



Rantec Power Systems Inc.
Los Osos, California

Job Description

Title: Electrical Engineer

Date: August 2024

Department: Engineering

FLSA Status: Exempt

Reports To: Technical Director

Scope

Perform task and project level assignments including design/development, analysis, and manufacturing support of power supplies and power conversion equipment.

Essential Duties and Responsibilities, including but, are not limited to;

- Produce new electrical designs. Produce original electrical designs for power supplies and power conversion equipment to conform to customer specifications and Rantec standards.
- Upgrade of existing electrical designs. Provide product improvement through the analysis of existing products and the incorporation of design improvements. Incorporate product changes originating from changes in customer specifications, changes in components or manufacturing requirements, and to address obsolescence issues.
- Support bid and proposal activities.
- Test procedure generation. Determine the testing protocol for design and prototype validation as well as final product acceptance testing.
- Support Manufacturing. Produce designs that conform to IPC standards and Design for Manufacturability guidelines. Review manufacturing issues for input to design changes.
- Develop product performance and compliance testing.
- Develop plans and schedules for product design and development programs. Develop and maintain program budgets.
- Support product realization. Participate in design reviews, scheduling meetings and other engineering and manufacturing work groups to provide design input as needed.
- Ability to work flexible hours and/or different shifts, as required.
- Ability to work in a safe professional manner adhering to all regulatory requirements including OSHA, EPA, State and Federal Regulations.
- As the Company's success relies on the productivity of our team and adherence to customer product schedules, an essential function of this position is the ability to arrive to work on-time, and work each day, as scheduled.
- Perform other duties as assigned.

Qualification Requirements

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

This position requires access to our export-controlled commodities, technical data, technology and services. These items are restricted under the International Traffic in Arms Regulations (ITAR) to U.S. Citizens, Lawful Permanent Residents of the U.S. and properly licensed foreign persons. Therefore, employment is contingent on compliance with ITAR regulations and successfully obtaining and maintaining the necessary export authorization license from the U.S. Department of Commerce's Bureau

of Industry and Security, U.S. Department of State's Office of Defense Trade Controls, or other applicable government agency.

Education and Experience

- BS in Electrical Engineering.
- 5 years analog design experience preferred, preferably in switching power supplies
- Experience using electronic test equipment to troubleshoot and diagnose failed units and components
- Sound reasoning skills in risk assessment and failure analysis.
- Possess strong understanding and working knowledge of root cause analysis techniques and effective corrective action.
- Electrical and mechanical requirements including MIL-STDs, and industry standards such as J-STD-001 and IPC-A-610
- Power switching techniques, Control systems, Thermal analysis, Component modeling
- Packaging and altitude considerations
- Network simulation
- Reliability topics related to power conversion
- Environmental effects on electronic systems
- Magnetics design
- EMI emissions

Physical Demands

The physical demands described here are representative of those to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- While performing the duties of this job, the employee needs to be able to sit, stand and move about the inside of the facility to manage the workforce.
- Operates a computer and other office productivity machinery, such as; calculator, copy machine, printers, etc.
- Lifting and handling of boxes and/or materials up to a maximum of 50 pounds occasionally, and 25 pounds on a regular basis.
- Specific vision abilities required by this job; close vision, distance vision, peripheral vision, depth perception, and the ability to adjust focus.

Rantec is proud to be an Equal Opportunity Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, or status as a protected veteran. Rantec will consider reasonable accommodation to its policies for employees and applicants due to sincerely held religious belief.