Pensar Job Description:
Electrical Engineer

The Pensar team is seeking qualified candidates for an Electrical Engineer. The responsibilities of this position are focused on specifying, designing, implementing, and verifying microprocessor-based platforms and subsystems that make up various consumer and medical device products. Duties will include development of requirements and evaluating solutions for functionality, cost, and risk. Designs will include audio/video interfaces, digital communication interfaces, high speed serial and parallel buses, memory, Ethernet (and PoE), analog & digital circuitry, along with power delivery systems.

The candidate will be responsible for all aspects of product-level electrical engineering related to product design. Responsibilities will also include: establishing technical specifications, implementing architectures, identifying and coordinating with cross-functional development partners, identifying components, and eventually delivering the final manufacturing-ready design. All of this must be done in accordance with program goals for product performance, quality and reliability goals, safety/compliance regulatory requirements, product cost, and schedule. The qualified candidate will have a track record in designing and developing high-volume consumer electronics or medical device products and must have complete product development cycle experience.

The Pensar team is responsible for aggressive cost reduction of products throughout their life as well as expanding their markets in derivative products. The position involves working closely with industrial designers, other electrical engineers, mechanical engineers, software engineers, test engineers, component engineers, and program managers.

Basic Qualifications:

- Minimum BS/MS in Electrical Engineering
- Minimum of 5 years experience contributing to the design and production of complex products in the consumer PC, consumer electronics, or medical device industry.
- A solid understanding of core engineering principles, fundamental circuit design (analog and digital), simulation, test and measurement equipment operation, and analytical techniques is required
- Experience with high-volume consumer products from specification to production, design for manufacturability and cost
- Experience with system level architecture and part selection.
- Experience with hardware product development from concept-to-production including:
    - high level & detailed design
    - high speed digital design
    - analog design/simulation
    - design for test/manufacturing
    - schematic capture (OrCAD, Allegro)
    - board bring-up and lab debugging
    - system integration
    - design verification
    - design for high volume and low cost
    - layout management
- Hands on experience with computer mother-board type products including:
    - PoE circuit design
    - Remote system control hierarchy (wireless, USB)
    - USB to SATA
    - BOM compilation
    - User Interface design
    - New component research and acquisition
    - PSU development

Management Qualifications:

- Must be able to plan work, and work to a plan, adapting as necessary in a rapidly evolving environment.
- Client side soft skills and management skills.
- Strong communication skills required. Including the ability to clearly express technical concepts in verbal and written forms.

Desired/Preferred Qualifications

- Experience in hardware verification: environmental and reliability
- The ability to comprehend and assimilate technical concepts across multiple disciplines
- Experience with FPGA specification and programming
- Familiarity with set-top box, game machine, or PC-type implementation of: high speed serial buses (SATA, PCIe, USB); high speed parallel buses such as memory bus (DDR2, GDDR3, etc.), CPU front side bus, Hyper transport; and voltage regulator/power delivery design
- Experience with embedded system architecture hardware, firmware, and software
- Familiarity with RF/wireless design and implementation
- Design experience for low power operation
- Comprehensive knowledge of switching power supply design