Operations Electronics Engineer

About ION Science Ltd:

ION Science has over 37 years of industry experience designing, manufacturing, and supplying PID gas sensors, gas detection instruments and leak detectors for a wide range of industries and applications. We are an unrivalled worldwide gas and leak detection company, with a team of workers who strive to deliver exceptional product quality and customer satisfaction. In 2022 ION Science were awarded the Queen's award for Enterprise for MiniPID Sensors. This is a fantastic opportunity to join our dynamic and growing team and be part of a well-recognised brand associated with quality.

MAIN PURPOSE OF JOB:

The Electronics Engineer is responsible for developing best-in-class PCBA and product testing capability, and for providing diagnostic support so that Manufacturing can run reliably and efficiently. The successful candidate will join a small team of Electronics Engineers and will contribute to projects that support the introduction of new products, processes and automated test equipment. This role requires advanced electronics engineering expertise combined with a hands-on approach, providing exceptional diagnostic support to the Quality, Manufacturing and Production Engineering teams. It also requires the ability to collaborate effectively with the R&D team and external suppliers to deliver robust production processes and test solutions.

JOB ROLE:

- Work as part of a small team of Operation Electronics Engineers in meeting departmental objectives & providing technical support to Manufacturing.
- Contribute to & take ownership of project tasks to deliver New Products, Processes & Equipment into Manufacturing, utilising best in class test solutions.
- Design, develop, validate, maintain & document test systems & verification processes / solutions to meet the requirements of the Manufacturing teams.
- Work with Production Engineering & R&D teams to develop data acquisition from key test & manufacturing equipment to enable data driven decisions & improvements.
- Provide support to Manufacturing, by conducting structured problem solving & root cause analysis to diagnose issues & to provide robust solutions.
- Work closely with external suppliers as well as the in-house R&D, Quality, Manufacturing & Manufacturing engineering teams to resolve high-priority issues.
- Provide good quality 'Design for Manufacture, Assembly & Test' inputs to the Project Development teams.
- Fault finding, troubleshooting & repair of precision electronic PCBA's etc.
- Support the Manufacturing & test processes of all PCBA variants via all the relevant in-house processes, equipment & relevant IPC Standards. Provide training where applicable.

Other responsibilities

- Where necessary, coordinate service / maintenance of Test equipment with external providers as to ensure that machine uptime is optimal.

- Participate in Continuous Improvement Activities to develop & improve our manufacturing capability in the PCBA & product manufacture & calibration processes.

SKILLS:

Essential Skills

- Advanced Electronic & Electrical design & measurement competence & capability.
- Ability to work effectively as part of a team & to take ownership of project tasks, sharing knowledge with Technicians & apprentices as required.
- Ability to design electronic circuits & PCB layouts for test & programming equipment using CAD & PCB design packages i.e. Proteus, Easy PC etc.
- Able to conduct structured root cause analysis of advanced & high sensitivity electronics to enable robust problem solving & to provide robust solutions.
- Understanding & experience working with various types of firmware & software, ideally with some basic coding ability.
- Good vision capability to enable precision work, with very small components (i.e. 0201 SMT components).
- Good communication skills, with a high degree of IT literacy, proficient with Microsoft Office tools.
- Safety Conscious & possess a high degree of precise manual dexterity, & the physical ability to load/unload SMT / PCB related Machines & carry out basic maintenance.
- Self-organised, methodical, logical & have excellent levels of attention to detail.
- Possess good initiative & work ethic.
- Ability & willingness to learn & develop.
- Excellent problem-solving abilities, with experience in methodologies such as 8D & A3 problem solving.
- In-depth knowledge of working within a formal Quality Management Systems (ISO9001 or equivalent) in relation to technical design & manufacturing business.

Desirable Skills

- Strong understanding of Scientific principles (i.e. Electronics, Mechanical, Physics, Chemistry etc.).
- Experience in design &/or manufacturing products for hazardous locations (e.g. ATEX, IECEx)

EXPERIENCE:

- Experience gained working in an Electronics Design &/or Manufacturing Engineering related Role.
- Experience gained working in a Technical (Engineering based) Manufacturing business or similar.
- Manufacturing Process Control experience.

EDUCATION & QUALIFICATIONS:

Essential:

- Minimum HNC/HND/Degree level in related technical subject (i.e. Electronics &/or a related Engineering &/or Science based Subject).

- CAD package trained for the Design of Electronic Circuits.

Desirable:

- Firmware/Software programming language training.

BENEFITS:

- 25 days annual leave plus Bank Holidays (annual holiday increasing with service)
- Excellent employer pension contributions of 8% after probation
- Life Assurance of 4 times of pensionable salary
- In-house training
- Discretionary Annual Bonus
- On site shower & changing facilities
- Long term service awards
- Monthly lunch & drinks laid on by the company
- Sick Pay
- Christmas party
- On-site parking
- Private Medical with AXA
- Bike Purchase Scheme
- Car share scheme
- Early finish on Fridays

WORKING PATTERN:

- Monday to Thursday: 08:30 – 17:00
- Friday: 08:30 –15:45
- Immediate start available
- Full time – Permanent position

LOCATION:

This role is based at the ION Science head office, located in Fowlmere, 10 miles south of Cambridge. The role is required for you to be on site.

Our Core Values:



See what our employees have to say about working at ION: https://ionscience.com/en/careers/

Due to the high volume of CVs we receive, it may not be possible to provide feedback to all applicants. If you are successful, we will be in touch to arrange a call with the hiring manager.