

Embedded Controls Software Engineer

Overview

XI is seeking an Embedded Controls Software Engineer to support embedded controls hardware development and support of vehicle control systems for Hybrid-Electric product lines.

Responsibilities

- Hardware, design, development and procurement, focus on harnesses and connectors.
- Analyze, develop, and support design and development of vehicle controls,
- Design and support CAN bus communication, telematics, harnesses and connectors.
- Support product prototype builds.
- Support customer related technical issues.
- Knowledge of micro-controller based control architectures is required.
- Ensures design for manufacturability, test, and reliability.
- Participates in the complete product development cycle, from initial product specification to product release.
- Transfers and follows designs through test engineering and manufacturing
- Keeps adequate records and provides documentation on all projects, (SVN, GIT).
- Understanding of communication protocols (CAN, SPI, 802.11, Bluetooth)
- Need to interface productively with Design Engineers, Test Engineers and cross-functional team.
- Insure all customer performance and durability requirements are met.

Qualifications

- Minimum 5 years of experience in embedded system, electronics design and analysis including microprocessor controllers, harness and CAD drawing programs.
- Bachelor's Degree Electrical Engineering, Computer Science, Computer Engineering or equivalent, or (higher)
- Knowledge of Solidworks and electronic connectors.
- Knowledge of 8/16-bit microcontrollers.
- Circuit-Board Layout and Manufacture.
- Familiarity with High Voltage AC and DC electronics and interfaces.
- Some programming skill in C, Java, Python.
- Strong analytical and problem solving skills.
- Strong troubleshooting skills.
- Experience with data analysis tools and statistical tools and techniques.
- Experience in product development and design-for-manufacturing.
- Familiar with Microsoft Word, Excel, PowerPoint, Project.
- BLDC 3-Phase Motor controls experience a plus.
- Basic understanding of microcontroller firmware and methodology.
- Practical working knowledge of: FMEA, APQP, PPAP, and Design (DV) & Production (PV) planning and testing.
- Ability to understand and apply automotive powertrain engineering specifications.
- Must have a self-starting, proactive and resourceful mindset.
- Ability to work alone and in a cross-functional team to determine optimal, robust engineering designs and materials for various products, applications and system components.
- Knowledge of Design of Experiments and Test Engineering.