

Job Title:	Electronics Engineer
Department/Location:	Research and Development
Reporting To:	Product Development Manager
Purpose of Role: (a short sentence that summarises the position)	To design and develop new products, on-time, on cost and in full, along with supporting and improving existing products.
Role Summary: (Few bullet points that provide an overview of role, and how it links into /supports departmental/business strategy)	The successful candidate will be responsible for the specification, design and delivery of integrated electronics for the instrumentation / coating thickness market as part of a project team. This includes the involvement in the full product cycle from initial research and feasibility through to introduction to manufacture.
Key Accountabilities and Responsibilities:	<ul style="list-style-type: none"> • The design of integrated analogue / digital electronics. • The investigation of new electronics technologies. • To take part in feasibility and research work focused at new product realisation. • The documentation and review of designs. • Liaise with other departments to deliver a design that optimises manufacturability • The adherence to relevant legislation and standards. (For example: ISO 9001.) • To support new designs through the full product lifecycle. • To take ownership of the electronics design and its related activities. (PCB layout, prototyping, testing, etc.)
Measures of Success:	<ul style="list-style-type: none"> • The successful candidate will be fundamental in delivering the electronics aspect of new products on time, in full and to budget. They shall show themselves to be technically competent in the electronics engineering field, capable of designing independently whilst also co-operating with a larger team. • The designs shall be optimised for power consumption, cost and physical space. They shall be designed with consideration of the software and mechanical needs of the product and with the intention of passing relevant EMC and environmental tests. • The designs shall have a consideration for manufacturability and robustness, to help minimise production costs and warranty returns.
Key Deliverables: (Within the first 12-18 months.) Objectives which are SMART: Specific Measurable Achievable/Agreed Realistic Timebound	<ul style="list-style-type: none"> • Product Training within 1 month. • Altium Training within 1 month. • First proto design within 3 months. • Demonstrable knowledge of NPI process in 3 months. • Tested and proven prototype within 6 months. • First-pass design within 9 months. • Tested design within 12 months. • PCB integrated into product design within 18 months.

Performance**Indicators:**

(Measures by which the individuals' performance will be monitored & assessed.)

- Ability to meet timescales mutually agreed by the engineer and project manager.
- Whether the designs meet all agreed product specifications, both technical and commercial
- The ability to design “right first time” within the timescales.
- Whether the designs meet all regulatory requirements (EMC, etc.)

PERSON SPECIFICATION

	Essential	Desirable
Qualifications/Education & Training	<ul style="list-style-type: none"> • Educated to degree level in Electronics Engineering or equivalent. 	
Experience	<ul style="list-style-type: none"> • 5+ years' experience in an electronics design role. • Experience in designing for EMC compliance. • Good background in product development within agreed timescales. • Experience in designing low-power battery products. • Transferring designs into production from the design/development stage. 	<ul style="list-style-type: none"> • Experience of being a lead engineer on a project. • Experience developing measurement systems. • Experience designing with ARM Cortex-M microprocessors.
Skills & Competencies	<ul style="list-style-type: none"> • Strong skills in electronics design (analogue and digital / microcontroller). • Capable of writing technical reports for a range of audiences. • Able to convert customer requirements into detailed specifications. • Design for manufacture. • Able to use electronics design-based CAD/CAM packages. • PCB layout knowledge. 	<ul style="list-style-type: none"> • Embedded software skills. • C & C++ programming. • Knowledge of serial communication interfaces. (RS232/485, SPI, UART, etc.). • Knowledge of Altium Designer. • Good MS Office skills (Word, Excel, PowerPoint, etc.).
Personal Attributes	<ul style="list-style-type: none"> • Strong analytical and problem-solving skills. • Good organisational skills. • Able to manage own time effectively within a project. • Excellent communicator with people from a range of technical/non-technical backgrounds and competencies. • Able to work well in a team. • Dedicated, with a sense of responsibility over designs and products. • Attention to detail. 	