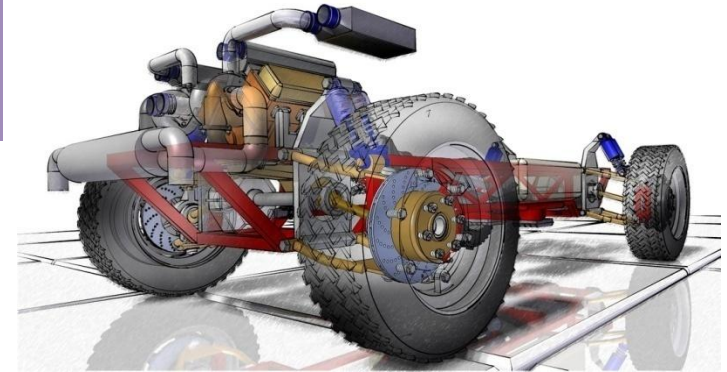


PRODUCT ENGINEERING SERVICES AUTOMOTIVE EMBEDDED

Analyse – Plan - Execute



We offer following services in Automotive Embedded

Automotive Software development for **Control Units**

Hardware Design for Automotive **ECUs**

AutoSar Software development

Model Based development

Testing Services

Automotive Software for Control Units

Microcontrollers – 8/16/32 bit, Low level driver development

BSP development and device drivers

Communication Protocols – CAN, LIN, FLEXRAY, J1939, UDS, CCP, Automotive
ETHERNET

Coding Guidelines – MISRA-C

Firmware & Application development – using Embedded C

RTOS based and Non-OS firmware development

Layered Architecture Implementation

Algorithm development, IQ Math library implementation

Hardware Design for Automotive ECUs

Hardware design based on Microcontrollers, DSP & FPGA

Safety Critical system design

Hardware – Firmware Integration and Board bring up

BLDC Motor drive design

Design Standards – ISO26262, FMEA Analysis

Thermal & EMI/EMC Analysis

Certifications – UL/ CE/ ROHS

AUTOSAR Software Development

AutoSar module Implementation – BSW, ECU abstraction & Service layers

AutoSar MCAL driver development for various microcontroller platforms

Expertise in Communication modules, Diagnostic modules, Communication drivers, Memory drivers and I/O drivers

AutoSar configuration and Integration tools

AutoSar code generation tools

Model Based Development

System modeling, simulation & Auto code generation using Matlab / Simulink

System design using Labview

State machine implementation and verification using Matlab – State flow

Rapid control prototyping using dSpace tool chain, porting & optimization

Model in loop (MIL) testing

Automotive Embedded Testing Services

Model in loop (MIL), Software in loop (SIL) & Hardware in loop (HIL) testing

Test bench development using Labview

Python based test framework development using NI DAQ cards

Bus monitoring solutions – CAN Bus analyzer, LIN analyzer, CAPL scripting

Collaborate and Innovate

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