FLUID COMPONENTS INTERNATIONAL, LLC.
Electrical Engineer 3 Sustaining Engineering

Position Purpose:

Under the general direction of the engineering manager, the electrical engineer is responsible for designing and/or redesigning instrumentation products to existing product lines, as well as, senior level designs of both hardware and embedded software. Responsible for final engineering drawings, operational and/or functional performance tests for the manufacture of complex process control instrumentation.

Essential Job Functions (primary duties and outputs of position):

- Develop and design innovative electronic circuits; both analog and digital.
- Develop and design new innovative software solutions for new products.
- Design digital circuits, including microprocessor based circuits.
- Design amplifiers, filters, switching and linear regulators, embedded computer circuits with A/D and D/A circuits, as well as, serial technical problems.
- Applying circuit board layout and design principles.
- Specify and define software requirements for sensor-based instruments.
- Use of schematic capture programs DXDesigner, and circuit analysis programs SPICE.
- Develop programs in C, and assembly language for embedded application.
- Operating oscilloscope, digital millimeters, system analyzers and in-circuit emulators.
- Developing support documentation for assembly, customer support, manufacturing test procedures and technical application notes.
- Participate in the definition, qualification and design of some or all of the industrial digital communication protocols software like HART, MODBUS, PROFIBUS, and Foundation Fieldbus.

Safety
Follow safe work practices, participate in safety training as required, and report any unsafe condition or accident.

Quality
Understand and support the quality policy and the appropriate elements of the quality management system for their areas of work

Communication

- Provide project leadership to multi-disciplined teams, both internally and externally.
- Must be able to work through the teams in order to complete project assignments as per project deadlines.
- Communicate effectively in English, both verbally and written.

- Maintain effective and constructive working relationships with others both internally and externally.

Education/Work Experience/Qualifications:

- BSEE 8-10 years of progressive work experience in designing analog, digital circuits and some embedded software.
- OR
- MSEE with 3-5 years of progressive experience in designing analog and digital circuits and some experience in designing embedded software.
- Strong Knowledge of circuit and software design tools for the development of embedded application.
- Able to design products that can be manufactured with multiple-configuration options.
- Solid experience in the design of serial communication interfaces such as USB and RS485.
- Solid experience in preparing manufacturing work instructions, and excellent documentation skills.
- Experience of rigorous attention to detail with focus on robustness, cost efficiency and quality of products.
- Strong passion for working with technology and must have the excitement for creating high quality complex process control instruments.
- Experience with the use of schematics and drawings, perform modifications and complete rework to new and used subassemblies and circuit analysis programs.
- Able to use oscilloscopes, digital multimeters, system analyzers and in-circuit emulators.
- Knowledge of Microsoft Outlook, Access, Word and Excel.

Physical/Travel Requirements:
Sitting 80% and computer work and lab bench at least 80% of the time, standing, walking and bending 20%. Capable of lifting up 15lbs. Some travel may be required.

These duties may be modified or changed at any time at the sole discretion of management either orally or in writing. The above statements are not to be construed as an exhaustive list of all responsibilities, duties, and skills required of this position. All personnel may be required to perform duties outside of their normal responsibilities from time to time, as needed.

FCI pioneered the development and application of thermal dispersion flow and level sensing technology. The Company is the world-recognized leading manufacturer for solving flow and level measurement applications for industrial process and plant applications using patented thermal dispersion flow measurement technology. The Company began in 1964 and is the world leader in thermal mass flow meter technology.

FCI is an equal opportunity employer with a commitment to affirmative action for minorities, women, persons with disabilities and veterans. FCI is an active participant of the DHS and SSA E-Verify program.

Company Description:
From off-the-shelf product solutions to custom engineered products and systems, FCI provides world leading experience and a record of unequalled innovation to meet or exceed our customer application demands. Complimenting FCI product leadership is a world class Flow and Level Calibration Facility in which all calibrations are performed in liquids or gases utilizing only N.I.S.T. traceable equipment and instrumentation.