



## **Sr. Validation Engineer - Rochester, New York**

IDEX America Inc. and its parent company IDEX ASA, a leading developer of fingerprint sensor devices, are building an ASIC Development site in Rochester, NY and is seeking an experienced Semiconductor Validation Engineer to help test state-of-the-art mixed-signal fingerprint sensing devices. As Sr. Validation Engineer, you will work closely with colleagues in the ASIC Development organization as well as with other teams within the IDEX R&D, System Engineering and Sensor Development teams. The Validation Engineer will be responsible for bench test, test automation, performance validation, data collection and formatting for complex finger print sensing ASICs. Will interface with design engineers and product engineers to validate device performance across various test conditions, debug, create compliance matrices and test reports and present data with the opportunity to provide test enhancement feedback for future designs.

### **Tasks and responsibilities:**

- Perform lab-based post-silicon validation data collection, initial debug and analysis, and documentation of results
- Responsible for maintaining and tracking validation plan based upon collaboration with the design team
- Assist in development of validation and characterization infrastructure including methods for serializing and tracking validation parts, creating reproducible tests, data storage formatting and analysis tools
- Work with design team on validation and test strategy
- Define and implement LabVIEW/Python based test automation
- Author/contribute to formal Validation Reports that are shared with customers and support teams
- Design PCBs to aid with validation of devices
- Interface with internal and external vendors to develop test and validation hardware schematics, optimize board layouts, component selection and manufacture of necessary test hardware
- Validate test systems to ensure test coverage and measurement repeatability
- Aid in correlating ATE measurements to bench measurements
- Support failure analysis process with the manufacturing and quality organizations. Work to replicate customer issues and, when necessary, interface directly with field engineers to root cause a customer problem and implement corrective action
- Mentor technicians, coop students and other junior engineers on the product operation and the silicon validation process
- Ensure timely and successful completion of projects

### **Required Experience:**

- 10 or more years of experience in validation of mixed-signal semiconductor ICs
- Working knowledge of basic circuits – R-C filters, op-amp circuits, etc.
- Must possess an in-depth knowledge of mixed-signal device performance parameters and test methods.
- Experience and familiarity with testing, evaluation and debugging RF, analog and mixed-signal IC designs in a lab environment. Should be proficient in use of network analyzer, spectrum analyzer, signal generators, oscilloscope
- Experience setting up and running bench and automated test with signal generators, network analyzers, noise figure meters, spectrum analyzers, oscilloscopes, temperature chambers, tunable filters & other associated equipment
- Experience working with evaluation boards and automated test setups including board-level rework
- Strong programming background (C, C++, Python, Perl, etc.)
- Creativity and analysis skills with ability to research and devise new tests
- Excellent problem solving and debugging skills



- Desirable Experience:**
- Experience with high volume, consumer, capacitive touch-related products
  - Excellent written and ability to effectively transfer knowledge within the organization
  - Detail oriented and self-starter, ability to perform assignments with minimal supervision
- Education:**
- BS / MS in Electrical, Computer or Microelectronics Engineering
- Personal capabilities:**
- Ambitious; able to work independently; self-assured and outgoing; dependable and able to deliver
  - Pragmatic and easy to work with
  - Excellent communication skills
- 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 Rochester, New York
- 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.
- Web site:**
- [www.idex.no](http://www.idex.no)
- Contact:**
- careers(at)idexus.com