



## **Sr. Embedded Systems Engineer** Titan Advanced Energy Solutions

Titan AES is seeking a Sr. Embedded System Engineer to join an innovative and dynamic team that develops and tests industry-leading, ultrasound-based Battery Management Systems (BMS) for applications in electrical vehicles (EV), consumer electronics (CE), energy stationary storage (ESS), and 2<sup>nd</sup> life market for re-purposing of used EV batteries.

The Sr. Embedded Systems will be part of a small team of embedded system engineers and firmware engineers and will be responsible for the entire product development lifecycle: concept development, requirements analysis, design, testing and product integration with client solutions. This role will work closely with the software systems group, program management, and the VP of Product and will report directly to the CTO.

Titan AES is a small and flat organization and we expect all its members to be willing and excited to get their hands dirty. The selected candidate will be working with a multi-disciplined, fast paced team and should be prepared to work on a variety of interesting projects. In particular, the candidate should be interested in designing and developing novel embedded solutions for one-of-a-kind problems by performing circuit design, designing PCB layouts, integrating electronic hardware and developing the firmware to bring up and test the embedded system. We use rapid prototyping without sacrificing good engineering discipline, so that prototypes can easily scale to production.

### **Required experience in most or all the following:**

- Background in Electrical Engineering and 10+ years of hands-on experience with electronics design and fabrication
- Digital circuitry design; analog circuit design is a plus
- Firmware software development; embedded Linux development, ATMEL studio, and RTOS is a plus
- PCB design and layout tools such as EAGLE, Altium, or Cadence Allegro
- Electronics design tools such as SPICE
- Oscilloscopes, logic analyzers, and other tools to aid in the development and testing of electronic systems
- Using and debugging common digital communication protocols such as I2C, SPI, and RS232
- Rapid low rate fabrication of electronics boards (component selection, testing, debugging, soldering)
- ARM microcontroller and/or PIC32/ATMEL development preferred
- Mixed signal processing
- Sensor integration
- Experience working with external board production companies



- Prior experience working on multidisciplinary teams composed of both hardware and software engineers

#### **Preferred but not required**

- Knowledge of RTOS and real time systems
- Knowledge of Bluetooth and Wifi

We are looking for an independent thinker passionate about solving hard problems with elegant solutions!

#### **About Titan AES**

Titan Advanced Energy Solutions (Titan) is developing and producing advanced battery management systems for Lithium-ion batteries (LiB) used in consumer electronics, automotive and storage markets. Our patented technology provides accurate and instantaneous state of charge (SoC) and state of health (SoH). By measuring the battery with improved accuracy, we reduce performance limitations and enable significant benefits to the whole value chain: 20% increase in capacity, double battery life and unprecedented safety monitoring.

Titan is located at Greentown Labs – largest clean tech incubator in North America - in Somerville, MA.

Learn more at [www.titanaes.com](http://www.titanaes.com)