



SENIOR FIRMWARE ENGINEER (Embedded Systems)

We are an engineering and technology company providing product development, engineering services and prototyping in a broad range of industries. RPM Tech provides an exciting, technically challenging, and creative environment for motivated individuals. We are seeking an experienced Senior Firmware Engineer to support our product development needs and serve our expanding customer base.

Summary of Qualifications:

The candidate must be experienced in the planning, development, and testing of embedded firmware for consumer, medical, or military devices. Candidates must be experienced in planning and developing embedded software and UI for a variety of chipsets and devices. Ideal candidates will possess a thorough understanding of analog and digital circuitry, hardware and systems to support their firmware development experience. Multi-disciplined candidates are strongly encouraged.

The candidate should be excited to work on multiple varying projects throughout the year, often simultaneously. Ideal candidates will have experience leading small external teams to deliver larger projects and will have the ability to support or manage the development of desktop applications.

The candidate will be the primary leader for firmware and software development on their team. Systems will range from prototypes to production devices, with varying levels of complexity. The candidate will be a key contributor for software development and will work closely with the electrical design team to identify system requirements and associated hardware specifications.

Some travel may be required.

Primary Responsibilities:

- Primary contributor in developing firmware and software for consumer, medical, or military devices
- Collaborate with the current engineering team to plan, architect, and implement future embedded systems in new devices.
- Supporting contributor in analog and digital hardware design, identifying embedded system requirements such as I/O, comms, and other system specifications.
- Participate in design reviews and code reviews for new and existing firmware and hardware.
- Evaluate existing customer products/projects for design improvement and optimization.
- Devise, document, and run test cases to debug and verify code, including unit testing.
- Assist in designing and programming reliability and compliance tests for new products.
- Establish software specification requirements in coordination with other disciplines within the team.
- Document software design and development activities in accordance with established procedures.

Other Requirements:

- Strong communication skills, ability to work in a cross-functional team.
- Capable of multi-tasking, strong sense of individual responsibility and ownership of assigned tasks/designs.

Qualifications:

- Bachelor's degree in Electrical Engineering, Computer Science, Computer Engineering or related field, with minimum of 5 years product development experience desirable. Candidates with significant development experience, in lieu of formal degree, may be considered.
- Background and demonstrated experience in design and support of embedded systems.
- Embedded programming proficiency using C/C++, C#, assembly a plus.
- Experience with low level I/O including I2C, SDIO, USB, PCIe, etc.
- Experience with Bluetooth and IoT applications.
- Knowledge of Linux, and RTOS's such a QNX, FreeRTOS, etc.



- Experience with source control management, such as git.
- Ability to lead external teams when working with contractors to do additional firmware work.
- Must be able to legally work in the U.S.

Preferred Additional Skills:

- Desktop application development experience in C/C++/C#, Java, Python, VB, or similar.
- Mobile application development experience for Android and IOS devices.
- Experience in medical and/or military device product development.
- Experience with ASIC / FPGA development and programming.
- Experience in medical device (FDA) or other regulated body standards and submissions.
- Familiarity with ISO 60601, IEC 14971, IEC 62304, etc.
- Experience with standard electronics lab equipment such as multi-meters, oscilloscopes, spectrum analyzers, temperature chambers, load banks, etc.
- DSP/DSCs and associated embedded system development tooling, (Emulators, Analyzers, etc.).

This is an on-site position in our Forest Hill, MD design headquarters. Occasional work-from-home arrangements may be considered when feasible.

Benefits package available including medical with HSA, dental, vision, disability, life insurance, and 401k.

Please email your cover letter and resume to HR@RPM-Tech.com

RPM Tech is an equal opportunity employer. We celebrate diversity and are committed to creating an inclusive environment for all employees.