ARBOR PHOTONICS, Inc.

Position:	**Electrical Engineer**	**Contact:**	Tom Sosnowski
Description	**See below**	**email:**	**tsoz@arborphotonics.com**

The position of Electrical Engineer will be a key member of the product development team with responsibility for the design and implementation of electronic control and power systems for state-of-the-art high-power fiber lasers. Key objectives for this position are:

1. **Development of electronic control system, embedded controller software and power system,** for high-power fiber lasers based on revolutionary 3C fiber technology.
2. **Translate designs into laser prototypes, document as required and assist in transfer to production**.
3. **Develop and execute relevant compliance testing.**
4. **Contribute expertise to proposal writing and execution of advanced development activities associated with government or other customer sponsored projects.**

In this position, you will be part of a team headed by the VP of Engineering. The team will drive technology and design choices to create competitive advantage in product performance, cost and time to market. A strong technical background and experience developing state-of-the art industrial-grade lasers, optoelectronics or optical instrumentation is preferred. We're seeking a highly motivated individual who is comfortable and excited about working in a start-up environment.

Qualifications:

- >4 years experience in developing electrical control systems for lasers, amplifiers or other optoelectronic or electronic devices or instrumentation
- Experience in the use of digital, analog and mixed signal design techniques along with a good understanding of micro processors, micro controllers and signal conditioning
- Experience with high speed electronics
- Experience using electronic design and simulation software
- Embedded controller programming experience: knowledge of C/C++, Ethernet protocol, USB communication standard
- Experience with Labview and Matlab a plus
- Hands-on experience with assembly and testing of prototype and product level electronics/control circuits
- Good communication and interpersonal skills required
- Must be able to work across functional boundaries inside the company
- Must be able to work effectively with suppliers and strategic partners
- *Experience with US government contracts and research programs is desirable.*
- B.Sc. Degree in Electrical Engineering plus 7 years experience or M. Sc plus 4 years experience
- *Must be willing and able to travel*

Key Responsibilities:

- Work with development team to generate top-down control architecture design, including in-depth analytical studies of competing alternatives and simulation of expected performance
- Develop embedded controller software, electronic and power systems that meet product/customer requirements for system performance, stability and long term reliability.
- Test designs in the lab to verify that designs meet product specifications; modify designs as necessary

- Provide detailed design and test requirements documentation for procurement and fabrication of electrical components. Conduct thorough make/buy assessments and oversee vendor selection and qualification for key components, subsystems or subcontractors
- Translate designs into documentation and Bill of Materials for prototype build and for manufacturing, assist in transferring the design to production
- Work independently and complete complex tasks without step-by-step instructions while working with team to meet project goals
- Work to meet schedule and budget requirements of projects

This position is located in Ann Arbor, Michigan. Relocation is available for the right candidate and salary will be commensurate with qualifications.

About ARBOR PHOTONICS, Inc.

Arbor Photonics is committed to providing high power laser solutions that increase productivity and enable new capabilities for advanced laser materials processing and defense applications. We are developing highly reliable fiber lasers that feature an unmatched combination of beam quality and optical power. Our proprietary fiber platform technology expands the limits of single mode laser performance to hundreds of watts of average pulsed power and multi-kilowatts of continuous wave optical power. These lasers can enable dramatic improvements in throughput and processing speed in microelectronics manufacturing, solar cell processing and industrial materials processing applications.