



JOB TITLE: Lead Embedded Software Engineering

DEPARTMENT: Engineering

REPORTS TO: VP of Engineering

As an Lead Embedded Software Engineering, you will be working closely with the hardware development team and specify, develop, debug and validate a new embedded Linux-based system. You will support legacy embedded Linux-based systems, lead mid-level and junior engineers and assist in testing as required.

DUTIES AND RESPONSIBILITIES:

- Evaluate embedded Linux software in C at both the kernel and application level.
- Perform the evaluation, specification and integration of Linux kernel, BSP, bootloader, drivers, etc.
- Initialize the Custom board bring-up process, debugging and s/w design validation.
- Maintain existing software platforms, root cause analysis, bug fixes and feature enhancement.
- Document of work product, concepts, and architecture for wide range of customers, products and applications.
- Ensure projects are completed on time and within budget
- Lead code reviews and participate in bug scrub.
- Mentor members of the embedded software development team.
- Consult with other Engineers to evaluate hardware/software interfaces and optional performance requirements.
- Provide technical guidance to lower-level programming personnel.
- Perform other related duties as assigned by management.

SUPERVISORY RESPONSIBILITIES:

- Directly supervise the Embedded Software Engineering team within the Engineering Department.
- Carry out supervisory responsibilities in accordance with the organization's policies and applicable laws.
- Responsibilities include interviewing, hiring, and training employees; planning, assigning, and directing work; appraising performance; rewarding and disciplining employees; addressing complaints and resolving problems.

QUALIFICATIONS:

- Bachelor's Degree in Computer Science, Electronic Engineering, Electrical Engineering or equivalent and 8 years of experience in embedded systems development.
- 1-3 years Supervisory experience is preferred
- 5 years of experience with embedded Linux.
- Demonstratable integration skills & experience on embedded Linux Platforms.
- Experience with Eclipse, CCS, Static Analysis, Perforce, Git, Jenkins and other such development tools.
- Extensive knowledge of C/C++.

- Experience with Linux distributions, toolchains and open source projects, (i.e. Buildroot, Yocto, Ubuntu, etc.).
- Experience with a wide variety of drivers, back-porting techniques and other low-level issues
- Experience with board bring-up, and debugging techniques using a variety of tools & techniques.
- Experience with 2/4-wire Ethernet, USB, RS-232, RS-485, CAN, I2C, SPI, etc.
- Experience with Wi-Fi, Bluetooth, BLE, AT command-sets and NMEA message strings.
- Experience with Bash, Python, or other scripting languages.
- Strong written and verbal skills with the ability to present concepts clearly and concisely using programs such as Word, Excel (charts), and PowerPoint.

PREFERRED SKILLS:

- Experience with database design and SQL-lite.
- Experience with Secure Boot, High Assurance Boot, Key and Certificate Management.
- Experience with satellite communications, V2X or other wireless technologies.
- Experience with GPL terms and conditions.
- Knowledge of test and diagnostic equipment such as spectrum analyzers, oscilloscopes, etc.
- Familiarity with simple soldering and electrical diagnostics.
- Experience with RF, analog, digital circuits and logic systems.
- Ability to analyze and solve complex software engineering problems.
- Experience developing on IAR platform (bonus points).