Director of Technology

Reports To: Chief Technology Officer

Location: Chandler, Arizona

Travel: Up to 30% domestic and international travel

Level: Title and level (Director, Senior Director, or Vice President) will be commensurate with experience and demonstrated impact.

Position Summary

Integrated Biometrics is seeking a hands-on engineering leader to lead hardware product and technology development for compact, low-power, FBI-certified fingerprint sensors. This role will guide product architecture, stage-gate development, technical support, manufacturing improvement, and root-cause investigations across hardware, firmware, software integration, and device engineering, with a strong focus on cohesive product systems and customer solutions that span hardware and software.

The ideal candidate has deep hardware engineering experience, proven product-development leadership, and the ability to take complex hardware products from concept through release, as well as the systems perspective to align embedded, application, and SDK-level software with the hardware roadmap.

Key Responsibilities

- Lead the hardware product development team and direct the associated software engineering execution, coordinating with complementary teams in Asia.
- Translate customer and market requirements into integrated product solutions, ensuring hardware, firmware, and application software deliver a consistent customer experience.
- Manage stage-gate product development, including checklists, reviews, and stakeholder alignment.
- Drive product architecture, redesign, prototyping, benchmarking, and performance improvements.
- Own design for manufacturing and design for test (DFM/DFT) implementation during product development, releasing designs that are manufacturable and testable, and supporting the quality, manufacturing, and cost-reduction

owners downstream.

- Lead root-cause analysis and technical investigations involving fingerprint sensor technology.
- Identify, test, and qualify new electronic and hardware components.
- Manage technical support for existing hardware products and contribute to new technology proposals.
- Build and sustain a close working partnership with our engineering and manufacturing organization in South Korea.

Required Qualifications

- Bachelor's degree or higher in Computer Science, Electrical Engineering, or related field.
- 10–15 years of hands-on engineering experience, including prior team leadership.
- Experience managing multidisciplinary teams (software, firmware, hardware), with demonstrated ability to align hardware and software delivery schedules.
- Strong hardware background, including SoCs, ARM processors, PCBs, FPGAs, CPLDs, and embedded systems.
- Demonstrated DFM/DFT discipline in volume production, (e.g. tooling, test fixture development, pilot builds, and hand-off).
- Experience with communication protocols such as USB, Parallel, MIPI, and SPI.
- Proficiency with Linux, Windows, Android, and iOS environments.
- Experience with PCB design tools such as OrCAD, PADS, or Eagle.
- Expert-level C/C++ skills and some Verilog HDL knowledge.
- Skilled with lab test equipment, including multimeters, oscilloscopes, and logic analyzers.
- Strong analytical, communication, problem-solving, and cross-cultural collaboration skills, including demonstrated success leading or partnering with engineering and manufacturing teams in Asia.
- Willingness to flex working hours as needed to maintain regular overlap with colleagues in South Korea; IB's flex-time policy supports this.
- Willingness to travel domestically and internationally, estimated at 15–30%,

including recurring travel to our South Korea operations.

Preferred Qualifications

- MS or PhD in Computer Science or Electrical Engineering.
- Experience with quality systems, imaging or biometric sensors, electro-optic devices, or other precision sensing hardware.
- Experience taking products through third-party certification or regulated qualification programs (e.g., FBI/NIST biometric certification, ISO 9001, FCC/CE), or selling into government and public-sector markets.
- Comfort leveraging modern development tooling, including AI-assisted coding, CI/CD pipelines, and static analysis, to improve team productivity and code quality.
- Experience delivering SDKs, APIs, or device-integrated applications alongside hardware platforms.
- Prior experience living or working in South Korea, or familiarity with Korean language and business customs.

About Integrated Biometrics

Integrated Biometrics designs biometric software and FBI-certified fingerprint sensors used in law enforcement, military, homeland security, national identity, social services, and commercial applications. Its patented light-emitting sensor technology enables lightweight, reliable scanners with advantages in size, power consumption, portability, and performance. The company has operations in South Carolina, Arizona, and South Korea, with sales resources located globally.