

**Power Applications Engineer**

**Type:** Full-time  
**Reports To:** **Applications Design Center Manager**  
**Location:** Shenzhen, China

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Silanna is a privately held semiconductor company with exciting new products for power conversion. We are looking for an Applications Engineer to become an integral part of the power products group based in the Shenzhen area. Silanna's Power Products have industry leading metrics of power density, efficiency and switching frequency.

As a Senior Applications engineer, your work will be critical to the success of the power business. As such, your responsibilities will include:

- Characterization and benchmarking of power semiconductor devices including competitive analysis.
- Developing Demo Kits including PCB Design, Component Selection, Magnetics design, Application Notes, Demo operation guides.
- Interfacing with design and marketing to ensure customer requirements are heard for new product developments.
- Understand and translate market & customer requirements into product specifications.
- Computer simulation of product performance in applications.
- Support the development of online simulation and design tools.
- Support Silanna at technical conferences. Present papers, seminars, and support customer questions at display booths.
- Provide in depth training for field personnel not only on product functionality but also in support of Silanna value discussions.
- Provide training for Field Applications Engineers to enhance skills in circuit design, component selection, magnetics design, and design for cost.
- May require periodic travel for support of customers' product development

## QUALIFICATIONS AND EDUCATION REQUIREMENTS

- BSEE or equivalent
- A combination of 2-5 years' experience in Power Supply Design and Power Semiconductor Applications
- Experience with Power IC characterization and Electrical Verification Testing of first silicon is a strong plus
- Strong understanding of AC-DC power topologies including Flyback, Boost, Forward, and LLC Half Bridge.
- Knowledge of the end use conditions for major AC-DC markets; Mobile Chargers, Appliances, Energy Meters, Laptop Adapters, PC Power, Security equipment, and others.
- Knowledge of Synchronous Buck Conversion and typical control methods; Constant On-Time, Voltage Mode PWM and Current Mode PWM
- Circuit simulation using ORCAD, Cadence or similar tools.
- Excellent PCB Design skills and knowledge of layout techniques for Safety and EMI compliance, low noise, and high-power density.
- Able to manage time efficiently and complete tasks on schedule.
- Excellent written and verbal communication skills
  - Comfortable communicating at all levels of internal and external organizations.
  - Comfortable working with customers collaboratively to find mutually beneficial power solutions.
  - Capable of authoring applications notes and white papers describing the implementation and benefits of Silanna's Technology.
  - Able to present technical seminars at conferences and customer sites on general power topics and Silanna product specifics
  - Create and present training material for internal and field organizations as part of our Sales training process.