

Magellan Aerospace, Winnipeg, is presently seeking highly motivated and dynamic individuals for the following positions in Winnipeg, Manitoba, Canada.

Electrical Engineering

Electrical Engineer, Analog Design

The successful applicant will work in a team environment to support satellite bus development. The Engineer will work with a small team of electrical engineers engaged in the design, specification and procurement of electrical subsystems. Primary Responsibilities and Accountabilities:

- Design, implementation, and simulation/verification of analog logic systems in existing and new products developments
- Performing sensitivity, reliability, failure mode, parts stressing and worst case analyses to determine the optimum approach for the design, and to predict performance of the system for the expected operational and environmental conditions
- · Developing and executing test plans for electronics system verification and acceptance
- Generate manufacturing drawings and documentation
- Support prototype manufacture
- Support or perform unit level and spacecraft level testing
- Analyzing and interpreting test results and preparing summary reports
- Liaise with vendors providing parts or performing manufacture

The successful candidate will posses the following qualifications:

- · University degree in electrical or computer engineering
- 2+ years of relevant experience in analog design is considered an asset
- Knowledge of Electromagnetic compatibility (EMC) design and control issues. An understanding of Electro-Static Discharge (ESD) would be advantageous
- Electrical systems design is considered an asset
- Strong team player, enthusiastic, with a willingness to learn and contribute to challenging space projects
- · Good communication (verbal and written) and interpersonal skills
- Eligible for registration with APEGM

Electrical Engineering, Digital Design

The successful applicant will work in a team environment to support satellite bus development. The Engineer will work with a small team of electrical engineers engaged in the design, specification and procurement of electrical subsystems. Primary Responsibilities and Accountabilities:

- Design, implementation, and simulation/verification of digital logic systems in existing and new products developments
- · Design of embedded digital systems using VHDL
- · Generate documentation detailing the embedded design

- Performing sensitivity and failure mode analyses to determine the optimum approach for the design, and to predict performance of the system for the expected operational and environmental conditions
- Ensure that verification planning and test requirements adequately capture system design requirements
- Designing or performing test sequences to measure and characterize the performance of electrical components and systems
- Executing test plans for electronics system verification and acceptance
- Support or perform unit level and spacecraft level testing
- Analyzing and interpreting test results and preparing summary reports

The successful candidate will posses the following qualifications:

- · University degree in electrical or computer engineering
- 2+ years of relevant experience in FPGA and/or ASIC development is considered an asset
- VHDL or Verilog design, synthesis and simulation (experience with Actel and Xilinx FPGAs)
- FPGA system architecture design, estimating resource and power utilization, static timing analysis
- Design verification of FPGAs at the board and system level (including design of hardware and software to support testing)
- · Test bench design and implementation (VHDL or Verilog and TCL)
- · Electrical systems design is considered an asset
- Strong team player, enthusiastic, with a willingness to learn and contribute to challenging space projects
- · Good communication (verbal and written) and interpersonal skills
- Eligible for registration with APEGM

Electrical Engineering, RF Systems Design

The successful applicant will work in a team environment to support satellite bus development. The Engineer will work with a small team of electrical engineers engaged in the design, specification and procurement of electrical subsystems.

Primary Responsibilities and Accountabilities:

- · Design, implementation, and simulation/verification of RF systems in existing and new products developments
- Establishing and maintaining the bus RF communications requirements for a given project
- Ensuring that the specifications and architecture of the satellite bus RF communications subsystem satisfy the functional and performance requirements of the mission, and that verification evidence to this effect is obtained at unit, subsystem, spacecraft and mission level
- Identifying design alternatives and performing trade-off studies
- Analyzing the bus RF subsystem performance, interface and functional requirements
- Leading the definition, execution, and evaluation of the relevant functional, performance, and environmental tests
- Technical management of RF communication vendor procurements and/or subcontractor support

The successful candidate will posses the following qualifications:

- University degree in electrical engineering
- · 2+ years of relevant experience in RF design and use of test equipment is considered an asset
- Knowledge of Electromagnetic compatibility (EMC) design and control issues. An understanding of Electro-Static Discharge (ESD) would be advantageous
- · Electrical systems design is considered an asset
- Strong team player, enthusiastic, with a willingness to learn and contribute to challenging space projects
- · Good communication (verbal and written) and interpersonal skills
- Eligible for registration with APEGM

(Salary Range – \$50,000 to \$80,000 Canadian)

Candidates are invited to submit a cover letter and resume by visiting http://www.magellan.aero.

In accordance with our employment equity goals, applications are particularly encouraged from aboriginal persons, persons with disabilities, visible minorities and women.

Only those applicants selected for an interview will be contacted.