



Solectria Renewables is America's leading manufacturer of high power photovoltaic inverters for solar applications. Join a driven and innovative team working in a fast paced and challenging high technology environment. Let your talent fuel one of the nation's fastest growing industries. We offer an excellent benefit package, the ability to work with cutting edge technology, and room for professional growth and career advancement within the company. Solectria Renewables is an Equal Opportunity Employer. Qualified candidates should send their resume and a detailed cover letter to: [hrengineermanager@solren.com](mailto:hrengineermanager@solren.com)

## POSITION DESCRIPTION

TITLE: **Embedded Software Design Engineer**  
SUPERVISOR: **Embedded Systems Control Manager**  
CLASSIFICATION: **Exempt, full-time**  
LOCATION: **Lawrence, MA**

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## DUTIES:

1. Designs and develops embedded software including: performing requirement analysis, software architecture design and optimization, data structure design, high and low level software requirement development, control algorithm development, and serial communication protocol development.
2. Performs coding, testing, debugging and modifying of complex embedded systems software.
3. Coordinates and participates in software design reviews and code reviews.
4. Develops software requirements specifications and software functional specifications.
5. Develops test protocols for design verification.
6. Works closely with a team of other highly skilled engineering professionals
7. Provides technical expertise on embedded software to multiple project teams.
8. Other duties as assigned

## REQUIREMENTS:

1. Bachelors's Degree in any of the following: Electrical Engineering, Software Engineering, Computer Engineering, or Computer Science.
2. 3 - 5 years of demonstrated professional experience as an Design Engineer or similar capacity
3. Hands-on experience writing software and managing teams that conform to: MISRA-C-2004, UL1998 or DO-178B
4. Hands-on experience with three phase Power & Control Electronics and software is required.
5. Strong technical aptitude and passion for technology related products and solutions.
6. A working knowledge of embedded hardware (digital, analog, RF).
7. Familiar with the use of HW\FW debugging tools (DVM, Oscilloscope, Logic Analyzer, Spectrum Analyzer).



8. Working knowledge of micro controller peripheral and interface drivers and/or use (e.g., SPI, I2C, UART, USB).
9. Strong working knowledge and experience with 'C' and assembly languages.
10. Experience in test driven design, code review
11. Experience in fast paced manufacturing environment
12. Extensive experience in bringing new products to market is a must
13. Experience in working with regulatory bodies (UL, FCC, OSHA)
14. Highly motivated self-starter
15. Excellent interpersonal, analytical, written and verbal communication skills.

#### **Preferred Skills**

1. Experience with SCADA protocols
2. Experience with embedded boot-loader implementations
3. Knowledge of the electric utility system and utility-interactive inverters