

Position Title:	Immediate Supervisor Title:
Sr. Firmware Engineer	VP, Global Product Development
Department: Engineering	Location: New Kensington, PA
FLSA Status: X Exempt	Grade:
Non-Exempt	

# **Brief Summary of Position Purpose:**

The Sr. Firmware Engineer designs, develops, tests and maintains firmware (embedded software) and end user software for use with Bacharach's products. This includes participating in VOC research, writing Software Requirements Specifications, drafting software architecture documentation, completing embedded firmware code, drafting design documentation, conducting code reviews, overseeing unit integration testing and supporting manufacturing launch activities.

The Sr. Firmware Engineer also participates in department continuous improvement initiatives and research projects and is responsible to ensure compliance to Bacharach's New Product Development and Engineering Change processes.

#### **Essential Functions:**

- Lead software design efforts for New Product Development including safety-critical firmware.
- Participate in and/or lead firmware module design to minimize maintenance, maximize code reuse and minimize testing.
- Facilitate the definition of project scope, technical requirements, goals and deliverables for firmware aspects of assigned projects.
- Participate product IP assessments and actions plans.
- Ensure all technical documentation is generated and reviewed in accordance with Bacharach's Engineering and Development processes.
- Provide task and schedule input to NPD Project Management for assigned responsibilities.
- Participate in design review / code reviews.
- Other assigned duties as required.

# **Education/Training/Certifications:**

BS Computer Science or Electrical Engineering or related degree



### **Experience:**

- Minimum 5 years of experience in software design, analysis and troubleshooting in embedded products.
- Experience with C/C++ for embedded applications.
- Experience with both RTOS and Bare Metal development
- Experience in HVAC-R, Emissions Analysis and/or Industrial Gas Detection preferred.
- Experience working in multinational development teams and/or 3<sup>rd</sup> party teams preferred.
- Experience developing products to functional safety standards preferred (i.e. EN50271, IEC61508, EN50402, etc.)
- Experience with MSP430, PIC, Rabbit RCM3100 and ARM Cortex processors.

## Required Skill Sets: (e.g., computer skills, communications, math, etc.)

- Experience with C, JIRA
- Strong interpersonal and communication skills, both verbal and written
- Ability to work independently as well as within in a team.
- Strong planning and organization skills
- Competency with Microsoft Office tools including Project, Outlook, Word, Excel and PowerPoint

# Physical Demands: (e.g., lifting, travel, etc.)

- Position requires concentration, accuracy, and focused mental effort
- Works in normal office environment
- May travel domestically and internationally as business needs require with occasional exposure to plant heat, noise, dust, dirt and fumes

Pursuant to the Americans with Disabilities Act (ADA), reasonable accommodations may be made to enable qualified individuals to perform the essential functions of this job.

AA/EEO/M/F/D/V