Lead Principal Engineer - Product Definition

Job description

You are technically sharp in Analog and Digital circuit design and have at least 5 years of experience in application/design engineering. You aspire to contribute your excellent knowledge and skills with a leading global organization within the semiconductor sector that strives for a better future. In this role, you will develop hardware and software for FPGA based development platform and perform IC development testing as a member of Infineon's Power & Sensor Systems (PSS) division.

In your new role you will:

- Develop **hardware and software** for **FPGA based development platform** and perform **IC development testing**
- Design, generate schematics, supervise layout, test functionality and **maintain a mixed signal design of various FPGA circuit boards**. The boards are used to emulate complicated mixed signal devices
- Have knowledge of **analog design** (op-amps, A/D, D/A, noise suppression, voltage generation, switches, muxes)
- Have knowledge of **digital design** (FPGA's-Altera or Xilinx, serial bus design up to 100MHz, clock frequencies up to 200MHz, Verilog coding, timing and FPGA tools)
- **Troubleshoot** with oscilloscopes, logic analyzers, function generators, temperature cameras, and other lab equipment for required board design and maintenance
- Successfully t **est all functionality on new IC development designs** to verify capability, as described in a feature matrix or similar document
- Efficiently **document the test results** to describe findings and flag errors and/or anomalies
- Travel occasionally (Approximately 10% of the time) to provide on-site customer support

Profile

You are resourceful, highly motivated, energetic and enthusiastic about being a positive team player and developing productive relationships. You are good at prioritizing tasks, managing multiple projects simultaneously for time driven results.

You are best equipped for this task if you have:

- BSEE or MSEE preferred with hands-on experience in **designing Analog and Digital circuits** and **writing Verilog code for FPGA's**
- **5+ years** in engineering design and/or applications engineering
- Are technically sharp in Analog and Digital circuit design. Analog frequency content up to 100MHz and digital bus speeds up to 200MHz is preferred
- Knowledge of **semiconductor design** and **application development** and **customer support**
- **Power supply design** experience is also preferred

- Are good at developing relationships with internal and external engineering community
- **Excellent communication skills** in both verbal and written English
- Are extremely responsive, ready to jump on the most difficult design and/or customer issues instantly and **solve technical issues** independently
- Knowledge of automated laboratory testing, python language or multi-phase VR design is a plus

Additional/Desirable Skills:

- Experience in PCB schematic capture and layout tools such as Allegro
- Experience in DC/DC power solutions and power management IC's
- Experience in using digital controllers for power management
- Magnetics design
- Python programming language

Infineon **Power & Sensor Systems (PSS)** semiconductors play a vital role in enabling intelligent power management, smart sensitivity as well as fast and reliable data processing in an increasingly digitalized world.

Our leading-edge power devices make chargers, adapters, power tools and lighting systems smarter, smaller, lighter and more energy-efficient. Our trusted sensors increase the context sensitivity of "things" and systems such as HMI, and our RF chips power fast and reliable data communication.

– We drive leading-edge power management, sensing and data transfer capabilities –

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