Senior Staff 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 partnered with Sphere Entertainment in the design, development, engineering, and manufacturing of the groundbreaking Big Sky camera system – an ultra-high resolution camera system and custom content creation tool that was created to capture the stunning images and video required for the world's highest resolution LED screen at Sphere. 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.

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Who We Are Looking For
A highly proficient Electronics Design Engineer who is passionate about hands-on development of a variety of cutting-edge products. An individual who demonstrates a high degree of creativity, foresight, and impact. An innovative problem solver who works well as part of a team or as a single point of contact on projects, has a breadth of experience, and is highly self-motivated.

What You'll Do
- Develop system architectures and generate schematic designs for complex digital and analog circuits using Altium Designer and advanced simulation and modeling tools to evaluate and optimize electronic circuits, ensuring performance, reliability, and manufacturability meet stringent quality standards.
- Conduct research of emerging technologies and design/develop electronic products from concept to production, leveraging your expertise in electronics engineering and design principles.
- 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

<u>Experience</u>:
- 10+ years of hands-on experience in state-of-the-art embedded systems electronics design, with demonstrated progression toward more complex and architecturally significant designs.
- Proficiency in Altium Designer is preferred.
- 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.
- Prefer experience with PCB layout of densely populated controlled impedance PCBs utilizing proper design techniques for signal integrity and power requirements along with mechanical design integration.

<u>Knowledge, Skills, and Abilities</u>:
- Exceptional communication and interpersonal skills, with the ability to effectively collaborate with cross-functional teams.
- Current on new technologies and industry trends to inform product strategy and innovation.
- Interfaces with other engineers and clients to coordinate specifications and design.
- 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 accurate estimates for complete hardware designs and 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.
- 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.
- 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