



Embedded Electronics Systems Developer

Posted by: MWDPlanet and Lumen Corp

Posting date: 30-Jun-2025 **Closing date:** 20-Jul-2025

Education: Minimum of a Bachelor's degree or diploma in Electronics (Electrical) Engineering or a related discipline, or an equivalent combination of education and experience.

Language: English

Job location: Airdrie

Salary: \$65000 Per Year

Years of Experience: 3 years

Vacancy: 1

Job Type: Full Time

Job id: CAJ1535375

Expired

Job description:

207 Stage Coach Lane

Rocky View County

Alberta, T4A 0P1

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Job Description -Embedded ELECTRONICS
SYSTEMS DEVELOPER

Job title Embedded Electronics Systems Developer

Reports to Project manager/Lead developer

Required Education & Experience:

- ? Minimum of a Bachelor's degree or diploma in Electronics (Electrical) Engineering or a related discipline, or an equivalent combination of education and experience.
- ? Experience in embedded electronics/systems research and development, including hardware (HW), firmware (FW), and software (SW).
- ? Expertise in analog electronics, including low-noise operational amplifiers (OP-amps), analog filters, and programmable gain amplifiers (PGAs).
- ? Experience with Class-D amplifiers and digital-to-analog converters (DACs).
- ? Knowledge of ground noise mitigation, filtration techniques, and safety barriers.
- ? Proficiency in designing power inverters, pulse-width modulation (PWM) systems, and digital control mechanisms.
- ? Experience with high-resolution analog-to-digital converters (ADCs).
- ? Understanding of digital filtration techniques.
- ? Familiarity with digital signal processing (DSP), including phase-based BPSK/QPSK modulation and demodulation.
- ? Knowledge of time-based encoding systems.
- ? Expertise in signal compression and channel multiplexing.
- ? Implementation of Kalman filters and signal processing techniques.
- ? Experience in designing and building brushless DC (BLDC) motors and BLDC motor drivers.
- ? Familiarity with telemetry systems, including gyroscopes, magnetometers, and accelerometers, for control and digital processing.
- ? Proficiency in microcontrollers and firmware development for embedded systems.
- ? Programming experience in C, C++ (Qt, MFC), C#, and Python.
- ? Knowledge of physical and digital communication protocols: CAN bus, RS232, RS485, RS422, SPI, I2C, 1-Wire, Ethernet, and 802.11.
- ? Experience with high-temperature and high-vibration hardware design and components.

- ? Proficiency in Altium-based PCB board design.
- ? Experience with hardware, firmware, and software revision control tools.
- ? Ability to prepare project documentation for both internal and external clients.
- ? Experience working in the field.

Duties and Responsibilities:

- ? Design and develop analog and digital electronics hardware.
 - ? Develop embedded firmware and hardware for microcontroller-based products.
 - ? Support project initiatives by collaborating with the design team to ensure development milestones and deadlines are met.
 - ? Define and implement high-performance software by leveraging a strong understanding of embedded hardware design.
 - ? Evaluate product non-conformances and recommend design modifications.
 - ? Conduct evaluations, testing, and design reviews to ensure compliance with requirements and specifications.
 - ? Maintain accurate documentation throughout the development process to comply with company and regulatory standards.
 - ? Perform equipment tests in the field with clients, including working under high-stress conditions.
 - ? Handle equipment weighing up to 80 lbs.
 - ? Work with various instrumentation tools, from soldering equipment to pipe wrenches
- Must be eligible to work in Canada

To apply for this job vacancy, please send your resume along with a cover letter and a reference letter from your previous employer to the following email: mariya@mwdplanet.ca

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