

## **Process Engineer**

Available Immediately

**Parallax, Inc.** is a small (40 employees) privately held company located in Rocklin, California. Parallax designs and manufactures microcontroller development tools and small single-board computers that are used by electronic engineers, educational institutions, and hobbyists. Our current product line consists of BASIC Stamp<sup>®</sup> microcontrollers and development software, SX chips and programmers/debuggers, project boards, sensors, educational tools, robotics kits and accessories. These products are sold to customers in education, commercial/industry and hobby sectors. Examples of how Parallax customers use our products are shown at http://www.parallax.com/html\_pages/resources/custapps/main.asp.

Parallax is looking for an enthusiastic, self-motivated, and knowledgeable individual to work as a Process Engineer in the Production and R&D Departments. This position is a regular full-time and exempt level position that requires working in the Rocklin, CA facility, reporting to the Inventory & Production Manager. This position is a working engineering position, the duties of machine programming and maintenance are included and the actual operation of the equipment and processes is required. At present, the equipment includes a Chip Programmer, Pick and Place, FIB Machine, and E-Beam Prober. In addition, the investigation of new equipment or enhancements to existing equipment or processes is necessary. Additional responsibilities include vendor liaison, recommending manufacturing tools and equipment and developing process-related documentation. The Process Engineer is expected to coordinate solutions and improvements in a proactive manor by working with various departments at Parallax while maintaining focus on overall quality and efficiency. This position should be the key contributor to continuous improvement of the overall process.

## **Requirements:**

- Bachelors Degree in one or more of the following areas: Electrical Engineering, Industrial Engineering, Materials Engineering and Mechanical Engineering
- Successful completion of a Co-op where their engineering knowledge was utilized and challenged.
- General knowledge of the PC, basic electronics, electronic assembly, and component identification.
- Proficiency using Microsoft Office software (Word, Excel, Outlook Exchange and Power Point preferred).
- Safely and proficiently use basic hand tools.
- Extensive hand soldering experience.
- Very high attention to detail.
- Excellence in cooperation, coordination and communication is expected at all times.
- Strong technical writing skills.
- Must be able to read, interpret, and follow electronic schematics.
- Comfortable in a work environment where multi-tasking, problem solving, and other tasks are done with completeness.

## Job Description:

The Process Engineer will be a leader in the Production and Manufacturing environments at Parallax. He/she will work cooperatively with techs and engineers to complete the following:

- Prepare, run, and maintain the programming machine for normal operation.
- Run Surface Mount Assembly line, duties include:
  - 1. Stencil printing.
  - 2. Program, edit, adjust, maintain, and run Pick and Place Machine.
  - 3. Reflow solder including profiling.
  - 4. Inspect and correct misplacements and reflow soldering defects.
  - 5. De-panelize, leg, flux, solder, clean and cut legs.
  - 6. Test finished products.
- Investigate and recommend solutions to quality and process related issues.
- Investigate second source component recommendations.
- Specify manufacturing tools and equipment.
- Develop documentation for assembly and test procedures.
- Test all current products, including programming interpreters.

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- Train and cross train members of the Production/Manufacturing department on all processes, tools, and equipment.
- Develop and understand lead free production processes.
- Responsible for continuous improvement and documentation in all job responsibilities.
- Troubleshoot, identify root problems, offer solutions, and complete with thorough documentation.
- Responsible for knowledge of latest and up-to-date production processes.
- Troubleshoot and repair simple circuits.
- Assemble electronic components onto printed circuit boards.
- Design, create, and program 'Demo Units'.

The Process Engineer will work with the design engineers to perform the engineering tasks associated with taking a project from R&D to completion. During this process, tasks include:

- Identify, locate, and qualify specific electronic components.
- Work with the Purchasing Agent to procure said components.
- Compile and maintain lists of components on a product-by-product basis.
- Assemble a prototype of the design using both surface mount and through-hole technology based parts.
- Draw assembly diagrams and write instructions for the Production/Manufacturing Department.
- Work with the Production/Manufacturing Department to assure the procedures are understood and to correct issues as they arise.
- · Fabricate simple test jigs and write small test programs for manufacturing.
- Technical writing and simple programming skills are preferred; simple PBASIC programming is a plus.

The following duties will be incorporated after the above mentioned responsibilities are completed successfully on a regular basis. Maintain existing FIB and E-Beam Prober to support the production of current research and development. The successful Process Engineer will thoroughly research and implement preventive maintenance and expand their knowledge in the following areas:

- Assist with the development of new products based on microfabrication capabilities.
- Work closely with the R&D department to accomplish company goals and the listed duties.
- Ongoing research and development for processes and product development.

## Other related duties:

- Any other duties as needed or assigned.
- Enthusiasm, positive attitude, ability to work well with others, friendly, polite, and professional demeanor.
- Willing and motivated to learn more about the above items as necessary.
- Able to contribute to cooperative meetings.
- Able to take on new tasks that arise from future needs in the department/company.
- Insuring quality control.

Salary determined on employment, commensurate with experience, qualifications and enthusiasm.

Application consists of a resume to: Human Resources Manager 599 Menlo Drive, Suite 100 Rocklin, CA 95765 Fax (916) 624-8003 jobs@parallax.com Check out the Parallax website for more details <u>www.parallax.com</u>