

#### SENIOR EMBEDDED SYSTEMS ENGINEER

Job Title: Senior Embedded Systems Engineer

**Department:** Engineering

**Reports To:** System Software/Firmware Design Coordinator

FLSA Status: Exempt

### **SUMMARY**

The Senior Embedded Systems Engineer at Test Products will work closely with the Project Management team and Engineering Management. It requires a comprehensive knowledge of job functions, proficiency in applying sound engineering, software, and circuit design principals; a working knowledge of industry practices, standards, and equipment; ability to develop and implement all aspects of multiple assigned projects; use of independent judgment; enhanced verbal and written communication skills; and ability to work with minimal supervision.

## POSITION TYPE/EXPECTED HOURS OF WORK

This is a full-time position. Standard days and hours of work are Monday through Friday, 7:00 a.m. to 3:30 p.m. However, the Embedded Systems Engineer is expected to dedicate the time required to meet the company's strategic plan.

**ESSENTIAL DUTIES AND RESPONSIBILITIES** include the following. Other duties may be assigned.

- Design, build, and test embedded systems, including the hardware design, and firmware.
- Analog and digital circuit design, problem analysis and resolution ability working with ARM embedded microcontrollers
- Program embedded microcontrollers in C as needed to make the system work as specified in the design requirements.
- Producing a product from conceptual design to working prototype.
- Knowledge of Microsoft products, including Excel and Word in Windows environment.
- Maintain the documentation for embedded systems, including hardware, and firmware
- Excellent interpersonal and communication skills, and a strong team player.



#### **QUALIFICATIONS**

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.

- Sharp performer with a passion for embedded systems and their application to solve real world problems
- Accepting responsibilities and result-driven
- Excellent analog and digital circuit design skills, specifically with embedded microcontrollers.
- Knowledge of software design fundamentals (in C/C++) with emphasis on embedded microcontrollers, include real time operating systems.
- PCB design experience though not required, is preferred
- Knowledge of industrial Electrical design standards (NEC, IEC, etc.)
- Working with engineers, managers, and other team members to complete projects on time and budget.

## **REQUIRED EDUCATION AND EXPERIENCE**

- Bachelor's Degree in Electrical Engineering, Computer Engineering or equivalent experience
- Minimum 2 years of experience in circuit design, firmware design, and testing based on high-level requirements.
- Experience with IC-level circuit design
- Experience with software design and development processes
- Experience with TCP/IP and PC Networking
- Experience with serial data communications, including RS232, CAN, LIN, and Ethernet.
- Hands-on experience in testing and troubleshooting of electronic equipment using high-speed oscilloscopes, signal generators, waveform generators, and debugging tools
- Ability to analyze, problem solve, multi-task, work in a team environment and meet deadlines.

#### **LANGUAGE SKILLS**

Effective ability to communicate orally and in written form effectively with management, and other team members as needed.



#### **REASONING ABILITY**

Demonstrate the ability to anticipate and solve technical problems and resolve issues. Good problem solving and troubleshooting skills are essential for this position.

# PHYSICAL DEMANDS/ WORK ENVIRONMENT

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

Individuals may need to sit or stand as needed. May require walking primarily on a level surface for periodic periods throughout the day. Reaching above shoulder heights, below the waist or lifting as required to file documents, up to 25 lbs., or store materials throughout the workday.

The performance of this position may require exposure to the manufacturing areas where under certain areas require the use of personal protective equipment such as safety glasses with side shields and hearing protection. Primary environment: ambient room temperatures, lighting and traditional office equipment as found in a typical office environment.

Printed Name	Date	
Signature	<del></del>	