motherson

Development of Safe and Reliable Truck Brake Controller



The Client and Industry

The client is a leading German Tier 1 manufacturer of braking systems for rail and commercial vehicles.

About Product

- The Global Scalable Brake Controller (GSBC) is an electronic air braking system used in trucks. As the name suggests, it can be scaled to any type of axle configuration
- It takes the brake demand from the foot brake module (FBM) and converts it into equivalent air pressure which is then created in the brake chambers and corresponding braking is applied
- It also collects the braking requests from other ECUs which require braking features, e.g., Electronic Stability Control(ESP), Hill Holder and Automatic Traction Control(ATC). The air pressure is created in the brake chambers using the Electronic Pressure Modulators (EPM)

Technology Features

- Debugger : Lauterbach and Trace32
- Can Device : Canoe
- Controller : TC367 (By Infineon)

Our Solutions

- Customer interaction and Requirement
 preparation
- Schematics Design & Review, Board Design and Prototype Development
- CAN COM stack configuration using DaVinci
 Configurator
- configure or add and remove CAN messages
- Platform Bring-up and Stabilization
- Complete System Integration and unit testing
- End-to-end testing
- Deployment and Post-deployment Support