

Hardware Engineer (job reference #060120-05)

ABOUT THE COMPANY

BioCircuit Technologies is an Atlanta-based company developing novel medical devices to diagnose and treat neuromuscular disease and injury. BioCircuit's core technology includes a bioinstrumentation platform for non-invasive stimulation and measurement of peripheral nerve and muscle activity.

JOB DESCRIPTION

We are seeking a Senior Hardware Engineer to drive key projects for the company. The candidate will contribute significantly to the design and manufacture of complex, mixed signal electronics for multichannel biosignal acquisition and stimulation.

The candidate will be responsible for analog and digital circuit design, development, testing, and debug for medical device instrumentation. The successful candidate will be capable of providing strong technical leadership on new development projects, while sustaining existing products.

KEY JOB RESPONSIBILITIES

- Design, low noise and high-performance analog, digital and mixed signal PCBs as key components of the BioCircuit stimulation and measurement platform
- Contribute to all phases of product development (e.g., product specification, system architecture, component selection, schematic design, PCB layout, troubleshooting, V&V, and transition to manufacturing)
- Design to meet critical medical device safety, reliability, and regulatory requirements
- Work closely with a multidisciplinary team, including other engineers, scientists, and clinicians to successfully bring the product to market
- Create, support, and execute test protocols for the verification and validation of hardware and embedded software
- Perform analysis of data collected, root-cause sources of error in measurements, implement improvements in hardware, measurement methods, or signal processing
- Conduct risk analysis and implement corrective actions
- Tackle challenges and enjoy discovering, defining, and solving problems
- Manage own projects to meet deadlines and budgets, with regular project updates

SKILLS & QUALIFICATIONS

Required

- Degree in electrical engineering, computer engineering, or similar
- 3+ years relevant experience
- Experience in board-level design (analog, digital, embedded systems, and power), schematic capture, PCB layout, debug, testing, and transition to manufacturing
- Experience designing boards with embedded processors or FPGAs
- Experience with troubleshooting and debugging



- Ability to work cross-functionally with applications, mechanical, software, and firmware engineers in a fast-paced start-up environment.
- Ability to function well in a self-driven, start-up environment and balance multiple simultaneous projects

Desired

- Experience developing medical devices and instrumentation in a regulated environment
- Experience with US and international safety and medical device standards such as IEC 60601, ISO13485, and 21 CFR part 820
- Experience with biosignal acquisition and/or stimulation
- Data analysis, signal processing, and programming (e.g., MathCAD, MATLAB, Python, C, LabView).
- Real-time embedded software development experience

FURTHER DESCRIPTION

BioCircuit Technologies is a quickly growing start-up company, where you will have the opportunity to receive exposure to all facets of medical device development and clinical translation (e.g., concept development, patent applications, grant proposals, partnerships with clinicians, presentations, etc.) Your successful performance will lead to significant opportunity for continued growth and experience.

CONTACT INFORMATION

If you are interested in this position, please send your resume and cover letter to jobs@biocircuit.com.

