LIBRARY OF COMMUNICATION AND VEHICLE DIAGNOSTICS PROTOCOL STACKS

- Embitel provides pre-tested and ready-to-integrate protocol stacks for automotive applications.
- Developed as per the CMMI Level 3 and ISO9001:2008 guidelines.
- Coding guidelines conforms to MISRA C.

BUSINESS MODEL All our protocol stacks are provided under a one-time licensing fee model. Terms and conditions for business model of the stack is completely aligned with the specific requirements of the customer. We would love to chat over a coffee to discuss your project’s requirements and vision.
EMBITEL LIBRARY OF PROTOCOL STACKS

Why Choose Us for Diagnostics & Communication Protocol Stacks Implementation

We have an extensive library of diagnostics and communication protocol solutions that we have perfected over a period of 13+ years. Right from process compliance to rigorous testing, our protocol stacks undergo the highest degree of quality check.
A QUICK GLANCE AT OUR QUALITY ASSURANCE PROCESSES FOR AUTOMOTIVE STACKS:

PROVEN IN USE: Over the past decade, our stacks are powering series production of ECU for American, French, German and Asian OEMs. We have successfully delivered the stacks to these OEMs through Tier-1 suppliers and even directly in some projects.

1. Stacks have been deployed for cutting edge products including Seat Control ECU, Roof System, Telematics, Body Control Module, Electric Power Steering and more.
2. We have partnered with more than 50 customers for stack integration

EXTENSIVE TESTING: Our stacks have been tested/validated extensively using tools like Vector CANoe, Samdia, Busmaster. As part of the project, we have successfully tested our stacks in various vehicle models.

STATIC ANALYSIS: Static Analysis has been performed for the stacks using Polyspace and QAC. Coding Guidelines and code reviews are designed to ensure MISRA 2012 Compliance.

UNIT TESTING: Each of our automotive protocol stacks have undergone comprehensive unit testing. Automotive-grade tools such as Tessy and MxDev have been deployed for unit testing.

PROCESS COMPLIANCE: Our automotive-grade diagnostics and communication protocol stacks have been developed as per the stringent guidelines laid down by CMMI-L3 practices and ISO9001-2008. An independent QA team manages project and process compliance.

PORTABILITY: Stacks have been developed in the ANSI C language which makes it suitable for porting to both OS and Non-OS platforms.
PROTOCOL STACK INTEGRATION AND SUPPORT SERVICES

- Implementation of Physical layer as per requirements
- Integration of stack with the target platform
- Support for Configuration of protocol stacks as per the project’s requirements
- Support for tooling solution development
- MISRA C compliance report, LLD and HLD provided as deliverables

READILY AVAILABLE TOOLING SOLUTIONS

1. UDS STACK CONFIGURATION TOOL
   - Supports multiple configuration
   - Generate cfg.c and cfg.h files as per the configuration

2. UDS DIAGNOSTICSTOOL (PC BASED)
   - Tooling solution for both Client and Server side
   - Support for integration with PCAN, Vector or any third party Hardware

3. CANIF CONFIGURATION TOOL
   - Generates the cfg.c and cfg.h from dbc file (CAN Matrix)
   - Auto Generates MISRA C compliant code

4. LIN INTERFACE TOOL
   - Generates cfg.c and cfg.h files from LDF file (LIN Configuration)
   - Auto generates MISRA C compliant code

4. PC BASED REPROGRAMMING TOOL
   - Supports J1939, UDS based reprogramming
   - Supports physical medium like LIN, CAN and CANFD, FlexRay
   - Integrates with PCAN, Vector or many third party hardware

6. END OF LINE CONFIGURATION TOOL
   - PC based tool to support configuration of Calibration Block
   - Helps configure the parameters for different variants of a vehicle
   - Generates the HEX file based on the parameter configuration

7. ODX AUTO CONFIG TOOL
   - Read-to-use PC based tool for UDS configuration using ODX file
   - Saves up to 90% of UDS configuration time compared to manual method

8. PC TOOL FOR ELM 327 DEVICE
   - QT C++ based PC based tool to access ELM 327 device (USB and Wi-Fi drivers)
   - Manages OBD commands and response from ELM 327 device

CONNECT WITH US

INDIA : +91 80 41694200
GERMANY : +49 711-60 17 47-789
USA : +1-248-385-2017
UK : +49 170 1688028
EMAIL : sales@embitel.com