



Electrical Engineer

Job Overview

Microsat Systems Canada Inc. (MSCI) is a leading privately-held Canadian corporation in design, build and operation of space hardware, and a leader in the development and manufacturing of spacecraft reaction wheels and rate measurement units. We are currently seeking an individual to fill an Electrical Engineer position within the engineering team. This is a full-time position.

Duties and Responsibilities

- Develop and maintain analog and digital electronics design schematics, Bill of Materials, and PCB layouts for space equipment.
- Develop and maintain ground test circuitry to interface with flight hardware for evaluation and maintenance purposes.
- Electrical circuitry design specification and documentation
- Electrical circuitry testing using custom test setup and software.
- Work with other engineering staff to provide requirements input for, and to review and comment on hardware designs and design improvements.
- Review of other teammates electrical designs.
- Support Non-Conformance Reporting (NCR) investigations and remedial actions.

Education/Experience Requirements

- Bachelor's degree (or higher) in electrical engineering
- Minimum 5 years of experience in design, development and verification of electrical systems from planning to execution
- Experience in embedded mixed signal systems, power systems, motor control systems
- Experience in digital system design
- Strong understanding of electromagnetic interference and compatibility
- Proficient in using Altium designer and familiar with OrCad and PADS.
- Demonstrated experience in critical thinking, problem solving and trade space design studies
- Ability to write clear and concise design documents, work instructions, test procedures, forms, and records for use in testing / assembly
- Ability to work effectively in a team environment
- Detail oriented



- Strong written and verbal communication skills
- Ability to rapidly change roles/responsibilities while working in a high-paced, challenging work environment
- It is a condition of employment that the employee obtain and maintain, through the Company, eligibility for access to controlled goods and / or technology in accordance with the policies and regulations of the Controlled Goods Directorate of the Government of Canada
- Canadian Citizen or Permanent Resident and living in Canada

Bonus Points

- Familiarity with space systems design
- Familiarity with development and verification of system level electrical specifications and requirements
- Familiarity with IPC electrical workmanship and quality standards
- Experience in hands-on hardware testing and debugging
- Familiarity with Matlab / Simulink, VHDL, C, Python
- Experience with SPICE simulators such as LTSPICE