



**Bellevue, WA- United States**

## **Senior Hardware Engineer**

**NEXT Biometrics** manufactures fingerprint sensor modules based on the patented *NEXT Active Thermal™* principle. Its sensors are used in a wide scale of solutions and by many manufacturers, including 1<sup>st</sup> tier manufacturers like Dell and Fujitsu.

NEXT Biometrics is looking for an experienced Senior Hardware Engineer to join our team. The ideal candidate will have a strong electrical engineering and technical product development background in semiconductor/electronics, mobile devices, mixed signal data acquisition systems, or related fields. As a member of the NEXT Biometrics engineering team, new team members will take an active role in the development and commercialization of electronic devices based on proprietary technologies. The Senior Hardware Engineer role centers around design, development, validation and production bring-up of electronic devices and systems.

### **Responsibilities**

- Design and development of analog and digital circuits in mixed signal system.
- Analog and mixed-signal circuit analysis, simulation, testing and characterization.
- PCB layout, prototyping, board bring-up, validation and optimization.
- Development and documentation of hardware-level requirements, specifications and validation test plans to meet product requirements.
- Leadership in driving hardware development from concept to production and in collaborating with cross-functional teams.
- Participation in hardware and hardware related cross-functional design reviews.
- Ownership in hardware issues and change requests tracking and resolution.
- Ownership in planning and coordinating hardware builds as well as maintaining engineering documentations and design releases.
- Design and development of engineering boards and production test boards.
- Manufacturing bring-up and support in collaboration with operations team.
- Support for design-in and product acceptance with existing and new customers.
- Support for products in production by conducting root cause analysis, risk analysis, and implementing corrective actions.

### **Qualifications**

- BSEE, MSEE preferred
- At least 7 years of hardware design experience for embedded systems including circuit design, layout implementation, hardware bring-up and system integration.
- Experience with analog and mixed-signal circuit design, low-power circuit design, DC/DC converters, battery based design and power management methods.
- Experience with microcontroller architecture, digital circuit design and various communication protocols such as SPI, USB, I2C, UART, etc.
- Experience with mixed-signal board-level design and proficiency with prototyping, troubleshooting, qualifying and optimizing circuits.
- Proficient with design, simulation, layout and verification tools.
- Experience with standard laboratory T&M equipment for design evaluation, validation and characterization.
- Experience leading and driving hardware design development from schematic capture, PCB layout, prototyping through validation and high-volume production.



- Experience working with mechanical team in mechanical assembly integration.
- Experience working with firmware, software and quality teams in definition and design integration of features, drivers, algorithms, and production test tools.
- Experience in successful market deployment of electronic devices with participation through all stages of product development, from concept to production, in more than one product cycle.
- Excellent English communication and documentation skills as well as the ability to work in multidisciplinary projects involving engineers with several technical areas of expertise.
- Strong interpersonal skills and ability to work independently with minimum guidance.

### Preferred skills and Experience:

- Experience with custom ASICs, display technologies such as TFT LCD, analog signal acquisition systems/sensors or related fields.
- Experience with ARM/Cortex M microcontroller based systems.
- Experience with SPI, USB, I2C, UART communication protocols.
- Experience with Altium Designer and NI Labview.
- Knowledge of noise suppression techniques and robust designs to meet ESD/EMI immunity, safety, and reliability requirements.
- Knowledge of regulatory and compliance requirements (CE, UL, IEC, ISO...etc)
- Understanding of high volume manufacturing processes for consumer electronic products. Experience with DFM/DFT/DFA.
- Experience with project management, engineering document control and engineering design release management tools and systems.

### Apply at:

[NEXT Biometrics Senior Hardware Engineer](#)

**NEXT Biometrics** is committed to the principle of equal employment opportunity for all employees and to providing employees with a work environment free of discrimination and harassment. All employment decisions at NEXT are based on business needs, job requirements and individual qualifications, without regard to race, color, religion or belief, national, social or ethnic origin, sex (including pregnancy), age, physical, mental or sensory disability, HIV status, sexual orientation, gender identity and/or expression, marital, civil union or domestic partnership status, past or present military service, family medical history or genetic information, family or parental status, or any other status protected by the laws or regulations in the locations where we operate. NEXT will not tolerate discrimination or harassment based on any of these characteristics. NEXT encourages applicants of all ages.