

## **Design Engineer**

### **SUMMARY**

Located in Hayward CA, Wohler Technologies is a leading provider of audio and video monitoring equipment to the Broadcast industry. The Design Engineer will be responsible for designs, with particular emphasis on digital audio and video products, involving hardware, software and firmware for embedded microcontrollers, DSPs and FPGAs.

### **Significant Responsibilities:**

1. New Product Development and Product Improvement including integration, testing, and transition into production.
2. Specification and design of data structures, protocols, and interfaces.
3. Interfacing LCDs and OLEDs with video, graphics, and closed captions.
4. Review and/or creation of new product design documents.
5. Hardware development, embedded systems development, FPGA development; software interfaces.
6. Collaboration with the other members of the Engineering team to execute successful New Product Development.

### **Qualifications (Including education, if applicable):**

1. Self-starting, creative individual who works well in a team environment.
2. Proven experience in VHDL or Verilog for FPGA design, implementation and verification as well as sound knowledge of FPGA development environments and tools.
3. Knowledge of serial and Ethernet interface protocols and functions.
4. Knowledge of SD/HD/3G SDI digital video and audio circuit theory and design.
5. Basic knowledge of analog and digital circuit design, including the ability to read, analyze, understand, and produce schematic diagrams.
6. Proven experience in circuit fault finding and analysis techniques.
7. Expertise in C/C++ coding and Networking protocols.
8. Knowledge of real-time programming concepts and debugging techniques.
9. Excellent interpersonal skills and communication skills, both written and verbal.
10. Excellent organizational and documentation skills.
11. Proficiency with Microsoft Office applications, software/firmware development tools, digital oscilloscopes, and other development/debugging tools.
12. BSCE, BSCS, or equivalent experience.
13. A minimum of 4 years relevant experience developing products in a small, dedicated, multifunctional project team.

### **Desirable Qualities:**

1. Knowledge of closed caption specifications and usage in a digital broadcast environment.
2. Experience in systems design and implementation within a broadcast facility, with employment experience of having worked for a broadcaster or a systems integrator.
3. Digital Signal Processing (DSP) experience.

**Personal Attributes:**

1. Uses creative, conceptual or inductive reasoning to develop novel concepts.
2. Breaks complex problems, processes or projects into their component parts and organizes the parts in a systematic way.
3. Acts to minimize errors and maintain high standards of quality by checking or monitoring data and work, and by developing and maintaining systems for organizing work and information.
4. Acts to improve performance by committing oneself to accomplishing challenging objectives or competing against a self-defined standard of excellence.
5. Takes self-directed or self-motivated action to exceed expectations.
6. Possesses the genuine intention and ability to work cooperatively with others, as a team, to complete successful product designs.
7. Acquires, expands and uses technical knowledge, and disseminates this knowledge to others.
8. Aligns behavior with the needs, priorities and goals of the development team and the company.

**Please feel free to visit our website at [www.wohler.com](http://www.wohler.com).  
We look forward to hearing from you!**

Wohler Technologies Inc. is an equal opportunities employer.