



## Job Description:

# Embedded Firmware/Software Engineer

Integrated Biometrics, LLC  
6150 W. Chandler Blvd  
Chandler, AZ 85226

## The Company

Integrated Biometrics, LLC designs and manufactures fingerprint sensors for law enforcement, military operations, homeland security, national identity, election validation, social services, and a wide range of commercial applications. Whether it's using the company's ground-breaking touchless SDK, or patented FBI-certified light emitting sensor (LES) technology, IB enables lightweight, mobile biometrics that outperform traditional prism-based devices in size, power consumption, portability, and reliability. Identity management solutions providers, government agencies, and corporations around the world rely on Integrated Biometrics' products to provide identity quickly and accurately, even in challenging, remote locations.

## The Role and Responsibilities

Integrated Biometrics seeks to add an Embedded Firmware/Software Engineer to our rapidly growing product development team. This US-based position will provide design and develop firmware and software for IB's various fingerprint scanner products. The successful applicant will work quickly, accurately and with a customer focus always in a fast-paced and rapidly growing organization. The Embedded Firmware/Software Engineer is a value-driven, intuitive team member that can apply their firmware and software knowledge/skills to plan, execute and report results on IB's various products/ scanners. This position's main purpose is to develop new hardware and software platforms for new and existing IB products.

Responsibilities include:

- Design and architect new firmware and embedded software solutions for IB biometric products
- Develop prototypes of new product concepts and improvements to existing products
- Improve and develop test methodologies with the software test team to ensure product reliability
- Present design and verification results to a global multidisciplinary team
- Teardown, analyze and benchmark various sensor products.
- Develop robust encryption systems for future biometric platforms
- Collaborate with hardware and software teams to innovate new product and solutions

## The Position Requires:

- BS in Electrical Engineering or Computer Engineering
- 3+ years experience with embedded software design and development
- Proficient in C/C++
- 3+ years experience with FPGA, Verilog, HDL
- Deep understanding of communication protocols including USB, MIPI, LVDS
- Experience with Altera FPGAs or equivalent
- Experience with firmware/software architecture development through implementation



- Hands-on experience in Bluetooth or Wi-Fi is required
- Familiar with boot code, low-level OS code, device drivers, and IO devices
- Unix system-level programming, embedded Linux
- Scripting with Python, Bash, Perl or equivalent
- Comfortable conversing with hardware teams, reading schematics and operating test equipment
- Excellent communication (written and oral) and interpersonal skills
- Ability to communicate complex technical issues in a clear and concise manner
- Proven ability to work creatively and analytically in a problem-solving environment
- Experience with common office-related software including MS Office
- Willingness and ability to travel domestically and international without restriction (up to 15%)
- Authorized to work in the US

#### **Other Desirable Skills & Qualifications:**

- MS in Electrical Engineering
- GitHub, version control systems
- Experience with camera systems and interfaces
- Unit Testing Frameworks and/or other Test Automation Tools/Frameworks
- Software Requirements, Testing Plans and Reports, Traceability Matrix, Defect/Issue Reporting
- Experience working with product development firms and contractors
- Writing and maintaining test scripts
- Biometric industry standards and certifications
- Familiarity with encryption techniques
- Korean language skill

*Integrated Biometrics is an equal opportunity employer, and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity or expression, pregnancy, age, national origin, disability status, genetic information, protected veteran status, or any other characteristic protected by law.*