

Senior Electrical Design Engineer

Job # 431

Photo-Sonics, Inc. is an international leader in state-of-the art electro-mechanical and optical tracking systems located in Chatsworth, CA. We are an entrepreneurial company dating back to the early 20th century. Many innovations and successes in technology development happened here. As we grow our company and capabilities, we are seeking highly motivated and skilled professionals. You are invited to join our team, where you can express your ideas and make them happen. We are looking for engineers like you who wants to make a difference and help us elevate our technologies to the next level. Interested in knowing more about our opportunities, please see below:

Senior Electrical Design Engineer

Job Responsibilities include but not limited to:

- Develop electrical subsystem requirements from system level requirements
- Design and develop electrical subsystem from concept through delivery
- Develop analog and digital circuit designs and interfaces for PCB layout
- Perform circuit simulations and analysis
- Lead and mentor electrical engineers on projects
- Work with other engineering disciples (systems, mechanical, software) on design, integration and test
- Lead, define/develop electrical design processes and conduct electrical hardware/firmware design reviews
- Lead, define/develop design verification test (DVT) plans/procedures and conduct DVTs to confirm product design integrity
- Develop, prototype, troubleshoot, test, validate, and document electronic designs to meet system specifications and customer requirements
- Select and evaluate electronic hardware and components, and act as liaison between supply chain, design, and manufacturing
- Support program technical interchange meetings (TIMs), design reviews and customer status meetings/questions

- Perform system analyses and calculate power budgets for electrical and electronic systems
- Create engineering drawings (schematics, wiring diagrams, cable drawings, system diagrams), hardware manuals, specifications, test procedures
- Support in-house system integration, testing and range integration testing (system/network/operational software)
- Facilitate and manage internal design reviews with engineering team (mechanical, electrical, system/software)
- Manage design development (hardware/system/software) lifecycle process
- Any other projected deemed necessary by management

Requirements:

- Position requires Bachelor's degree in Electrical Engineering with minimum of 10 years of engineering and design/development experience
- Master's degree in engineering a plus
- May require domestic traveling to customer site and test sites
- Proficiency with OrCAD or Altium, AutoCAD, and SolidWorks
- Knowledge or experienced with FPGA programming Xilinx or Microsemi chip sets
- Experience with analog and digital video signals and standards
- In-depth knowledge of electrical and electronic standards, both commercial and military
- Knowledge or experienced with tracking systems, radar, sonar
- Knowledge of Optics, system calibration, timing
- Knowledge or experienced with gimbles, inertial measurement units, guidance systems
- Knowledge and experienced in the application and adaptation of Commercial-Off-the Shelf (COTS) products to meet government system requirements.
- Excellent presentation and communication (written and verbal) skills
- Preferred experience in servo control methods, electro optical system performance modeling, design and testing; as well as designing, using, procuring or analyzing visible and infrared focal planes or detectors.

- Cameras and optical sensors knowledge preferred
- Ability to obtain and maintain a DoD Secret security clearance
- Strong interpersonal, organizational, and time-management skills

Affirmative Action/EOE