Anametric, Inc. Position Opening: Aug. 23, 2021

Sr. Processor Design Engineer

> *Anametric is developing new technologies and devices for chip scale quantum photonics, with a focus on cybersecurity. The company enjoys a close working relationship with Southern Methodist University (SMU) in Dallas, Texas. Together, we are commercializing innovative devices based on the SMU team's advanced research along with Anametric's deep experience in semiconductor design and cybersecurity.*

Anametric is searching for a Senior Processor Design Engineer. The successful candidate will be the lead designer on a new generation of co-processors that will support a cutting-edge quantum photonics platform. The position will require working closely with internal and external engineering resources to help define the architecture and then directly implement the resulting design in an FPGA and, subsequently, a full-custom CMOS chip. We are looking for someone who can see the "big picture" and who can work well with people from a wide variety of disciplines, both within Anametric as well as externally. The selected individual will be both a self-starter as well as a team-player, able to deal with a high level of ambiguity, as well as the ability to track and manage technical issues, risks and priorities on simultaneous fronts.

Key responsibilities include defining and implementing a simulation test bench environment for a high-performance digital platform that is flexible and able to scale widely across the price-performance curve. The position requires extensive experience in digital design and logic synthesis using Verilog and/or VHDL under standard FPGA design tool environments. Experience with transitioning from an FPGA-based design to a full-custom CMOS design flow is highly desired. Will work closely with SW Engineering to define a platform that will form the main interface between a proprietary Quantum Photonic platform and the external world. Experience with Crypto protocols, such as OpenSSL or TLS is highly desired.

Other responsibilities will involve growing the group and setting up a bug-tracking process to provide root cause failure analysis and helping to identify and close gating issues. Over time, the group's responsibilities will include providing support for field applications engineers to quickly resolve customer concerns. While based in Austin, Texas, the position will involve working closely with remote engineering teams and travel, when appropriate.

Required Experience:

- Strong analytical and excellent communications skills.

- Extensive experience with industry-standard logic design and synthesis tools and FPGA design.
- Experience with full-custom silicon design.
- Detailed knowledge of ARM and RISC-V processor architectures.
- System-level bring-up and debugging skills.
- Expert use of JTAG debuggers, logic analyzers, and network analyzers.
- Familiarity with board level design.

Desired Experience:

- Experience with Ethernet MAC internals.

Academic Credentials:

- Bachelor's degree in Electrical Engineering or Computer Engineering required.
- Master's degree in Electrical Engineering or Computer Engineering preferred

Location: Austin or Dallas preferred, but remote work is acceptable
U.S. Citizenship required