Analog Mixed-Signal Verification Engineer

Type: Full-time
Reports To: Director of Engineering, ASIC Design
Location: San Diego, CA

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 *Analog Mixed-Signal Verification Engineer* with strong knowledge of the IC mixed-signal design flow to become an integral part of Silanna's AC:DC Power Management business unit.

Essential Duties and Responsibilities

- Define, prioritize and execute verification plan based on product specifications and system use-cases
- Develop top-level and module-level mixed-signal testbenches, and generate directed/constrained random tests
- Build Verilog-A and Verilog-AMS behavioral models, testbench monitors, and checkers for AC/DC PMIC modules
- Debug failures, fix testbench/model/checker issues, manage bug track, and analyze and close coverage
- Write scripts for automation and improve mixed-signal verification methodology
- Estimate and manage tasks on a tight schedule
- Work closely with systems, analog and digital design team to ensure overall IC functionality, high reliability and high yield
- Work with test engineers to test AC/DC ICs and provide guidance for debugging

Required Skills and Experience

- BSEE required, MSEE preferred
- 5+ years of industry verification (AMS) experience with mixed signal ASICs
- Proficiency in developing test plans, test benches and test cases
- Fluent with Cadence design and verification tools
- Solid experience in creating Verilog-A and Verilog-AMS behavioral models
- Strong problem solving and debug skills
- Good understanding of basic analog modules
- Power management ICs experience (AC/DC or DC/DC converters) is preferred
- Strong team player with excellent communication and interpersonal skills
- Self-motivated, driven, with a focus on results and meeting project deliverables
- Experience with HVL methodology (UVM/OVM/VMM) is preferred
- Experience with scripting and automation (Python, Perl) is a plus