TATA ELXSI

AUTOMATIC TRANSMISSION CONTROL – REVERSE ENGINEERING

Overview

Reverse engineer and develop MATLAB/ Simulink model for Transmission Control System from legacy code and limited specification documents available, for an Automotive Supplier

Scope

- Understanding of legacy code
- Preparation of system understanding document
- Unit test cases development
- Model development of various modules (clutch, gear, throttle & pedal)
- Unit testing using Simulink V&V
- Convert C-code to S-function & MIL Validation against S-function
- Model static check (MINT)
- Fixed point conversion
- Auto-code generation & SIL Validation against S-function
- PIL Testing
- Functions – Clutch, Gear, Throttle, Pedal