |
| **SYNC Gen 4.0 Screen / ID HMI Number** | **HMI Setting ID** |
| TBD | 1022 |

## Cluster Settings with dedicated FBMP messages

### Overview

This section covers new features in which the interface is only between the Cluster and Centerstack Settings HMI Client that will use dedicated messaging and signaling. This is so there is an additional FBMP (feature based message protocol) Feature.Rq / Feature.St interface so querying settings after ignition goes to run can happen quicker than otherwise would happen.

The Cluster in this section can be the Centerstack Feature Settings Server or Setting Gateway/Translator module (ie middle-man) to the actual server module.

### General Requirements - Cluster Settings with dedicated FBMP messages

#### VS-SR-REQ-362577/A-Cluster and Centerstack Settings HMI Client dedicated Feature2.Rq/Feature2.St FBMP message usage

Deployment of FBMP (Feature Based Message Protocol) Feature2.Rq / Feature2.St:

|  |  |  |
| --- | --- | --- |
| **Transmitter** | **Logical Signal Name** | **CAN dB signal name** |
| Centerstack Settings HMI Client (APIM, CHR..) | Feature2.Rq : Operation | CtrStkDsplyOp2\_D\_Rq |
| Feature2.Rq : FeatureID | CtrStkFeat2NoActl |
| Feature2.Rq : Configuration | CtrStkFeat2ConfigActl |
| Feature2.Rq : PersIndex | CtrStkPersIndex2\_D\_Actl |
| Cluster Feature Settings Server / Settings Gateway\_Translator Module | Feature2.St : FeatureID | FeatNoIpc2Actl |
| Feature2.St : Configuration | FeatConfigIpc2Actl |
| Feature2.St : PersIndex | PersIndexIpc2\_D\_Actl |

Centerstack Settings HMI Client requirements:

The feature numbers under the section “Cluster Settings with dedicated FBMP section” shall be used by the Centerstack Settings HMI Client for sending Feature2.Rq Query and Set requests (Feature.Rq shall not be used).

* Example: If feature number 0x1234 is listed in the “Cluster Settings with dedicated FBMP section” then only Feature2.Rq and Feature2.St dedicated signals shall ever be used with feature number 0x1234.

The Centerstack Settings HMI Client shall query the settings under “Cluster Settings with dedicated FBMP section” with Feature2.Rq at the same time it is querying the other settings in this spec using Feature.Rq. Since these are done in parallel this will speed up the process to query all the settings when ignition goes to Run.

Cluster requirements:

The Cluster shall be able to support responding to both Feature.Rq and Feature2.Rq concurrently since these are different feature numbers that never overlap.

For the Cluster it shall respond to any feature number in the Feature.Rq/Feature2.Rq with the corresponding Feature.St/Feature2.St message

* Example1: The Centerstack Settings HMI Client performs a Query or Set operation for feature number 0x1234 using Feature.Rq. The Cluster shall respond back to the Query or Set operation for feature number 0x1234 using Feature.St.
* Example2: The Centerstack Setting HMI Client performs a Query or Set operation for feature number 0x1234 using Feature2.Rq. The Cluster shall respond back to the Query or Set operation for feature number 0x1234 using Feature2.St.

#### VS-SR-REQ-364389/A-Settings Start-up

The Settings under “Cluster Settings with dedicated FBMP messages” shall be queried by the Centerstack Settings HMI Client when the Ignition\_Status changes from OFF/ACC to Run. See the FBMP SPSS for details on querying at start-up when ignition\_status changes to Run.

When Ignition\_Status changes from Run to OFF/ACC the Settings shall be considered unknown. The HMI should not show any settings selections when Settings selection information is unknown.

#### VS-SR-REQ-364390/A-HMI Activation during Run

Settings in this “Cluster Settings with dedicated FBMP messages” section can only be selected on the HMI when the Ignition\_Status = Run.

### VS-FUN-REQ-364615/A-Engine Oil Temp

#### Requirements

##### VS-SR-REQ-364614/A-Engine Oil Temp Life Gauge - Cluster menu

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Engine Oil Temp Gauge – Cluster menu | 0x096B | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1040 |

### VS-FUN-REQ-364616/A-Power Gauge

#### Requirements

##### VS-SR-REQ-365515/A-Power Gauge - Cluster Menu

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Power Gauge – Cluster menu | 0x096C | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1041 |

### VS-FUN-REQ-365516/A-Tachometer

#### Requirements

##### VS-SR-REQ-365517/A-Tachometer Gauge - Cluster menu

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Tachometer Gauge – Cluster menu | 0x096D | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1042 |

### VS-FUN-REQ-365529/A-Oil Life

#### Requirements

##### MD-REQ-369894/A-EngOilLife\_Pc\_Actl

Message Type: Status

Status signal from the Engine Oil Life Server with the oil life percentage until the oil life has expired

|  |  |  |  |
| --- | --- | --- | --- |
| **Logical Signal Name** | **Literals** | **Value** | **Description** |
| EngOilLife\_Pc\_Actl | 0 percent oil life | 0x0 |  |
| 1 percent oil life | 0x1 |  |
| 2 percent oil life | 0x2 |  |
| … | … |  |
| 99 percent oil life | 0x63 |  |
| 100 percent oil life | 0x64 |  |

##### VS-SR-REQ-365551/A-Oil Life Percentage

The signal EngOilLife\_Pc\_Actl shall be used for oil life percentage HMI if displayed in the Centerstack HMI

|  |
| --- |
| **HMI Settings ID** |
| 1044 |

##### VS-SR-REQ-365550/A-Oil Life Reset

For this feature when performing the “Set” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Oil Life Reset | 0x096F | 0x00 | Null / Inactive |
| 0x01 | Reset  (Request from Centerstack Settings HMI Client) |
| 0x2 | Oil Life Reset Successful  (Response from the Feature Server) |
| 0x3 | Oil Life Not Reset  (Response from the Feature Server) |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

The Centerstack Settings HMI Client shall not query this feature number at start-up as this is a reset function. If it was queried at start-up as an error state then the Oil Life Reset Server would respond back with 0x0 Null / Inactive.

If some kind of Notification/Pop-ups are supported on the Centerstack Settings HMI Client (ex Successful / Not Successful) then configuration numbers 0x2 and 0x3 would be used to indicate success or failure to reset. The Notification/Pop-up shall only occur when 0x2 or 0x3 is first set (periodic message on the bus of the same state would not re-initiate a pop-up).

|  |
| --- |
| **HMI Setting ID** |
| 1043 |

### VS-FUN-REQ-365643/A-Cluster IoD menu configurations

#### Requirements

##### VS-SR-REQ-365685/A-Calm Screen - Cluster IoD config

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Calm Screen – Cluster IoD config | 0x0980 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1045 |

##### VS-SR-REQ-365686/A-Trip 1 - Cluster IoD config

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Trip 1 – Cluster IoD config | 0x0981 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1046 |

##### VS-SR-REQ-365687/A-Trip 2 - Cluster IoD config

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Trip 2 – Cluster IoD config | 0x0982 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1047 |

##### VS-SR-REQ-365688/A-This Trip - Cluster IoD config

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| This Trip – Cluster IoD config | 0x0983 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1048 |

##### VS-SR-REQ-365689/A-Fuel Economy - Cluster IoD config

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Fuel Economy – Cluster IoD config | 0x0984 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1049 |

##### VS-SR-REQ-365690/A-Electric Efficiency - Cluster IoD config

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Electric Efficiency – Cluster IoD config | 0x0985 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1050 |

##### VS-SR-REQ-365691/A-Eco Behaviors - Cluster IoD config

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Eco Behaviors – Cluster IoD config | 0x0986 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1051 |

##### VS-SR-REQ-365692/A-EV Coach - Cluster IoD config

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| EV Coach – Cluster IoD config | 0x0987 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1052 |

##### VS-SR-REQ-365696/A-Auto Start Stop - Cluster IoD config

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Auto Start Stop – Cluster IoD config | 0x0988 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1053 |

##### VS-SR-REQ-365697/A-Seatbelt Status - Cluster IoD config

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Seatbelt Status – Cluster IoD config | 0x0989 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1054 |

##### VS-SR-REQ-365701/A-TPMS - Cluster IoD config

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| TPMS – Cluster IoD config | 0x098A | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1055 |

##### VS-SR-REQ-365706/A-Eco Coach - Cluster IoD config

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Eco Coach – Cluster IoD config | 0x098B | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1056 |

##### VS-SR-REQ-365722/A-Now Playing (Audio / Phone) - Cluster IoD config

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Now Playing (Audio / Phone) – Cluster IoD config | 0x098C | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1057 |

##### VS-SR-REQ-365740/A-Nav / Compass - Cluster IoD config

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Nav / Compass – Cluster IoD config | 0x098D | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1058 |

##### VS-SR-REQ-365741/A-Average Speed - Cluster IoD config

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Average Speed – Cluster IoD config | 0x098E | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1059 |

##### VS-SR-REQ-365743/A-Battery Charge - Cluster IoD config

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Battery Charge – Cluster IoD config | 0x098F | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1060 |

##### VS-SR-REQ-365744/A-ADAS - Cluster IoD config

For ~~this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.~~

~~If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.~~

|  |  |  |  |
| --- | --- | --- | --- |
| **~~Feature Description~~** | **~~Feature Number~~** | **~~Configuration Number~~** | **~~HMI selection / Configuration Name~~** |
| ~~ADAS – Cluster IoD config~~ | ~~0x0990~~ | ~~0x00~~ | ~~OFF / Disabled~~ |
| ~~0x01~~ | ~~ON / Enabled~~ |

~~Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol~~

|  |
| --- |
| **~~HMI Setting ID~~** |
| ~~1061~~ |

##### VS-SR-REQ-365745/A-Maps / Augmented Reality - Cluster IoD config

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Maps / Augmented Reality – Cluster IoD config | 0x0991 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1062 |

##### VS-SR-REQ-369132/A-Classic View - Cluster IoD config

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Classic View – Cluster IoD config | 0x0992 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1078 |

### VS-FUN-REQ-365765/A-Cluster Trip 1 menu

#### Requirements

##### VS-SR-REQ-365846/A-Cluster Trip 1 Menu Reset

For this feature when performing the “Set” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Cluster Trip 1 menu reset | 0x09A0 | 0x00 | Null / Inactive |
| 0x01 | Reset All values for Trip 1 |
| 0x02 | Reset Trip 1 Odometer |
| 0x03 | Reset Trip 1 Average Speed |
| 0x04 | Reset Trip 1 Average Fuel |

Note:

* this feature number uses Feature2.Rq and Feature2.St feature based message protocol
* configuration numbers 0x01 – 0x04 are all requests from the Centerstack Settings HMI Client

The Centerstack Settings HMI Client shall not query this feature number at start-up as this is a reset function. If it was queried at start-up as an error state then the Cluster Trip 1 Menu Reset Server would respond back with 0x0 Null / Inactive.

|  |
| --- |
| **HMI Setting ID** |
| 1063 |

##### VS-SR-REQ-365847/A-Set to Default - configure Cluster Trip 1 view

For this feature when performing the “Set” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Set to Default – configure Cluster Trip 1 view | 0x09A1 | 0x00 | Null / Inactive |
| 0x01 | Default Trip 1 view  (Request from Centerstack Settings HMI Client) |

Note: this feature number uses Feature2.Rq and Feature2.St feature based message protocol

The Centerstack Settings HMI Client shall not query this feature number at start-up as this is a set only function. If it was queried at start-up as an error state then the Set to Default Server would respond back with 0x0 Null / Inactive.

|  |
| --- |
| **HMI Setting ID** |
| 1064 |

##### VS-SR-REQ-365855/A-Trip 1 Odometer - configure Cluster Trip 1 view

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Trip 1 Odometer – configure Cluster Trip 1 view | 0x09A2 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1065 |

##### VS-SR-REQ-365858/A-Trip 1 Timer - configure Cluster Trip 1 view

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Trip 1 Timer – configure Cluster Trip 1 view | 0x09A3 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1066 |

##### VS-SR-REQ-365860/A-Average Speed - configure Cluster Trip 1 view

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Average Speed – configure Cluster Trip 1 view | 0x09A4 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1067 |

##### VS-SR-REQ-365864/A-Average Fuel - configure Cluster Trip 1 view

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Average Fuel – configure Cluster Trip 1 view | 0x09A5 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1068 |

##### VS-SR-REQ-365865/A-Instantaneous Fuel - configure Cluster Trip 1 view

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Instantaneous Fuel – configure Cluster Trip 1 view | 0x09A6 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1069 |

### VS-FUN-REQ-365845/A-Cluster Trip 2 menu

#### Requirements

##### VS-SR-REQ-365866/A-Cluster Trip 2 Menu Reset

For this feature when performing the “Set” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Cluster Trip 2 menu reset | 0x09B0 | 0x00 | Null / Inactive |
| 0x01 | Reset All values for Trip 2 |
| 0x02 | Reset Trip 2 Odometer |
| 0x03 | Reset Trip 2 Average Speed |
| 0x04 | Reset Trip 2 Average Fuel |

Note:

* this feature number uses Feature2.Rq and Feature2.St feature based message protocol
* configuration numbers 0x01 – 0x04 are all requests from the Centerstack Settings HMI Client

The Centerstack Settings HMI Client shall not query this feature number at start-up as this is a reset function. If it was queried at start-up as an error state then the Cluster Trip 2 Menu Reset Server would respond back with 0x0 Null / Inactive.

|  |
| --- |
| **HMI Setting ID** |
| 1070 |

##### VS-SR-REQ-365867/A-Set to Default - configure Cluster Trip 2 view

For this feature when performing the “Set” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Set to Default – configure Cluster Trip 2 view | 0x09B1 | 0x00 | Null / Inactive |
| 0x01 | Default Trip 2 view  (Request from Centerstack Settings HMI Client) |

Note: this feature number uses Feature2.Rq and Feature2.St feature based message protocol

The Centerstack Settings HMI Client shall not query this feature number at start-up as this is a set only function. If it was queried at start-up as an error state then the Set to Default Server would respond back with 0x0 Null / Inactive.

|  |
| --- |
| **HMI Setting ID** |
| 1071 |

##### VS-SR-REQ-365877/A-Trip 2 Odometer - configure Cluster Trip 2 view

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Trip 2 Odometer – configure Cluster Trip 2 view | 0x09B2 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1072 |

##### VS-SR-REQ-365878/A-Trip 2 Timer - configure Cluster Trip 2 view

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Trip 2 Timer – configure Cluster Trip 2 view | 0x09B3 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1073 |

##### VS-SR-REQ-365880/A-Average Speed - configure Cluster Trip 2 view

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Average Speed – configure Cluster Trip 2 view | 0x09B4 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1074 |

##### VS-SR-REQ-365884/A-Average Fuel - configure Cluster Trip 2 view

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Average Fuel – configure Cluster Trip 2 view | 0x09B5 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1075 |

##### VS-SR-REQ-365885/A-Instantaneous Fuel - configure Cluster Trip 2 view

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Instantaneous Fuel – configure Cluster Trip 2 view | 0x09B6 | 0x00 | OFF / Disabled |
| 0x01 | ON / Enabled |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1076 |

### VS-FUN-REQ-369169/A-Classic View - Cluster Speedo view

#### Requirements

##### VS-SR-REQ-369170/A-Classic View - Cluster Speedo view - Cluster Menu

For this feature when performing the “Set” or “Query” operation the Feature Number and Configuration Number in the Feature.Rq and Feature.St messages shall be used below.

If Enhanced Memory is supported the Active Personality Profile shall be used for PersIndex. If Enhanced Memory is not supported PersIndex shall be set to Vehicle.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature Description** | **Feature Number** | **Configuration Number** | **HMI selection / Configuration Name** |
| Classic View – Cluster Speedo view – Cluster Menu | 0x0970 | 0x00 | Digital Speedometer only |
| 0x01 | Round Speedometer Gauge |

Note: this setting uses Feature2.Rq and Feature2.St feature based message protocol

|  |
| --- |
| **HMI Setting ID** |
| 1079 |

# Appendix: Reference Documents

|  |  |
| --- | --- |
| Reference # | Document Title |
| 1 | Feature Based Message Protocol SPSS   * Nothing earlier than April 2017 release |
| 2 | Driver Restrictions SPSS |
| 3 | HMI Driver Restriction specification(s)   * For SYNC H21J\_SYNC\_GEN3\_Driver\_Restrictions |
| 4 | Setting in the Centerstack HMI specifications   * For SYNC H31k HMI spec and SYNC H31K supplement |
| 5 | Vehicle Settings (Global) SPSS |
| 6 | MyKey Settings in the Centerstack SPSS |
| 7 | Infotainment Diagnostics Specification |
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