



**Position:** Software / Firmware Engineer

**Department:** Engineering

**Location:** Santa Ana, CA

**FLSA Status:** Exempt, Full-Time

**Job Summary:**

The Software/Firmware Engineer is responsible for the design, development, and integration of embedded firmware and software for advanced timing and synchronization products. This position focuses on supporting mission-critical applications in aerospace and national defense by delivering high-reliability embedded solutions.

**Key Responsibilities:**

- Design, develop, and maintain embedded firmware for microcontrollers and System-on-Modules (SoMs).
- Collaborate with hardware engineers to define system requirements and ensure seamless hardware/software integration.
- Implement and support networking protocols, particularly NTP (Network Time Protocol) and PTP (Precision Time Protocol).
- Work with real-time operating systems (RTOS) and embedded Linux environments to optimize performance.
- Debug and troubleshoot complex embedded systems using tools such as JTAG, oscilloscopes, and logic analyzers.
- Conduct peer code reviews and contribute to continuous improvement of code quality and system design.
- Maintain comprehensive technical documentation related to code, system architecture, and development workflows.
- Participate in cross-functional development projects, offering input on system architecture and integration strategies.
- Monitor industry advancements to inform ongoing development and innovation.

**Qualifications:**

- 5 - 10+ years of experience in embedded Firmware and Software Engineering.
- Bachelor's degree in Electrical Engineering, Computer Engineering, or a related field.
- Proficiency in programming languages such as C, C++.
- Familiarity with real-time operating systems (RTOS) and firmware development processes.
- Excellent problem-solving skills and analytical thinking.
- Effective communication skills for collaboration with cross-functional teams.



- Ability to manage multiple projects and priorities in a fast-paced environment.
- Strong understanding of microcontrollers and embedded systems architecture. (preferred)
- Experience with debugging tools and methodologies, including JTAG and logic analyzers (preferred).
- Knowledge of communication protocols such as I2C, SPI, and UART (preferred)
- Familiarity with version control systems like SVN/Git (preferred)

**Physical Requirements:**

- Ability to sit and stand for long periods and occasionally lift up to 30 lbs.
- Frequent operation of standard office equipment, including computers, keyboards, and telephones.
- Ability to communicate effectively in person and over the telephone.
- Visual acuity to read and interpret technical documents and computer screens.

**Additional Information:**

The Key Responsibilities are an outline of the general nature and level of work performed by individuals assigned to this position. It is not intended to be an exhaustive list of all duties, responsibilities, and qualifications. The company may amend or modify duties based on business needs in accordance with applicable California labor laws. Reasonable accommodations may be made for qualified individuals with disabilities.

**Equal Opportunity Employer Statement:**

Brandywine Communications is an Equal Opportunity Employer. We are committed to providing equal employment opportunities to all employees and applicants without regard to race, color, religion, sex, (including pregnancy, childbirth, and related medical conditions), sexual orientation, gender identity or expression, national origin, ancestry, age, physical or mental disability, medical condition, genetic information, marital status, military or veteran status, or any other characteristic protected by federal, state, or local laws.

Brandywine Communications strives to create a workplace that is inclusive, respectful, and reflective of the diverse communities we serve. We are committed to providing reasonable accommodations for qualified individuals with disabilities in accordance with applicable laws. If you require accommodation during any part of the application or hiring process, please contact Human Resources at [hr@brandywinecomm.com](mailto:hr@brandywinecomm.com).