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## Electronics Manufacturing Engineering Lead

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### About ION Science Ltd:

ION Science has over 36 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:

As a key member of the Manufacturing Engineering Team, the Electronics Manufacturing Engineering Lead is responsible for developing best-in-class PCBA & Product Testing capability, along with diagnostic support to ensure that the Manufacturing Operations can run reliably & efficiently.

The successful candidate will lead a small team of Electronics Manufacturing & Test Engineers / Technicians. In addition, you will take the lead in managing projects to support the introduction of new products, processes & automated test equipment.

This role requires advanced electronics engineering expertise, combined with a hands-on approach to provide exceptional diagnostic support to Quality, Manufacturing & Manufacturing Engineering teams, & the ability to collaborate effectively with the R&D team & external suppliers to deliver robust production processes & test solutions.

### JOB ROLE:

- Take responsibility for, & lead, a small team of Electronics Manufacturing & Test Engineers / Technicians in meeting departmental objectives & in providing technical support to Manufacturing.
- Lead projects to deliver New Products, Processes & Equipment into Manufacturing, utilising best in class automated manufacturing processes & test solutions.
- Design, specify, develop, validate & document automated test & verification processes / solutions to meet the requirements of the Manufacturing teams & to develop the capacity to meet current & future customer requirements.
- Work with Manufacturing Engineering & R&D teams to develop data acquisition from key test & manufacturing equipment (K' Stations) to enable data driven decisions & improvements.
- Provide exceptional 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, PVL, 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 & 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.
- Maintain high quality documentation using the company documentation systems.

#### Other responsibilities:

- Help develop & support the Manufacturing Teams by ensuring that in-house processes, test, inspection & rework comply with best-practise & relevant IPC standards.
- Attend &/or lead internal meetings as & when required.
- It would be desirable (but not essential) if the successful candidate has the ability/experience to load, set, programme & optimise SMT & associated SMT & PCBA process & AOI related inspection equipment etc.
- Where necessary, coordinate service / maintenance of SMT & related PCBA Manufacturing & Test equipment with external providers as necessary to ensure that machine uptime is optimal.
- Participate in & lead Continuous Improvement Activities to develop & improve our manufacturing capability in the PCBA & product manufacture & calibration processes.
- Work effectively with team members, management teams & other key members to ensure delivery of robust & reliable solutions.

#### **SKILLS REQUIRED:**

##### Critical Skills:

- Advanced Electronic & Electrical design & measurement competence & capability.
- Ability to lead others effectively as required. The role will require team & project leadership, & the development of a small team of direct reports from apprentice level to more experienced engineers.
- Ability to design electronic circuits & PCB layouts for test & programming equipment using modern CAD packages.
- 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 & leadership skills, with a high degree of IT literacy, proficient with Microsoft Office tools.

##### Other Essential Skills:

- Experience of working with, & TPM maintenance of, modern SMT/PCBA & AOI related Machines & other related Processes & Equipment.
- 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.
- Good levels of numeracy & excellent written & oral communication skills in English language.
- Team player & good at building rapport with internal departments
- Possess good initiative & work ethic.

- Have a flexible approach & prepared to work additional hours where necessary to meet customer dem&.
- Ability & willingness to learn & develop.
- Proficiency in advanced process control methodologies (i.e. 6-Sigma, SPC etc.).
- 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:

- Firmware/Software Coding skills & ability
- 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).
- Knowledge of within an advanced Quality Management Systems (i.e. Medical, Aerospace &/or Automotive) in relation to technical design & manufacturing business.
- Knowledge of Health & Safety (ISO45001) & Environmental Management (ISO14001) systems.

**EXPERIENCE:**

- Significant experience gained working in an Electronics Design &/or Manufacturing Engineering related Role.
- Significant 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:

- Solid Works CAD qualified, &/or similar 3D Modelling mechanical package.
- Six-Sigma / Lean Manufacturing experience.
- Firmware/Software programming language training.

### **BENEFITS:**

- 25 days annual leave + 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

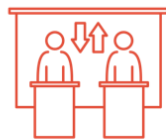
### **LOCATION:**

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:**



**Fun**



**Embrace  
change**



**Respectful**



**Responsive**



**Challenge the  
status QUO**



**Committed**

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.