



## FIRMWARE ENGINEER

We are looking for talented people that are out of the box thinkers and want to work in an environment where you can make a big difference. If you want to work for a company that has a multitude of areas for you to learn and grow in, a small company atmosphere with the security of a larger company, and work with a top-notch team with extremely talented engineers and fascinating technology, then this is the place for you.

### **Job Summary**

We are looking for a well-rounded engineer to develop firmware for embedded processors that reside on our custom printed circuit boards and to develop application software for Windows based desktop computers. Additional beneficial skills or possible growth areas include: development of Field Programmable Gate Arrays (FPGA) and design of schematics for printed circuit boards.

The engineer should be able to work in a small company environment and be able to make contributions in many disciplines, including: define firmware specifications, determine firmware architectures, define data interfaces, test/ debug systems.

The successful candidate will keep current with the latest research and advances in the field, help shape the direction of the firmware side of the product, and be comfortable tackling unfamiliar or broadly defined problems with little or no outside direction. We are looking for a person with excellent technical and interpersonal skills, a good communicator, and someone who can comfortably work in a multidisciplinary field. Entry level candidates with a desire to grow will be considered. Our company has a casual working environment, but high standards of performance.

### **Primary Areas of Responsibility**

- Develop firmware for embedded processors on custom printed circuit boards
- Develop and test application software for Windows PC computers using LabVIEW & Windows Microsoft Visual Studio C# or C++
- System integration and system debug
- Characterizing new products
- Sustaining engineering on legacy products
- Write specifications for firmware & data interfaces
- Write documentation: operating manuals & flowcharts

### **Minimum Qualifications**

- B.S. or M.S. in Electrical Engineering or Computer Science or a related field
- Embedded firmware development
- Fluent in C or C++ & Assembler
- Experience with Real Time Operating Systems and ICE tools for debugging
- Knowledge and ability to use lab equipment (e.g. Oscilloscope, Logic Analyzer)
- A self-starter and team player with excellent communication skills

**Additional Beneficial Qualifications or Growth Areas (but not required):**

- Experience with the following firmware software development environments:
  - ARM embedded processors
  - IAR Embedded Workbench
  - Microsoft Visual Studio
  - LabVIEW
- Experience with Cypress Microsystem’s Programmable System on a Chip (PSoC) and PSoC Designer CAD tool
- FPGA design and development and experience with associated tools:
  - Xilinx and/or Altera FPGA’s
  - Verilog and/or VHDL
  - CAD: Vivado, Quartus, Aldec Active HDL, ModelSim
- Circuit design for printed circuit board and experience with associated CAD tools:
  - OrCAD Schematic Capture
  - PSpice, LTSpice, HyperLynx

**About Silicon Light Machines**

Our company has a casual working environment, but has high standards of performance. We are a family-like, dedicated group committed to continuously improving our technology for our current customers and are also excited about our research on novel spatial light modulators meeting the needs of emerging applications. Go to our website at [www.siliconlight.com](http://www.siliconlight.com) for more information on our technology and about our company.

**Generous Benefits**

- Paid Time Off and Paid Holidays
- Medical, Dental, Vision and Life Insurance
- Tele-Doc
- Flexible Spending Accounts
- Long-Term Disability
- Long-Term Care
- Employee Assistance and Wellness Program
- 401k with company matching

Qualified candidates please send resume to: [HR@siliconlight.com](mailto:HR@siliconlight.com)

Silicon Light Machines is an equal opportunity employer