



# Senior Firmware Engineer

## Work Areas

Firmware Development | Low-Level Programming |  
Debugging & Optimization

## Location

Gurgaon/Bangalore

## Department

Research And Development

## Employment type

Permanent Full-Time

## About Us

Elecbits is India's leading full-stack, vertically integrated Electronics engineering and manufacturing organisation, enabling customers like Panasonic, Yamaha, Maruti Suzuki, OLA, Valeo, and 200 others to go from idea to mass production in a simpler, faster, scalable manner.

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

## 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.

## Responsibilities:

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

### Product Development and Leadership:

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

### Collaboration and Communication :

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

## External Relations and Partnerships :

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

## Team Management and Development:

1. Create comprehensive firmware simulation models and test cases.
2. Perform firmware simulations to verify functionality, performance, and reliability.
3. Stay up-to-date with the latest industry trends and emerging technologies in firmware development and algorithm design.
4. Drive continuous improvement initiatives to enhance firmware functionality and performance.

## Project Management and Resource Allocation :

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

## Requirements:

### Must Haves:

1. 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).
2. Proficiency in frameworks and tools: Espidf, Arduino, STM32 CUBEIDE. Experience with Real-Time Operating Systems (RTOS): FreeRTOS, Zephyr, or embedded Linux.
3. Proven track record of delivering high-quality firmware and algorithm solutions on schedule.



## Education & Experience:

1. Bachelor's degree in Computer Science, Electrical Engineering, or a related field.
2. 8+ years of experience in firmware design and development.
3. Strong proficiency in C/C++ programming for embedded systems, with a focus on register-level programming and library creation.
4. Experience with hardware/firmware co-design and familiarity with hardware design principles (recommended).

## How to Apply?

Please mail your resume at [careers@elecbits.in](mailto: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 as a {Profile Name} (in years/months)
- Current CTC Date of joining Attach your latest resume

Note: 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.

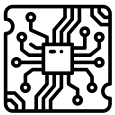


## What makes Elecbits a great place to work:

We believe electronics is more than a field—it's the foundation of the future. From design to prototyping to production, we're reimagining how hardware companies innovate, collaborate, and scale.

We're not just building a company—we're building the foundation for a global electronics revolution, with India at the forefront.

So if you believe in the power of Electronics to change the world, and you're ready to build the infrastructure that makes it all possible—join us.



### Engineering Centric Culture

We foster a hands-on culture where passionate engineers solve real-world problems at the intersection of hardware and firmware.



### High Ownership, High Impact

Hardware is hard and everyday we are working towards changing that with a team that takes high ownership and creates large impact



### Built in India, For the World

We're here to make India the next global hub for electronics innovation and manufacturing. Every line of code, every PCB — brings us one step closer.



*'Building the digital physical infrastructure for every electronics enterprise on the planet'*



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