

TetraFusion is currently seeking energetic and enthusiastic R&D Hardware Design Engineer for the position of Electronics Hardware Design Consultant. Successful candidates will have once-in-a-lifetime opportunity to become a key contributor in the development of a high-speed embedded design services company in Richardson, Texas.

As part of the founding team you will have the opportunity to apply (and enhance) your existing technical skills & knowledge, develop and advance your professional career in many new and interesting areas and directions, and experience the challenges and excitement of building a company from the ground up.

The principle focus for this position will be the definition, design, development, analysis and verification of high-speed electronic circuits, circuit cards, and subsystems used principally in commercial communications equipment and systems. Additional areas of key responsibilities include but are not limited to:

- Design, implementation and verification of high-speed printed-circuit using PC workstations and modern EDA tools
- Analyze system and device level interconnects for AC timing performance, adherence to specifications, voltage levels, Simultaneous Switching Output (SSO) impact and board-level effects using standard signal integrity analysis tools and techniques (Hyperlynx, Mentor ICX, PSPICE).
- Using customer inputs, working as an integral team member to develop detailed design specifications, development, verification and integration plans
- Review designs and associated development plans for correctness, functionality and performance considerations
- Manage and resolve mechanical design and support related issues that may arise
- Investigate hot problems related to client's product development initiatives when needed (may require trips to customer site)
- Serve as a R&D hardware interface for sales and marketing, clients, manufacturing and support partners
- Mentoring and supporting other engineers in high-speed circuit design, modeling, analysis (circuits & systems) and signal integrity analysis (to include methods and tools usage)

All candidates applying for this position should possess:

- A Master or Bachelor of Science degree in Electrical Engineering (MS Preferred) with a minimum of ten years of hardware design experience including direct exposure to the areas identified above
- Thorough knowledge and foundation in high-speed design techniques and substantial experienced performing detailed SI analysis (Hyperlynx and/or Mentor ICX™, PSPICE, HSPICE)
- Detailed knowledge and experience of schematic capture, circuit board layout and FPGA/CPLD (VHDL/Xilinx) design & implementation
- Extensive hands-on experience with electronics lab equipment used in basic board level rework, standard laboratory testing (DMMs, high-bandwidth oscilloscopes, logic analyzer, Spectrum Analyzer, function generator) and communication systems test and analysis (BERTs, SDH testers, DSX testers, SONET test sets, pattern generator)
- Successful deployment of PowerQuicc, TI 5000 family DSP, PLX and Intel PCI chipsets based designs and designs using network protocols such as SONET/SDH/G.709, Ethernet, and/or ATM
- Strong project management and leadership skills to include exceptional communication skills (verbal and written)
- Detailed knowledge and experience of SDH/SONET/ITU/IEEE802.3/ATM/PCI/PCIX specifications
- Experience working in a fast paced, team oriented development environment

- Detailed knowledge and experience of FPGA/hardware/software debugging and lab verification techniques
- Extensive experience with EDA tools such as Concept, OrCAD, Xilinx ISE (VHDL), MentorGraphic
- Creative problem solver and solutions contributor in both independent or team setting

TetraFusion is a Professional R&D services firm located in Richardson, Texas. We provide electronic design and development services for commercial equipment manufacturing and development companies. Our focus is on high-speed embedded processing and controls elements for commercial telecom and datacom equipment.

Our Mission is to provide our clients with the professional class design organization that possesses the skills, knowledge and experience essential to consistently achieving the results their business leaders are counting on."

At TetraFusion we strive to provide a professional business environment that meets our business needs and objectives while at the same time committing to providing for the needs of our employees. We believe in a relaxed business environment where the attire is business casual and the attitude is positive and professional. Open communications throughout the company is our company standard. We are committed to a positive, dynamic and creative work environment that breeds both team and individual success in everything we do. Our core values are customer first, integrity in everything we do, respect for each other, growth and change, community commitment and shareholder value. We actively seek to involve all team members in our daily operations and company mission and objectives.

Prospective candidates requiring non-immigrant visa (e.g., H-1, J-1, L-1, F-1, B-1, TN), are currently ineligible for consideration.

If you are ready to step out of the ordinary and become part of something new, exciting and extraordinary send your resume and introductions letter to careers@TetraFusion.com