

Job Description – Envoy Medical

Electrical Engineer Work location: Onsite

Job Summary

Reporting to the Director of Engineering/R&D the Electrical Engineer will be responsible for activities throughout the medical device lifecycle including design, development and sustaining activities. The Electrical Engineer needs to be a hands-on contributor who can work effectively in cross-functional teams while inspiring and motivating the team to complete projects quickly, efficiently and effectively to meet customer needs.

The individual will be involved in all phases of product development including definition, design, documentation, troubleshooting, characterization, and verification of fully implanted cochlear implant as well as externals such as surgical support equipment, patient chargers/controllers and physician programmers and applications.

The Electrical Engineer is responsible for developing electrical designs that define both new products and product improvements and may include circuit design, software, and hardware design.

Duties & Responsibilities:

- Self-starter who can plan, schedule, and execute activities as necessary to meet project timelines.
- Adept at working on cross-functional teams.
- Design, develop, analyze, and debug product designs including analog and digital circuitry.
- Integrate electronics, firmware, and hardware designs into final product.
- Perform debugging efforts, root cause investigations, and issue resolution.
- Ensure reliability, performance, and safety standards are achieved.
- Design and conduct bench testing to verify updates, identify product limitations, and explore product capabilities.
- Evaluates test results against expected results, implements improvements to process and recommends alternative testing as needed.
- Create/execute verification plans, protocols, and reports with tracing from product requirements.
- Support EMC and 60601-1 Safety testing.
- Establish, maintain, review, and approve documentation associated with planning, intended use, user requirements, hazard analysis, functional and design specifications, design reviews, V&V test plans/protocols/reports and traceability.
- Create technical documentation such as ECOs, datasheets, technical drawings, block diagrams, detailed design documents, technical reports, etc.
- Support manufacturing and sustaining needs.
- Reports to Director of R&D.



Position Requirements:

- Bachelor's degree in electrical engineering or related field
- Three or more years of experience.
- Strong lab skills and hands on experience with standard electrical test equipment.
- PCB / Board level electrical design experience.
- Understand, design, and simulate analog and/or digital circuits.
- Strong interpersonal and communication skills (verbal and written).

Preferred Qualifications:

- Experience working in an Agile development environment.
- Expertise in one or more schematic capture and simulation software packages.
- Familiarity with PCB design methodology and tools such as Altium and manufacturing processes.
- Circuit simulation in tools such as PSPICE or LTSPICE
- Experience with Cadence design tools (Virtuoso, Spectre, etc).
- Experience evaluating and debugging electrical designs
- Experience with C/C++/C#, LabView, Matlab or Python scripting.
- Knowledge and experience in low power analog design techniques.
- Experience with design verification and validation of Class III medical devices or similar regulated products, especially active implantable medical devices.
- Familiarity with EN45502 and IEC60601

Physical Job Requirements:

The physical demands described within this job description are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Significant Work Activities: Continuous sitting for prolonged periods, Keyboard use (greater or equal to 75% of the workday)

Location: Twin Cities Metro Area

Travel: Yes, <10% of the time

About Envoy Medical Corporation:

Envoy Medical Corporation, headquartered in White Bear Lake, Minnesota, is a privately held hearing health company focused on providing innovative technologies across the hearing loss spectrum. Envoy Medical has pioneered one-of-a-kind, fully implanted devices for hearing loss, including its fully implanted Esteem® active middle ear implant, commercially available in the U.S. since 2010, and the fully implanted Acclaim® cochlear implant, an investigational device. Envoy Medical is dedicated to pushing hearing technology beyond the status quo to improve access, usability, compliance and ultimately quality of life. For more information, please visit: www.envoymedical.com.