



Bellevue, WA - USA

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 1st tier manufacturers like Dell and Fujitsu.

NEXT Biometrics is looking for an experienced **Senior Hardware Engineer** to join our team. The ideal candidate has strong electrical engineering and technical product development background in consumer electronics, mobile devices, mixed signal data acquisition systems, or related fields.

As a member of the NEXT Biometrics engineering team, you will take an active role in the development and commercialization of electronic devices based on proprietary technologies. The Senior Hardware Engineer role centers around leading the end-to-end design, development, validation, characterization and production bring-up of electronic hardware devices and systems.

Responsibilities

- Lead electrical hardware development from concept to mass production in collaboration with cross-functional teams to meet product cost and schedule targets.
- Take ownership in tracking, resolving and reporting status of hardware issues and change requests throughout the product life-cycle.
- Plan, coordinate and execute hardware builds and maintain engineering documentations and design releases.
- Perform hardware design, analysis, simulation, prototyping, schematic capture, PCB layout implementation, board bring-up, validation testing, characterization and optimization of analog and digital circuits in mixed signal system.
- Develop and document hardware requirements, specifications and validation test plans.
- Participate in hardware and hardware related cross-functional design reviews.
- Support design-in and product acceptance with existing and new customers.
- Support manufacturing bring-up in collaboration with quality and operations teams.
- Support products in production by conducting issue root cause analysis, risk analysis and implementing improvements and corrective actions.

Qualifications and Experiences

Essentials:

- BSEE, MSEE preferred
- At least 5 years of hardware design experience with embedded systems including circuit design, layout implementation, prototyping, board bring-up and design validation.
- At least 2 years of experience leading hardware development from design to production.
- Experience with analog and mixed-signal circuit design, low-power circuit design, DC/DC converters and power management methods.
- Experience with mixed-signal board-level design and proficiency with prototyping, troubleshooting, soldering rework, board bring-up and circuit optimization.
- Experience with microcontroller architecture, digital circuit design and various communication protocols such as SPI, USB, I2C, UART, etc.



- Proficient with design, simulation, PCB layout and verification tools.
- Experience with standard laboratory tools and T&M equipment for design evaluation, circuit characterization, hardware validation testing and compliance qualifications.
- Experience working with mechanical, firmware, software and quality teams in design integration of features, algorithms, production assembly 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.

Nice-to-have:

- Experience with custom ASICs, TFT based display technologies, analog signal acquisition systems/sensors or related fields.
- Experience with ARM/Cortex M microcontroller-based systems.
- Experience with Altium Designer, NI Labview, Jira, CodeBeamer and Arena Solutions.
- 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, requirement 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.