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**Position Title:** Electrical Engineer I, II or III- Huntsville, Alabama

**Department:** Research and Development/ Engineering

**Prepared Date:** 5/11/2022

**SUMMARY**

Miltope Corporation manufactures rugged computers and computer devices. We have multiple offices located primarily in the United States. We encourage a healthy work life balance with our PTO programs and 9/80 work week. In addition, we have excellent benefits such as tiered health plans through BCBS, 401k and various insurances that are employer paid.

The primary duty of this position are to complete system designs, producing military products that ready for integration within the host computational systems. The design includes fully integrated computing and display systems for rugged environments.

**SUMMARY**

**Essential Functions** *(To perform within this position successfully, the incumbent must be able to perform each essential duty satisfactorily. Other duties may be assigned.)*

- Product design and support in Analog and Digital Electronics for military applications and rugged environments.
- Perform detailed circuit design that may include CPU, GPU and high speed buses.
- Design for compliance with military, aviation, and company specifications/standards with emphasis on shock and vibration, wide temperature extremes, and EMI/RFI concerns.
- Interface with systems and software engineers to specify and evaluate interface between hardware and software
- Lead a team of engineers involved in a specific project
- Act as a lead engineer for assigned products
- Prepare complete documentation packages including schematics, assembly drawings, and BOM's



- Work closely with mechanical and software engineers to insure a “system approach” to product solutions
- Provide design reviews for product compliance to military, airborne, commercial, and customer requirements
- Participate in or support Verification, Validation, & Qualification of new products and end of life component solutions. Including performing tests and test report generations.
- Review product documentation for completeness and accuracy, including documentation intended for customer use.
- Other duties as assigned

**Supervisory Responsibilities:** Yes (project team)

**BASIC QUALIFICATIONS** *(The requirements listed below are representative of the knowledge, skills, and/or ability required and preferred for this position.)*

**Required Education & Experience:**

- Bachelor's Degree of Electrical Engineering, Electrical & Computer Engineering or equivalent
- Minimum of 5 years of experience as an Electrical Engineer in an electronics design

**Required Knowledge, Skills, & Abilities:**

- Must possess superior engineering, strong interpersonal, verbal and written communication skills to interface with peers, customers or suppliers and be able to accurately document, report and present information.
- Ability to research solutions, debug and apply advanced tools / techniques to resolve engineering challenges.
- Ability to identify test methods, perform tests and write test plans, procedures and reports.
- Possess an understanding of industry standard electrical design tools including schematic capture, BOM management, and printed circuit layout. Examples: Cadence OrCAD / Allegro, Mentor Graphics Dx Designer / Expedition / PADS or equivalents.
- Must understand signal integrity constraint concepts as they apply to schematics and printed circuit board design.
- Must have experience in schematic design and (BOM) Bill of Materials generation.
- Knowledge of wireless, data server or computer architectures and operation.



- Knowledge of design or testing firmware or circuitry containing firmware.
- Ability to organize, schedule and coordinate work phases to complete tasks per estimates; excellent time management skills.
- Proficient with Microsoft Office (Word, Project, Visio, Excel & PowerPoint).
- Perform other duties as assigned.
- No travel restrictions.

**Preferred Education & Experience:**

- 5-10 years' experience in electrical design to meet temperature, shock, vibration and EMI requirements and is familiar with applicable military, commercial airborne, and industry standards.
- Experience designing or testing wireless, data server or computer products for the Mil-Aero market.
- Experience writing test plans, procedures, reports and technical correspondence for Mil-Aero products.
- Experience with industry standard printed circuit layout design tools. Examples: Cadence Allegro, Mentor Graphics Expedition / PADS or equivalents.
- Experience performing printed circuit layout of high speed circuitry including memory and computer interfaces using signal integrity design principles.
- Design, testing or programming experience with Intel / AMD or ARM processors, architecture, supporting chips, GPU's, PLD's or FPGA's.
- Experience designing or testing standard computer interfaces including Ethernet, USB, PCI Express, HDMI, and SATA, as well as legacy serial and parallel interfaces.
- Experience in electronics design with a DfX approach.
- Experience in programming languages such as HDL, VHDL, C, C++, Java, and Python.
- Experience with MIL-STD-810, MIL-STD-461, DO-160, DO-254, DO-178
- Experience with UL, CE, FCC design compliance and testing.
- Experience with test automation and design for testability.

**Physical Demands and Work Environment:**

- While performing the duties of this job, the incumbent is frequently exposed to moving mechanical parts, fumes, airborne particles, or risk of electrical shock and vibration.



- Position requires desk work as well as physically standing and walking
- Position requires adequate vision/color interpretation.
- The noise level in the work environment is usually moderate.