

Hardware Engineer

Axion BioSystems, Inc. is a life science company located in Atlanta, GA. Our microelectrode array (MEA) and impedance-based systems are used in applications including disease modeling, drug development, cancer research, and cell and gene therapy for multiple cell types. Our systems provide a way to move complex biological experiments to more standardized, in-a-dish experiments, with understandable metrics and endpoints. Axion prides itself on building innovative, industry-leading products that increase throughput, functionality, and information for industrial and academic research.

Axion is seeking a Hardware Engineer to work in a small team environment to specify, design, and build next generation electronics, as well as support existing products and manufacturing efforts. This engineer will be working with several departments including applications, manufacturing, and software in Axion's highly collaborative environment. Projects could include continuous improvement, manufacturing testing, small signal analog, high channel count data acquisition, high speed communication, FPGA and microcontroller layout, and hardware verification.

Job Functions:

The Hardware Engineer will participate in all phases of hardware system development for systems that include microcontrollers, FPGAs, and highly sensitive analog electronics. The design lifecycle includes: system specification, component selection, schematic design, high density multilayer mixed signal PCB layout, functional verification/debug, manufacturing optimization, and product support.

Requirements:

- Electrical and/or Computer Engineering degree
- 2-4 years of hardware experience
- Board level debug using test and measurement instrumentation
- Mixed signal circuit design
- Knowledge of op amps, ADCs, DACs, DC-DC converters, microcontrollers, and FPGAs
- Schematic capture and PCB layout (Orcad Capture, Mentor Graphics Pads preferred)
- High-speed signaling protocols (USB, Ethernet or LVDS)
- Documentation of design

Preferred Skills:

- Verilog and/or VHDL firmware programming
- RF antenna design
- MATLAB and/or Python programming
- Signal processing
- Design for manufacture

