



Staff Application Engineer – Power Adapters

Type: Full-time
Reports To: Director of Systems Engineering
Location: Toronto, Ontario

Job Description and Responsibilities

Silanna Semiconductor is a privately held semiconductor company that develops disruptive technologies and products that address market needs in high efficiency power conversion. The company provides DC/DC and AC/DC integrated circuits that deliver Best-in-Class Efficiency so that its customers can build end products with Breakthrough Power Density. Silanna has a global footprint with design centers and satellite offices in North America, Europe, Asia and Australia and is an ISO 9001 certified company.

We are looking for a *Staff Application Engineer* with strong knowledge of Power Adapters, to join our AC/DC Power Management business unit.

Duties and Responsibilities

- Your work will be critical to the success of the AC-DC power business. As such, your responsibilities will include:
 - Developing best-in-class qualified reference designs (QRD) including component selection, magnetics design and EMI filter design that pass
 - EMI regulatory requirements (radiated and conducted)
 - Safety requirements (thermal and clearance/creepage)
 - Power density requirements
 - Pre-defined BOM targets
 - Characterization and benchmarking of power semiconductor devices including competitive analysis.
 - Key customer support: You are a strong voice of technical expertise that customers and field staff can rely on.
 - 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.
- Requires periodic travel for support of customers' product development.

Required Skills and Experience

- Strong understanding of AC-DC power topologies including Flyback, Active Clamp Flyback and Boost PFC.



- Knowledge of the end use conditions for major AC-DC markets; Mobile Chargers, Appliances, Energy Meters, Laptop Adapters, and others.
- Circuit simulation using ORCAD, Cadence or similar tools.
- Excellent PCB Design skills and knowledge of layout techniques for Safety and EMI compliance.
- 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.
- Experience with Power IC characterization and Electrical Verification Testing of first Silicon
- BS in Electrical Engineering (or equivalent)
 - MS in Electrical Engineering preferred