GARRETT®
METAL DETECTORS

Job Title: Electrical Engineer

FLSA Status: Exempt

Reports To: Engineering Manager

Supervises: None

Date: October 2020

Summary

Supports engineering staff in the development and implementation of electronic circuitry for products and in-house test equipment. This may include assisting with circuit design and analysis, component selection, schematic entry, circuit board layout, circuit testing and troubleshooting, and low-level firmware development for embedded systems.

Essential Functions

1. Works with supervisor to determine circuit and component needs.
2. Researches available components and circuit configurations needed to meet design requirements. Performs searches on available databases to identify components best suited to the application.
3. Makes recommendations and selects suitable components and alternatives.
4. Develops circuitry and performs computerized circuit analysis as required. Develops and evaluates demonstration circuitry to confirm circuit concepts. Performs computerized circuit analysis as required.
5. Develops low level firmware needed to support circuit development and testing of embedded systems.
6. Assists with the development of schematics, circuit board layout, circuit prototypes and testing.
7. Assists with the development and verification of assemble drawings and bills of material.
8. Assists with engineering change processes to ensure changes are properly tested and documentation is accurate and updated in a timely manner.
9. Reads, analyzes and interprets technical documents to define problems and established facts.
10. Maintains required documentation of development and testing activities, including engineering notes and reports.
11. Complies with all safety policies, practices and procedures. Report all unsafe activities to supervisor and/or Human Resources.

Required Education and Experience

1. Bachelor's degree in Electrical Engineering
2. Minimum of eight years of relevant experience

Special Skills & Qualifications:

1. Altium schematic capture
2. Circuit analysis, and circuit board layout

3. Proficient with C programming language
4. Ability to collaborate with others in a multidisciplinary team environment
5. Trouble-shooting and problem-solving skills

Work Environment

1. Well-lighted, heated and/or air-conditioned indoor office/production setting with adequate ventilation and moderate noise.
2. May work with or near moving mechanical equipment.

Physical Demands

Moderate physical activity performing non-strenuous daily activities of a productive/technical nature to work from a sitting or standing position.

1. Manual dexterity sufficient to reach/handle items and work with the fingers.
2. Must be able to bend, stoop, squat, crouch.
3. Must be able to sit for long periods of time.
4. Must be able to lift up to 20 pounds, with or without assistance.