

Lead Test Engineer

Job Type: Full Time

Location: Safran Electronics Canada, Peterborough, ON, CANADA;

JOB SUMMARY:

The job of Lead Test Engineer requires advanced formal engineering education, prior experience in designing and using automated test equipment, and a good knowledge of developing test programs and test interfaces for both analog and digital products. This individual will also have superior problem solving skills and independent decision-making ability. The role includes the ability to manage the engineering group's test requirements, working with the project lead engineers to design and develop their tester needs.

This position reports to the Systems Group Manager and is part of a dynamic team implementing positive change to an already excellent organisation.

RESPONSIBILITIES:

- Establish and maintain the engineering group's test strategy and equipment including test software and hardware interfaces.
- Assist design teams in establishing development products' test equipment requirements and baselines.
- Design and integrate software, hardware and firmware for test stations for in-house product development and automatic product testing in a production environment.
- Develop test design requirements, test procedures, test plans, test cases, test descriptions, and compatibility matrix etc. from the hardware and software design specifications.
- Manage and co-ordinate the construction activities and modification of prototypes, test interfaces and automatic test stations.
- Evaluate COTS test equipment's performance and test software packages and tools.
- Develop current and new device drivers for existing automated test equipment.
- Design, review and optimize the acceptance test procedures to ensure coverage of system requirements.
- Create, maintain and update documentation using MS Office, and other tools.
- Prepare material cost and timing estimates, reports and design descriptions as required.
- Prepare for and conduct design reviews, test coverage/verification reviews (DDR, PDR, CDR, PRR etc.) as required.
- Supervise the work of more junior designers and/or other engineering employees.
- Produce estimates for work packages and submit reports on activities to the Systems and/or Engineering Manager.

QUALIFICATIONS:

Lead Test Engineer

- Bachelors Degree in Electrical, SW or Aerospace Engineering;
- Must be eligible to meet requirements of CGP or ITAR;
- Minimum of 6 years of related experience in designing and using automated test equipment preferably in the aviation industry;
- Using test instruments for hardware verification, such as oscilloscopes, logic analyzers, function generators, DMM's digital/analog IO etc. preferably in a LabView automated environment.
- Experience with National Instruments, LabView (and Veristand) is required.
- Experience HW interfaces including digital and analog building blocks – discrete I/O, analog I/O, Hi side/Lo side drivers, 4-20mA, pressure transducers, thermocouples, serial communications, transistors, FET's, PLD's etc. would be preferred;
- Experience with ARINC 429, CANBUS, RS232, RS422/485, 1553 will be to your advantage.
- Familiar with test and verification documentation, developing ATP's etc.
- Experience using simulation tools like MATLAB/Simulink would be to your advantage.
- Working knowledge and experience of commercial aviation and/or military specifications, standards and practices: ARP-4754, RTCA DO-160, MIL-STDs and ARINC STDs and DO-254 would be to your advantage.
- Experience with DOORS Orcad, Matlab and PSPICE are assets;
- Excellent analytical and problem solving skills.
- Must be able to reliably meet deadlines while paying close attention to detail
- Computer literate and proficient in Microsoft Word, Excel, PowerPoint and MS Projects;
- Both verbal and written communications skills play an important role in this position;

This posting reflects the general duties of the position but is not a detailed description of all duties which the successful applicant may be asked to perform.