

Senior Electrical Engineer

Who We Are

AED Product Development (AED) is an engineering product design and development firm located in Bozeman, Montana that is a wholly owned subsidiary of Sphere Entertainment Co. AED thrives on solving intricate design challenges and developing innovative solutions for a diverse range of industries and technologies. Our environment is fast-paced and engaging, coupled with a healthy work-life balance and competitive compensation. Due to the hands-on nature of the products we develop, staff are required to be present on campus. When you join our team, you will be part of an exclusive group of forward-thinking engineers developing first-of-kind technologies that make a positive contribution to society.

Who You Are

You are an Electronics Design Engineer who is passionate about developing a variety of cutting-edge products. You demonstrate a high degree of creativity, foresight, and impact. You're a problem solver who works well as part of a team or as a single point of contact on projects, has a large breadth of experience, and is highly self-motivated.

What You'll Do

- Conduct research of emerging technologies and design/develop electronic products from concept to production, leveraging your expertise in electronics engineering principles.
- Generate schematic designs of complex digital and analog circuits using Altium Designer and utilizing advanced simulation and modeling tools to evaluate and optimize electronic circuits, ensuring performance, reliability, and manufacturability meet stringent quality standards.
- Develop and execute test plans and procedures to validate product functionality, performance, and compliance with regulatory requirements, troubleshooting issues and implementing solutions as needed.
- Collaborate with internal and external cross-functional teams, including product management, engineering, and manufacturing, to help define project requirements, establish design specifications, and ensure alignment with overall objectives.

Qualifications

Experience:

- 8+ years of professional embedded systems hardware development experience.
- Proficient with Altium Designer.
- Circuit design and layout of mid-level to complex PCBs utilizing proper design techniques for signal integrity and power requirements along with mechanical design integration.
- Electronics design experience includes FPGAs, processors, microcontrollers, high-speed memory interfaces, DC/DC converters, and high-speed interconnect.
- Experience in low noise analog and RF design is desired.

Knowledge, Skills, and Abilities:

- Exceptional communication and interpersonal skills, with the ability to effectively collaborate with cross-functional teams.

- Interfaces with other engineers and clients to coordinate specifications and design.
- Provide accurate estimates for complete hardware designs.
- Keeps management apprised of project issues such as anticipated cost overruns, schedule delays or necessary technical changes.
- Evaluates design and recommends changes to management to improve design reliability, cost, etc.
- High level of attention to detail, with the ability to ensure the highest quality standards in all hardware products and processes.
- Coordinate with FPGA and Firmware Engineers to validate component peripheral requirements and connections.
- Coordinate with mechanical engineers to validate physical interfaces and constraints.
- Responsible for design Bill of Materials management, selecting and approving alternate component selections.
- Provide oversight for Building Symbols, Footprints, and attaching mechanical Models to ensure high accuracy.
- Able to navigate documentation systems and provide technically accurate and concise content as needed.
- Supervise data entry of project team members for accuracy and consistency including design revisions documentation.
- Review validation procedures and results in order to sign off specification compliance for a project. Initiate necessary changes if unable to sign off as originally specified
- Works with clients to determine design architecture, evaluating various solution options.

Requirements:

- Bachelor's degree in EE, CpE, or related discipline
- Pass a comprehensive background check.
- Candidates must be able to comply with the federally mandated requirements of U.S. export control and ITAR compliance laws, which require proof that the candidate is a U.S. person.
- Professionalism representing AED when interacting with staff, vendors, clients, and the public.
- Organizational skills and the ability to plan, prioritize, and execute tasks independently.
- Strong written and verbal communication skills.

Benefits

In addition to exciting work at a growing company, we offer the following benefits:

- 401(k) retirement with a company match
- Health, Vision & Dental Insurance
- Life, AD&D insurance
- Vacation and holiday pay
- Relocation assistance