

Position – EV Software Expert

Qualification - Bachelor of Technology (B.Tech) / Bachelor of Engineering (B.E) or M.Tech in electronics engineering

Experience – 5-8 Yrs

Location – Hosur

Company Name – India Nippon Electricals Ltd

Job Responsibilities

- To define SW architecture for motor control ECU and Vehicle control ECU as per customer specification, Based on SW architecture, define SW flow chart algorithms
- Interfacing with microcontroller supplier to write low level SW modules (Firmware and drivers)
- Implementation of different communication protocol as per customer requirement (CAN,LIN,etc)
- To develop different SW functional module to meet system functionality and performance
- To develop different types motor control algorithms specific to different types of motors and electrical machines.
- To develop application SW for end of line testing and different functional test
- To define test cases and scripts for SW testing and validation. SW validation in HIL environment.
- To manage SW development as per standard SW development process(V Model, Water fall mode, Agile) and to meet ASPICE compliance
- Monitoring proto board assy and board bring up. Monitoring the tests carried out on the proto ensuring proper functionality.
- SW trouble shooting for any software bug

Technical Skills:

- Microcontroller selection & programming (Embedded C)
- I/O Configuration, ADC,PWM with complimentary PWM, Timers
- Communication:CAN,SPI,I2C,UART,LIN,SENT
- Compilers & IDE: MPLABX, Code Warriar, CS+
- Simulation: Proteus,Matlab model based software
- Algorithm: Field Oriented Control, Proportional Integrator and Differentiator Controller, First order transfer function
- Debugger, Bootloader & Drivers.
- GUI development (Visual studio,Eclips,NI)
- CAN OE,Vector tools
- Software validation skills using test scripts.