



XL Hybrids, Inc.
145 Newton Street
Boston, MA 02135

Job Title: Embedded Controls Engineer

XL Hybrids seeks an experienced Embedded Controls Engineer for real-time controls hardware development and support of vehicle control systems for hybrid electric vehicle product lines. Senior Embedded Controls Engineer candidates with greater qualifications will also be considered.

About XL Hybrids:

XL Hybrids is an exciting, high-growth hybrid vehicle technology company founded by MIT alumni. We have developed cutting-edge technology and commercialized electrification and connectivity products for the commercial vehicle sector (vans, trucks, and buses) to become the leader in the North American market. We are a small but rapidly growing team, with a state-of-the-art engineering facility based in Boston. We are looking for high-energy, creative, and ambitious people to join our development team. Candidates must be able to work full time in Boston area.

We offer a competitive salary, meaningful stock ownership, 401K, health benefits, a great work environment and the opportunity to enter a high-growth startup company. We are recruiting candidates who have demonstrated leadership and excellence throughout their careers and are excited by the prospect of tackling challenging technical problems.

Responsibilities

- Own the hardware design, development and procurement for the following subsystems from concept, to prototype, and through production release:
 - micro-controllers that interface with the vehicle ECU, battery controls, power converters, SPI-bus and communication devices
 - wireless and CAN bus communications units
 - laboratory electrical test equipment for vehicle systems
 - high voltage power electronics (motor drives, DC/DC converters, on-board chargers, and other auxiliary power equipment)
- Support development and execution of validation, testing, and optimization of the control systems and components including development of in-house testing equipment and in-vehicle field testing
- Specific duties include:
 - Case, wiring, and PCB support of existing and new designs, parts selection, and procurement
 - Support engineering verification, design validation and production validation testing.
 - System debug in the lab and on vehicles
 - Embedded software support for custom microcontroller and telematics
 - Create test setups

- Support new component selection and vehicle integration
- Perform system performance analysis
- Keep records and provide documentation on all projects (SVN, GIT)
- Collaborate with the technical organization on other outsourced vehicle and component testing projects for performance, durability, emissions, and safety
- Ability and willingness to drive development vehicles (CDL not required)
- Limited travel required to test facilities and customers which may include international travel
- Candidate will report to the Control Systems Manager

Additional Responsibilities based on experience/interests

- XL Hybrids is a dynamic, growth business, so joining our team means that you will have a wide scope of work and responsibilities that may shift with rapidly growing areas of the business.
- Support resolution of customer-related technical issues

Minimum Qualifications

- BS in Engineering or Computer Science
- 3+ years of control system design, test, and manufacturing experience including
 - PCB layout and manufacturing
 - Wiring and electrical system debug
 - Test equipment design or programming (e.g. Labview, Python)
 - Data analysis
- Thorough knowledge of 8/16-bit microcontrollers
- Skilled in Microsoft Office applications.
- Must be able to work full time in XL Hybrids' Boston office

Preferred Qualifications

- Direct experience in CAN bus communication software and hardware systems development
- Some direct embedded real-time controls programming experience (e.g. C, C++, Python, Java)
- Direct experience in the development and commercialization of electrified vehicle control systems software
- Direct experience in the development and commercialization of electrified vehicle control systems microcontroller and communications hardware
- Knowledge of 3-phase motor drive, DC/DC converter, and other high voltage power electronics.
- Direct experience in the development of cellular/telematics and hardware systems
- Direct experience with communication protocols (e.g. CAN, SPI, 802.11, Bluetooth)
- Practical working knowledge of: FMEA, APQP, PPAP, and Design (DV) & Production (PV) planning and testing.

Contact: please send your resume to careers 'at' xlhybrids.com with "Embedded Controls Engineer" in the subject heading