



Code functionalities:

VCU + Sub VCU:

- 1) Brake light activation
- 2) SCS Monitoring for manual mode and AS signals
- 3) APPS/Brake Pedal Plausibility Check(If we decide to not compute power, maybe give this responsibility to Actuator Controller?)
- 4) Manual Mode - ready to drive sequence and disabling ASB
- 5) Inverters power output control
- 6) Provide Handbook signals and ASB signals to datalogger
- 7) Tunneling AMI chosen mission to ASC and actuating AMI+ASSI
- 8) Closing SDC if driving mission conditions are fulfilled(T14.5)
- 9) Provide signals of ESB implementation at Actuator Controller, actuate SDC is communication loss/fault.
- 10) Actuating the buzzer for Manual R2D.
- 11) Sample rear ASS Signals.
- 12) Decide the AS Status according to Figure 17 and actions according to it. Control ASSI status.
- 13) Actuate the SDC according to RES signals
- 14) Precharge control & actuating the AIRS
- 15) Receiving messages from BMS and RES.

Pedal Node:

- 1) Sample the following signals: APPS, BPPS, BOPS, SWPS
- 2) ASB Functionality check implementation.
- 3) ASB SCS signals monitoring(Watchdog, etc.), T15.2.1 and perform emergency brake maneuver(Brake + Steering) if ASB failure.
- 4) Provide ASB signals and front sensors to VCU for datalogger

Dashboard Node-

- 1) Receiving chosen mission in AS mode.
- 2) Receiving R2D from driver while manually driving.
- 3) Receiving heat evacuation mode for the driver.
- 4) Show the driver relevant data about the car.
- 5) Preparing and sending the updated messages to the Levi Node which control the steering wheel in AS mode.

Levi Node-

- 1) Actuates the steering wheel servo according to the generated ASC signals.
- 2) Gives several details about the servo including: temperature, position and velocity.

Mission 1: Actuating the brake light



