



## Sr. Firmware Engineer – Tewksbury, Massachusetts

IDEX America Inc. and its parent company IDEX ASA, a leading developer of fingerprint sensor devices, is expanding its Tewksbury, MA development center.

Are you a highly motivated and talented FW/SW engineer that loves working close to the HW all the way up to host application SW? Are you someone who wants to be part of a growing biometrics company and enjoys working with other highly talented engineers? Do you enjoy architecting and developing small footprint embedded firmware? Are you never satisfied with the status quo and passionate about innovation and developing best in class solutions?

### Tasks and responsibilities:

- Participate in low-level ASIC firmware development of sensing algorithms, power management, host communication and diagnostic subsystems.
- Establish and promote best software practices throughout the company
- Undertake open ended design and investigation activities based on internal and external customer input
- Design and implement firmware and ensure implementation meets requirements
- Perform technical analysis across multiple domains such as system-level partitioning, use-case definition, system BW analysis, firmware subsystem architecture, sensor modeling and performance estimation, system power consumption for various use cases, power management and low-power design.

### Experience:

- 7 years of embedded firmware / embedded system development experience
- Embedded system architecture and systems partitioning experience
- Able to work within a multi-discipline team
- System modeling and simulation experience using Matlab and related tools
- Excellent problem solving and debugging skills

### Desirable Experience:

- Capacitive Touch experience
- Image processing experience
- Recent mobile handset or tablet experience is highly desirable.
- Recent experience with SPI & USB communications highly desirable
- Mix of hardware, software and firmware experience highly desirable

### Education:

- Bachelor or Master degree in Electrical Engineering, Computer Engineering or related disciplines
- Highly motivated and excited by the prospect of working on innovative technologies in a fast-paced environment

### Personal capabilities:

- Ambitious; able to work independently; self-assured and outgoing
- Creative, pragmatic and easy to work with
- Enjoying responsibility for a diverse portfolio of projects and assignments
- Excellent communication skills
- Quality conscious with an eye for detail
- Structured and documented work methods

### Potential:

IDEX is a pioneering company in fingerprint sensing technology. We are technically advanced in our field. The organization is small and compact, and we have informal and stimulating work environment. There is a spectrum of challenges and you will have an opportunity to grow with us. You will have extensive contact with customers, suppliers and management. We offer competitive compensation and terms and a share-based incentive scheme.

### Work place:

Full-time position in Tewksbury, Massachusetts

### Travel activity:

Occasional domestic and international travel, depending on projects



**IDEX ASA:**

IDEX ASA specializes in fingerprint imaging and recognition technology. IDEX's vision is to ensure individuals a safe, secure, and user-friendly use of personal ID.

IDEX has developed the award-winning SmartFinger® technology platform based on the company's core intellectual property, including the patented fingerprint imaging principle, sensing scheme and chip design. Combined with core software solutions for imaging and authentication, the SmartFinger technology enables on-device enrollment, template storage and verification within the very same module. SmartFinger solutions can be seamlessly integrated into a variety of embedded applications such as mobile phones, one-time password devices, Smartcards, payment and ID cards, payment terminals, access control devices and biometric security and login tokens.

**Web site:**

[www.idex.no](http://www.idex.no)

**Contact:**

careers(at)idexus.com