



7815 Silverton Avenue, Suite 2  
San Diego, CA 92126  
858.259.1220 / 858.259.0123 fax  
www.rasirc.com

**Position: Sr. Development Engineer**  
**Reports to: Engineering Director**  
**Salary: \$95,000 - \$140,000/ Year**  
**Date: January 2024**

**Summary:** RASIRC is a growing semiconductor equipment company located in San Diego, CA. RASIRC products convert low vapor-pressure liquid chemistries into safer, reliable gases. These highly reactive gases are used in semiconductor industry to generate thin oxide and nitride films at reduced temperatures for complex nanoscale 3D structures. RASIRC customers are industry leading companies which manufacture advanced microprocessors, memory, and III-V nitride devices.

At RASIRC, Engineering creates success. The challenge for RASIRC technology is to deliver water vapor, hydrazine gas and hydrogen peroxide gas in controlled, repeatable concentrations. The ideal job candidate will use industry best practices to design and develop new products and processes, and generate required documentation. They will be expected to contribute to and drive development projects and report findings to external and internal customers. This job function will cover multiple stages of product life cycle from late R&D through development and, as needed, will cover design transfer to manufacturing and design changes for on-market products. The ideal candidate must have proven skills in high tech industry environment. Design skills needed include modeling, heat and mass transfer, documentation, robustness analysis, serviceability, and test. Process development skills include product transfer to manufacture, facilities layout, development of manufacturing tools, work instructions, and development of test equipment.

**Job Responsibilities:**

- Design and develop prototypes and fully functional product components.
- Generate Piping and Instrumentation Diagrams (P&ID) and Process Flow Diagrams.
- Calculate heat and material balances, and utility requirements.
- Drive development and improvement of manufacturing methods, tools, and test methods.
- Perform risk analysis, design and process FMEA.
- Design experiments to improve and optimize product performance.
- Analyze data using sound statistical methods to make data driven decisions.
- Write Work Instructions and customer facing technical documentation.
- Write engineering reports and present data at engineering review meetings and meetings with customers.
- Participate in and drive problem solving activities.
- Assist with creation, handling and tracking of equipment documentation.

**Required Qualifications and Skills:**

- **Education:** Requires Bachelor's Mechanical Engineering, Chemical Engineering or similar. Master's or PhD is preferred.



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- Citizenship: RASIRC does not assume the responsibility to sponsor employees, US citizenship or Permanent Resident Certificate (Green Card) is required for this job.
- Minimum 3 years work experience in semiconductor or other high-tech industry in equipment or product development roles.
- Experience in development and test of equipment and processes that use pressurized gases and liquids.
- Experience with heat and mass transfer modeling and calculation.
- Experience with implementing design changes in CEI or other regulated environment is preferred.
- Proven communication skills working both with internal and external customers.
- Experience with Solid Works or similar software.
- Ability to prioritize, plan and manage tasks to meet agreed deadlines.
- Ability to work in class 1000 or better cleanrooms with required cleanroom attire.
- May require working with hazardous gases and the ability to physically control RASIRC-designed hazardous equipment.
- Ability to lift 35 lbs.
- Ability to travel.

This is an outstanding opportunity for a highly motivated individual to grow in a dynamic and fast paced development environment. For consideration, please submit your resume. EOE