



## **POWER ELECTRONICS ENGINEER – Solar Energy**

Morningstar Corporation, the world's leading supplier of solar charge controllers and inverters, is looking to hire an experienced POWER ELECTRONICS ENGINEER in our Jessup, MD engineering center. This position requires inventive thinking and close collaboration with Morningstar's engineering staff to bring products to market in a timely and cost-effective manner.

### **Company Description:**

Morningstar is a rapidly growing original equipment manufacturer (OEM) in the off-grid solar energy and photovoltaic (PV) industry with an international presence and a reputation for providing high quality and reliable power electronics.

### **Job Description (Jessup, Maryland)**

The Power Electronics Engineer will assist with the design, development and testing of Morningstar's solar DC-DC converter and DC-AC inverter product lines, working directly with our Senior Design Engineers on cutting-edge power electronics projects.

Core responsibilities include embedded controls software development and coding, hardware and software testing and debugging, and resolution of EMI issues. Qualified candidates should have a solid understanding of various power converter and inverter topologies and software control schemes. They should also possess good written and verbal communication skills, the ability to multi-task and manage several projects in parallel, and be productive in a small team where self-sufficiency is paramount.

### **Position Skills Required:**

- M.S. or PhD in Electrical Engineering (EE)
- Coursework focus: Power Electronics, Motor Control, Motor Drives, or similar
- Strong coding skills in C and C++
- Embedded controls architecture and coding
- Platform experience: ARM, DSP, PIC, FPGA
- Fundamental understanding of various control strategies and conversion topologies
- Experience writing controls software for high power devices (e.g. inverters, power supplies, motor drives)
- Positive attitude and a willingness to learn
- Creativity essential

### **Desired Skills & Experience:**

- Knowledge of TCP/IP, USB, EIA-485 and 802.11x standards
- Experience in agency certification processes: EMC, UL, FCC
- Experience in power electronics PCB layout
- Possess good time management skills

### **Responsibilities:**

- Write embedded software for power electronics projects
- Assist with hardware prototyping and debugging
- Assist with agency certification and EMI testing

### **Job Application Requirements:**

- Resume
- Cover letter with salary requirements
- Professional references, upon request
- Copy of college transcript, upon request

Morningstar offers a competitive salary and full benefit package including Medical, Dental, Vision, Long Term Disability insurance, 401k Retirement Savings Plan with company matching, Employee Stock Purchase Plan (ESPP) and Incentive Stock Option Plan (ISO). This opening is ideal for a Power Electronics Engineer who prefers a small and dynamic company environment in which to grow further.

Interested candidates are invited to submit a resume and cover letter with salary requirements to: [kmelsky@morningstarcorp.com](mailto:kmelsky@morningstarcorp.com), Attn: Power Electronics Engineer, MD office. Salary is commensurate with experience.

Please visit our website at [www.morningstarcorp.com](http://www.morningstarcorp.com) for further information about Morningstar's product line.