SMT
SURFACE MOUNT TECHNOLOGY
CORPORATION

SMT 2022/23 Recruitment-
SMT Engineering Firmware Staff Engineer II

Qualifications: Bachelor's or Master's degree in Electrical Engineering, Computer Engineering, Embedded/Firmware engineering. 5+ years of professional experience.

Ideal Experience: 7+ yrs experience.

Incentives: Attractive Salary and Benefits. Relocation package. Great Work/Life Balance.

Keywords:

Embedded Engineer	Embedded Firmware Engineer
Firmware Engineer	Embedded Software Engineer

Position Summary:
SMT's Firmware team is looking for talented firmware engineers to join our growing team. We are seeking individuals with both a solid history of experience along with high potential for continued growth. Engineers who are motivated by a fast paced environment with exposure to many different technologies will thrive at SMT. In this role- you will have the opportunity and autonomy to further define how SMT helps clients bring world class products to life! Our clients are focused in embedded industrial controls, life sciences, lighting, light medical, and automotive. Where quality, safety, and predictability are paramount.

This position will be responsible for developing architecture, embedded code, and test applications per client specification; while working in a cross functional team alongside hardware engineers, test engineers, and manufacturing teams. We need strong technical minds with the skills and confidence to plan and execute complex code developments, maintain schedule and scope, and drive projects to completion. Qualified candidates should excel in developing stable, efficient, and manageable code using industry leading tools and processes. SMT Engineering is a place for passionate engineers who value continuous improvement, a strong culture, and a wide variety of challenges.

Technical Skills:
- Firmware Architecture/Specification development
- Test driven code development
- Significant experience with 8051, AVR, ARM MCU architectures.
- Expert with C, C++. Skills in Assembly, Scripting, UML, Python
- Bare Metal 8/32bit Embedded Applications
- Efficient and effective embedded code flow.
- Automata theory and methodology, state machines, schedulers, semiphores, mutex etc.
- RTOS based applications – FreeRTOS, Linux Variants
- Commercial/Industrial Wired Protocols – RS485, CAN, USB, ModBus etc.
- Mature Wireless protocols – BLE, Wifi, Lora, 802.15.4
- Direct Memory Access
- External Memory/Data – EEPROM, FLASH, SD, MMC
- Embedded Graphical/GUI Development
- Distributed repositories and Version control tools and processes. GIT, SVN etc.
- Capable with AGILE/SCRUM software development processes and tools. JIRA.
- Code Testing Processes. Continuous Integration, White/Black Box, Regressive
- Hands-On lab experience. Development and testing using common EE lab equipment

Responsibilities:
- Creates new embedded system software design concepts, including requirements specifications and system models, and verifies the feasibility of the concept using systems analysis and simulations.
- Implements and verifies new embedded software systems and embedded software designs including specifications, requirements analysis, and design. Coding, design verification test specifications and design verification test results
- Support managing project activities and provides the project manager with regular status reports to ensure the project manager has a clear understanding of the status of the schedule, budget and risk issues.
- Ongoing Firmware Unit Testing, Verification Test Plan Development and Execution
- Data Management- Working with internal and external design repositories—Knowledge of GIT
- Collaboration with HW engineers, Test engineers, PCB designers on integration efforts.
- Maintains knowledge and understanding of the SMT product development process and quality system to ensure the project complies with all quality procedures and to assure customer satisfaction.
- Participates in customer and project team meetings to ensure schedule milestones, budget and customer expectations are met.