

## **UNITRON, LP**

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**TITLE OF POSITION:** Software Design Engineer

**DEPARTMENT:** Engineering

**REPORTS TO:** Director of Engineering

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### **Position Summary –**

Design and develop requirements, specifications, and software code for multi-board/multi-processor systems. Will work on low level application code and device drivers as well as higher level PC based applications. Individual contributor as well as part of an engineering development team.

### **Principal Duties and Areas of Responsibilities –**

- Determine system requirements and design specifications, and prepare documentation.
- Plan and manage the software development schedule.
- Be comfortable and well-versed in software development processes.
- Will be responsible for the integration and testing of code. Must be comfortable working with others at the system test stage.
- Be well-grounded in the use of common software tools (IDE's, Emulators, Source Control (CVS), Bug Tracking (TestTrack).
- Generate requirements and a plan for system integration and design validation.
- Develop built in self test code in firmware where practical.
- Assist in the checkout and debugging of new hardware designs via creation of test code.
- Become familiar with the existing Aerospace and Marine product line.
- Support the Production Test Department to resolve technical problems.
- Provide telephone support for field service personnel on an as-needed basis.

### **Education, Specialized Knowledge, and Experience –**

#### **Education -**

- Minimum BSEE, BSCS Degree from an ABET Accredited Institution.
- Solid experience in embedded software/firmware design.

#### **Preferred –**

- 2-5 years related Experience as software/firmware developer.
- Experience coding control algorithms for DSPs.
- Experience in Commercial, Military, and/or Maritime Environments.
- Experience in Power Conversion; Power Supplies, Hardware Interfaces, Drive Controls.

**Required –**

- Strong experience in the C programming language.
- Experience in C#, HTML and JAVA, Web page design , embedded web server.
- Software design with embedded processors; TI DSP's, Microchip PIC Processors.
- Knowledge of hardware interface standards; RS-232, I2C, SPI, CAN Bus and LAN.
- Experience in gathering requirements and creating system and sub-system specifications.
- Firmware debug and troubleshooting skills; use of common electronic test equipment
- Excellent written and verbal communication skills; MS Word, Excel, PowerPoint.

Equal Opportunity Employer