Job Description
Senior Firmware Engineer

About Elecbits

Elecbits is a tech-enabled B2B platform that helps Electronics Enterprises to go from an idea to a shelf ready, commercial Electronics Product. We cover the end-to-end intricacies involved in the Electronics product development & manufacturing cycle using 25+ micro-services on our platform.

We are proud to have worked with more than 100 eminent enterprises, digitizing their product development and manufacturing lifecycle. Some notable names are Ola Electric, Urban Company, Maruti Suzuki, Bosch, V-guard, Luminous, Phone pe, Escorts Kubota, Napino, etc. We are the largest B2B Electronics development and manufacturing platform of its kind, having more than 3000 global Electronics manufacturers and suppliers on our platform.

Key Responsibilities

We are on a mission to build the digital and physical infrastructure for every electronics enterprise on the planet.

Product Development and Leadership:

- Architect, design, and develop firmware for electronic systems, including IoT and fintech products.
- Write efficient and optimized firmware code in C/C++, Embedded C, and register-level programming.
- Develop and optimize algorithms for signal processing, control systems, data analysis, and other relevant applications.
- Create firmware modules for communication, control, and other functionalities.

Collaboration and Communication:

- Collaborate with hardware engineers to define hardware/firmware interfaces and specifications.
- Work closely with software developers to integrate firmware with higher-level software components and ensure seamless functionality.
- Collaborate with product managers to define project requirements, scope, and timelines, and actively participate in project planning and execution .

External Relations and Partnerships :

- Lead the debugging and troubleshooting efforts to identify and resolve firmware and algorithm-related issues.
- Develop and execute test plans to ensure firmware quality and performance.
- Prepare and maintain detailed documentation, including design specifications, test plans, and technical reports.

Team Management and Development:

- Create comprehensive firmware simulation models and test cases.
- Perform firmware simulations to verify functionality, performance, and reliability.
- Stay up-to-date with the latest industry trends and emerging technologies in firmware development and algorithm design.

- Drive continuous improvement initiatives to enhance firmware functionality and performance.

Project Management and Resource Allocation :

- Optimize firmware for resource-constrained environments and real-time embedded systems with strict timing constraints.
- Implement efficient algorithms and data structures.
- Perform firmware simulations to verify functionality, performance, and reliability.

Role Overview:

We are seeking a highly skilled Firmware Engineer to architect, design, and develop optimized firmware for electronic systems, including IoT and fintech products. The role involves low-level programming in C/C++, algorithm development for control and signal processing, and close collaboration with hardware, software, and product teams. Key responsibilities include creating efficient, real-time firmware, leading debugging and testing efforts, and driving continuous improvements. The ideal candidate will have experience in register-level programming, firmware simulation, and working within resource-constrained embedded environments.

Why Join Us?

Work hard, party harder:

Our mantra balances dedication and celebration.

No self–imposed limits:

We encourage you to push your boundaries and reach your full potential.

Preferred Skills-:

- Strong proficiency in C/C++ programming for embedded systems, with a focus on register-level programming and library creation Experience with hardware/firmware co-design and familiarity with hardware design principles (recommended).
- Proficiency in frameworks and tools: Espidf, Arduino, STM32 CUBEIDE. Experience with Real-Time Operating

Energized environment:

Our company's energy fuels growth and self-improvement.

Good vibes only:

We foster a positive and supportive atmosphere for all.

Systems (RTOS): FreeRTOS, Zephyr, or embedded Linux.

- Proven track record of delivering high-quality firmware and algorithm solutions on schedule.
- Bachelor's degree in Computer Science, Electrical Engineering, or a related field.
- *8+ years of experience* in firmware design and development.
- Strong proficiency in C/C++ programming for embedded systems, with a focus on register-level programming and library creation.
- Experience with hardware/firmware co-design and familiarity with hardware design principles (recommended).

Job Type	City	Cost to Company
Full Time	Gurugram/Bangalore	

How to apply?

Please mail your resume at _careers@elecbits.in_ in the following format.

Mail Subject: {{name}} – Application for {Senior Firmware Engineer}

Also, add the following details while mailing

Total work experience

_____

Current CTC

_____

Date of joining

_____

Attach your latest resume

Be a part of our team that works toward Exponential growth-:

We are looking for immediate joiners with a maximum notice period of 1 month.

This would be an in-office role for our Gurugram branch.