

## **Senior Mechanical Design Engineer**

JOB # 427

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 20<sup>th</sup> 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 Mechanical Design Engineer.

## Job Responsibilities include but not limited to:

- lead product design through project lifecycle, from initial concept design through systems analysis/engineering, planning and execution within program budget and timelines
- create new designs and implement design improvements on all product lines
- coordinate design reviews to ensure designs meets customer requirements (functional and performance)
- Develop designs to meet high quality standard and ease of manufacturing, assembly and testDevelop and maintain the continuous improvement of department's technical standards, design guidelines, practices and procedures
- Ensure the work products developed are in compliance with engineering practices, procedures and standards
- Demonstrate ability and experience leading product development, engineering teams and mentoring other engineers
- Establish mechanical design lifecycle, review process and gates
- Responsible for mechanical design implementation and quality
- Incorporate Commercial -Off-the Shelf (COTS) products to designs as required
- Develop mechanical system designs using Solid Works
- Experience using Solid Works, PDM a plus
- Perform mechanical system modeling and analysis (thermal, stress) as required
- Support outsourcing analysis and decisions
- Support system design, integration and test efforts
- Support product transition to Operations and sustaining efforts
- Collaborate with system, electrical engineering on acceptance, qualification and factory test planning, procedure and assembly methodology

- Assure system and product quality by design validation/verification and testing
- Interact with customer and the development team as well as with other contractors in a multi-contractor development environment
- Other duties and projects as assigned by management.

## **Qualifications and Experience Requirements:**

- Position requires Bachelor's degree in Mechanical Engineering or Engineering with 10 plus years of mechanical design experience preferably in a manufacturing environment
- Ability to execute product design activities through all phases of projects, from initial concept design through systems analysis/engineering, project planning/execution and reviews
- Ability to design both large and small high precision mechanical systems as part of an overall opto-electro-mechanical system.
- Ability to package electronics boards, harnessing, and COTS electronics components for applications in harsh environments and tight packaging constraints.
- Experience with imaging camera and lens optical system mechanical and system integration desired
- Familiarity with thermal analysis and heat transfer principals for electronics packaging
- Demonstrated ability to utilize Solidworks for design and drafting and Solidworks Simulation tools for system analysis.
- Demonstrated ability to develop and review component drawings utilizing GD&T, per ASME Y14.5, and assembly drawings and associated engineering drawings.
- Demonstrated ability to perform tolerance stack calculations.
- Familiarity of engineering change control processes (ECN's), Solidworks PDM Professional experience desired.
- Experience with AutoCAD or Draftsight for 2D design and drafting desired
- Possess strong written and verbal business communication, excellent problem solving and organizational skills.
- Demonstrated ability and experience working with product development engineering teams.
- Working knowledge of Military standards and compliance rules and regulations mandated under the following quality and governmental standards: AS9100 & ITAR.

Physical requirements, ability to lift, stand, walk for long periods of time. Position may require some climbing.

Affirmative Action/EOE