



TITLE: STAFF/PRINCIPAL HARDWARE ENGINEER
LOCATION: CARLSBAD, CA

Who We Are:

GigaIO has invented the first truly composable universal dynamic AI memory fabric, empowering users to accelerate AI and engineering/scientific workloads on-demand, through our revolutionary SuperNODE and SuperDuperNODE architectures. As a global leader in accelerated infrastructure, our open platform helps users quickly deploy leading edge infrastructure to help them capitalize on all the ways AI will move their businesses forward.

Does getting in on the ground floor of a data center technology that is disrupting AI and HPC computing make your heartbeat a little faster? Does the excitement of joining a team of exceptionally talented and motivated technologists at a well-funded startup sound attractive? Are you looking for an exciting Strategic Account Manager opportunity with unlimited upside potential? If so, please read on.

What You Will Do:

GigaIO is seeking an experienced **Principal Hardware Engineer** with a strong background in high-speed digital board design and FPGA development. The ideal candidate will have a deep understanding of hardware development, simulation tools, and physical layer design, particularly in PCIe technology.

Key Responsibilities:

- Lead the development of complex intelligent high-speed digital boards.
- Utilize state-of-the-art development and simulation tools to ensure high-quality designs.
- Develop test programs in C to validate hardware functionalities.
- Collaborate with the Product Development team to support product requirements and specifications.
- Contribute to the design and testing of high-speed digital serial data physical layers, with a focus on PCIe technology.
- Apply knowledge of signal integrity, both in theory and through practical measurement techniques.
- Design and implement complex FPGA-based systems including microcontroller and system-on-chip firmware.
- Develop and optimize embedded systems for various applications, using FPGA and application-specific hardware accelerators.
- Create and manage custom IP cores using VHDL or Verilog.
- Collaborate with cross-functional teams to define system architecture and hardware requirements.
- Participate in all phases of product development, from concept to deployment.
- Perform system-level integration and validation.
- Document design specifications and implementation details.
- Stay updated with the latest trends and technologies in FPGA design.

Qualifications:

- Bachelor's or Master's degree in Electrical Engineering, Computer Science, or a related field.
- Minimum of 3 years of experience in FPGA design and development.
- Proficiency in VHDL or Verilog for hardware description.
- Experience with microcontroller and system-on-chip firmware.
- Strong background in embedded systems design using FPGA.
- Knowledge of application-specific hardware accelerators.
- Excellent problem-solving and analytical skills.
- Strong communication and teamwork abilities.

Preferred Skills:

- Experience in PCIe and high-speed digital serial data physical layer design & testing a plus.
- Familiarity with signal integrity (theory and practical measurement techniques) a plus.
- Familiarity with industry standards and regulations.
- Knowledge of PCB design and layout considerations.
- Desirable to have experience working for a start-up company.

Salary:

\$140,000 - \$170,000, Depends on Experience

Contact Information:

Send your cover letter and resume to careers@gigaio.com