

Embedded Software Engineer

About Us

At Eagle Electronics, we are a bold and ambitious start-up focused on disrupting the cellular module production environment in the United States. With a small but dedicated team, we are pioneering innovative solutions to redefine the industry. Our vision is to build a smarter, more sustainable, and future-ready cellular hardware ecosystem here in the United States, and we're looking for passionate individuals to join us on this journey.

Job Description

As an Embedded Software Engineer at Eagle Electronics, you will work on the development and integration of software for next-generation cellular modules. You will be part of a cross-functional team responsible for building firmware and embedded applications that interact directly with wireless hardware, including LTE, 5G, and IoT technologies. This role is ideal for an engineer with ****1–5 years of experience**** in embedded systems who is excited to work hands-on with cellular technologies in a fast-paced start-up environment.

Key Responsibilities

- Design, develop, and debug embedded software for wireless modules and microcontroller-based systems.
- Work closely with hardware and RF engineering teams to bring up new platforms and ensure optimal hardware/software integration.
- Implement and test device drivers, communication protocols (e.g., UART, SPI, I2C), and middleware.
- Assist in cellular module integration, certification testing, and troubleshooting connectivity issues.
- Contribute to software development workflows including version control, continuous integration, and code reviews.
- Support manufacturing test automation and diagnostic tools.

Required Qualifications

- Bachelor's degree in Electrical Engineering, Computer Engineering, or a related field.
- 1–5 years of experience in embedded software development.
- Proficiency in C and/or C++ for embedded systems.
- Experience working with real-time operating systems (RTOS) or bare-metal firmware.
- Understanding of embedded systems architecture, memory management, and peripheral interfaces.
- Familiarity with debugging tools such as oscilloscopes, logic analyzers, and JTAG/SWD.
- Ability to collaborate effectively in a fast-paced, interdisciplinary team environment.

Preferred Qualifications

- Experience with cellular module integration (e.g., Quectel, Sierra Wireless, u-blox).
- Knowledge of LTE/5G networks, SIM interfaces, and modem AT command sets.
- Familiarity with Yocto, Linux kernel development, or secure boot environments.
- Understanding of wireless protocols such as TCP/IP, MQTT, or CoAP in constrained devices.
- Previous experience in manufacturing test development or automated validation frameworks.

What We Offer

- A dynamic, hands-on role in a start-up shaping the future of cellular module production.
- Competitive salary, benefits, and opportunities for career growth.
- A collaborative and entrepreneurial environment where your contributions matter.
- Mentorship and support to develop your embedded and wireless expertise.