



Location: Webster, Texas

Job Type: Full-Time, Exempt

Experience: >= 6 years

Education: BS in Electrical Engineering or related degree

Reports to VP of Engineering

Senior Analog - Digital Engineer

1st Detect, a fast growing spin-off company developing next generation, miniaturized chemical detectors (mass spectrometers) is seeking a Senior Analog – Digital Engineer specializing in mass spectrometry instrumentation. The engineer will support the research and development of new technologies for 1st Detect’s mass spectrometer-based product line.

Job Responsibilities:

- Perform analysis, research and development for analog circuits used in 1st Detect’s line of mass spectrometer products.
- Generate documentation relating to architecture and circuit design
- Work with engineers and scientists to implement new features and capability

Required Qualifications:

- Bachelor’s degree and at least 6 years’ experience circuit design
- Ability to perform circuit analysis and modeling using software tools (Spice), EMC/EMI
- Must have proficiency in relevant engineering tools such as circuit design and layout tools, Altium Designer suite is preferred
- Analog circuits, A-D/D-A converters, OpAmps, DC-DC converts, High voltage supplies +/- 6KV, RF signals to 500MHz, signal amplifiers
- Digital design experience Microcontrollers, USB, SPI, Flash memory, DDR3, LVDS
- Strong understanding of low to medium volume assembly processes is required
- Including PCB fabrication
- Regulatory issues UL,CE,FCC
- Candidate must be a US citizen

Desirable Experience:

- LabVIEW, Math Works tools
- Rapid prototyping
- Test driven development

The ideal candidate will be:

- Ability to deliver quality work under a tight schedule
- Ability to solve design problems independently
- A motivated self-starter that is able to assume responsibility for tasks with minimal supervision or direction
- Excellent analytical skills and communication skills

- Willing to think 'outside the box' and able to assume tasks, projects, and duties outside of their 'comfort zone'
- Motivated to work as part of a team

1st Detect revolutionizes the chemical detection market by leveraging the analytical performance of a mass spectrometer, in a transportable instrument. The instrument is capable of satisfying the chemical detection requirements for a variety of markets, including industrial, food and agricultural, security, and defense. As a part of the 1st Detect team, you will have the opportunity to develop and expand your career, while interacting first hand in a group of talented and dedicated engineers and scientists.

EOE M/F/Disability/Veteran