Silanna Semiconductor | Power Management Re-Imagined

Power IC Design Engineer

Type: Full-time
Reports To: **Director of Design Engineering**
Location: Raleigh, NC

Candidates will work closely with experts in the areas of IC design/development, semiconductor power conversion and device physics to define and productize state of the art integrated circuits as part of complete power conversion solutions. As part of a small, fast moving, innovation focused company, IC designers must be self-driven and energized by opportunities to understand, problem solve and accomplish tasks within the entire spectrum of definition, design, evaluation and release to high volume manufacturing.

Essential Duties and Responsibilities

1. Participate in all aspects of the design cycle, including transistor level design, layout supervision and lab verification/debug
2. Research and development of state-of-the-art analog and mixed signal power conversion products for selected markets
3. Close interaction with Design, systems, test, reliability and marketing engineers
4. Power Management Cell development for areas including Buck Regulators, Boost Regulators, LDO, Bandgap, Voltage and Current References, Clock, bias circuitry, etc.
5. Develop products to meet the performance and cost targets on time
6. Preparation of cell design support documents. Present cell designs to peers
7. Provide guidelines to Mask designers and review circuit layouts
8. Author characterization and cell test plans at the Cell and Product Level
9. Limited travel from zero to 3 times per year expected

Core Competencies

- Analog integrated circuit design and analysis
- Power electronics and switched mode power supplies
- Semiconductor device physics and fabrication processes
- Utilization of CAD for analog/mixed signal simulation and layout
- Results driven with focus on communicating and meeting project schedules
- Verilog-A, Verilog-ams or HDL language and simulation experience is a plus
- Strong written and verbal communication skills

Qualifications and Education Requirements

- BSEE Required; MSEE preferred.
- Any professional experience in analog and mixed signal IC design of power management circuits is a plus. 1-5 years preferred.