



Document Number: JD025  
Legacy Document Number: N/A

Rev.  
A

Title: Senior Electrical Engineer

**Position:** Senior Electrical Engineer

**Reports To:** Technology Manager

**FLSA Classification:** Exempt, salaried

**Pay Range:** \$120,000 - \$135,000

**Supervises:**

- Electrical Engineering Team

### Position Summary:

The Senior Electrical Engineer should demonstrate expert abilities in designing, developing, and testing electrical systems, devices, and equipment, preferably in the medical field. Successful candidates desire to learn from new challenges and possess advanced problem solving and communication skills to work within a collaborative team. Candidates must demonstrate passion for their work and be able to communicate their ideas and concepts both verbally and visually. Candidates must demonstrate an ability to integrate feedback and to respond quickly to fluctuating priorities.

### Responsibilities and duties:

- Carry out electrical engineering design activities including design, debug, modifications, and verification of the company's products
- Provide technical leadership including training and supervising electrical engineering staff. Responsibilities include training employees, planning, assigning, directing, and reviewing work.
- Sustain and improve current electrical designs
- Contribute to product definition, feature development, and system design
- Design experiments, analyze data, and recommend product improvements
- Coordinate manufacturing and support documentation and testing activities to ensure compliance with specifications, codes, and customer requirements
- Provide support for manufacturing and end users
- Develop and document circuit schematics and create the BOM for printed circuit board assemblies
- Ensure safety and EMC certification of all electrical aspects of Company devices
- Develop test methods for agency approval and work with the test agencies to qualify products
- Provide multiple solutions to complex engineering challenges associated with evolving specs/requirements
- Promote a positive attitude and strong work ethic among electrical engineering team
- Ensure human and material resources are available to meet project requirements and deadlines
- Execute plans and processes that maximize efficiency and cost-savings through effective use of labor, equipment, and materials
- Other duties as assigned

### Education and experience:

- Bachelor's degree in electrical engineering, Computer Engineering, Physics, Mathematics, or equivalent discipline; M.S. preferred (academic degrees and coursework are subject to verification)
- 10+ years related work experience, including 5+ years design and development experience in analog and digital circuit design



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**Knowledge, skills, and capabilities:**

- High-speed digital and analog circuit design, PCB layout and schematic capture using professional design software (Altium preferred)
- Ability to solve engineering issues programmatically
- Practical experience working with FPGAs
- Demonstrated experience using MATLAB
- CE device design
- Design and testing experience in EMC
- Excellent verbal and written communication skills, willing to ask questions and seek clarification when necessary
- Experience in design, development, and test with embedded computers, computer peripherals, and handheld devices
- Recent experience with currently available microcontrollers
- Demonstrated leadership and mentoring skills
- Experience working in ISO9001, ISO13485 or other standardized quality management system environments
- Experience working in medical device, technology development or technology manufacturing environments
- Exceptional interpersonal skills: energetic and enthusiastic, approachable, and positive
- Ability to prioritize workflow and work independently and/or collaboratively in an environment of fluctuating priorities

**Physical, Mental and Visual Demands**

- Lifting, carrying, reaching 50 lbs. and less – frequently; over 50 lbs. –seldom
- Sitting, standing, seeing, walking, hearing – frequently
- Typing, keying continually
- Continuous mental and/or visual attention; the work involves performing complex tasks to close accuracy and continual work using a computer



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Founded in 1986, Sonic Concepts delivers premium ultrasonic systems to the biomedical, industrial, marine and research markets. We specialize in designing and manufacturing low intensity and High Intensity Focused Ultrasound (HIFU) transducers, electronics, and software. Our systems are installed in leading corporate and academic research labs around the world. The marketing and sales department plays a key role in helping drive revenue, improving brand awareness, collaborating with partners globally, and encouraging customer preference for the company's products and services.

For selected, qualified applicants, references are required, and a background check, review of transcripts and degree verification may be performed.

Sonic Concepts is an equal-opportunity employer.

Interested individuals are invited to submit their resumes electronically, in PDF format ONLY. No phone calls please. Principals only. Recruiters, please do not contact us regarding this opening.

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