sense photonics

Principal Electrical Engineer

We are seeking an experienced, Principal Electrical Engineer for our Research Triangle, NC or San Francisco, CA development centers, to be a key contributor to engineering activities aimed at revolutionizing the world of LiDAR systems for autonomous vehicles, UAVs, industrial automation and other applications. You will be a lead engineer in defining system architecture, high power & high speed design, embedded design, simulation and schematic, PCB bring up, troubleshooting, and transfer to production. You will be responsible for the electrical system design including power distribution, digital and analog controls, embedded processor implementation, and system integration.

JOB RESPONSIBILITIES

- Drive system architecture, simulation, and schematic capture for the mid-range LiDAR product
- Translate high-level customer & marketing requirements into detailed design documents.
- Design embedded system, power distribution subsystem, and digital and analog controls.
- Drive interconnect design for high power & high speed signaling
- Recommend new designs and/or changes to existing designs
- Develop design requirements, bench prototypes, execute design simulations, integrate prototypes, conduct V&V testing, and deploy designs to production.
- Oversee design reviews and PCB layout activities
- Design for EMI/EMC compliance and safety

REQUIREMENTS

- Bachelor's/Master's degree in Electrical or Computer engineering with >10 years industrial experience.
- Experience in defining system architecture and subsystem requirements
- Substantial experience designing embedded systems, PMICs, high power, high-speed digital interfaces using discrete components.
- Experience debugging signal integrity issues in high power, high speed interconnects
- Experience designing electrical systems for challenging environments.
- Experience carrying high volume automotive electronic designs from concept through mass production (EVT/DVT/PVT).
- Experience with robotics & automotive system hardware design a plus.
- High power laser driver design a plus
- Working knowledge in automotive electrical hardware requirements and automotive communication protocols a plus
- Demonstrated ability to identify problems, recommend solutions, and perform contingency plans
- Team player with strong interpersonal and communication skills.

ABOUT US

We are passionate about building the next generation of LiDAR systems for autonomous vehicles, UAVs, industrial automation and many other applications. Our core technology – protected by over 200 patents – enables a simple, high-performance, solid state solution with no moving parts that can uniquely meet the rigorous performance, reliability and cost requirements of the automotive industry. Sense Photonics was founded in 2016 and is based in Research Triangle Park, NC with offices in

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Edinburgh, UK and in Silicon Valley. We are well financed, backed by several top tier venture capital firms and have already developed strong customer traction for our solution. We are building an innovative world-class company that designs and builds the world's best 3D sensors. Sense Photonics is also an equal opportunity employer – all applicants will be given equal consideration.