



Development Engineer

Job Description

Role	Development Engineer
Commitment	Full-time role
Salary	Competitive package dependent on experience, including Pension
Employer	Ionix Advanced Technologies Ltd. (www.ionix.at)
Reports to	Development Director
Location	Ionix's development and manufacturing activities are based in Huddersfield, West Yorkshire. UK, easily accessible from Leeds, Manchester and Sheffield.

Summary:

Ionix Advanced Technologies specialises in high performance, extreme environment piezoelectric devices, systems and materials, offering a range of sensors, actuators and transducer devices based on its novel piezoelectric materials, with applications in areas such as non-destructive testing/evaluation (NDT/E) condition monitoring and flow measurement in demanding environments.

Piezoelectric materials are used in a vast and rapidly expanding range of actuators and sensors. They are the irreplaceable heart of systems such as medical ultrasound imaging, non-destructive testing (NDT), energy harvesting and SONAR comprising a \$15bn annual market. Ionix has developed novel range of high temperature piezoelectric materials, which can operate in extreme environments in excess of 500 °C and with which opens the opportunity to a whole host of new high temperature sensing technologies.

Purpose:

Ionix is currently looking for product Development Engineer who will be a key contributor to the design and production team, responsible for devising and implementing new extreme environment piezoelectric transducers, sensors and systems. You will work closely with Materials, Acoustic and Electro-mechanical Engineers to drive the development of client demands into prototypes that will see service in Aerospace, Automotive, Nuclear, Manufacturing, Plant, Process Control and Oil & Gas sectors.

Able to demonstrate relevant experience in research/design, assembly, testing, production or manufacturing, you should have an ability to work to deadlines with a flexible approach to the varied tasks required of the role.

Applicants must have the right to live and work in the UK.

To apply for this role, please send your CV and covering letter to careers@ionix.at with the reference "DE122020"



Responsibilities:

- Manage and contribute to projects to develop Ionix sensor & system products for customers across market sectors.
- Design and produce technical drawings of mechanical components and assemblies of devices using 2D and 3D design tools.
- Assembly, testing and characterisation of sensor assemblies, by a range of acoustic, electrical and mechanical means.
- Liaise with suppliers to resolve issues and ensure product or project requirements are met.
- Contribute to the design and prototyping of novel sensors to specification, including producing risk register, timelines, and bill-of-materials.
- To provide technical advice and support the business development process, working with sales and technical colleagues to achieve the collective commercial goals of the business.
- Present progress and feedback from development activities to technical and commercial colleagues to support product development.

The Candidate

Essential skills and personal attributes:

- A degree in Science or Engineering plus 2 years' industrial experience or HNC/HND plus 2 years' experience, or at least 3 years' experience in research, design, product development or manufacturing.
- Demonstrable understanding and knowledge of modern Computer Aided Design, ideally Solidworks and how to use the systems effectively and efficiently to design products.
- A hands-on and analytical approach to development, capable of creating high quality documentation and reports.
- An understanding of modern machining, fabrication, and assembly processes of mechanical and electro-mechanical products.
- Capable of reading, understanding, and creating technical drawings of components with accurate and thorough machining tolerances, limits, and fits.
- Understand the principles of engineering compliance and risk management.
- Confident command of written and spoken English for report writing and technical presentations.
- Experience of working under a quality management system, including documentation control, change and configuration management.
- Potential to contribute to new device ideas through proven analytical thinking.
- Hands-on approach to prototyping, testing and characterisation.
- Good communication skills to articulate aspects of development ideas and concepts to other engineering disciplines.
- Entrepreneurial, innovative and resourceful – able to generate new ideas, with a can-do attitude
- Able to work independently to meet deadlines within a small team, working in a dynamic SME environment.
- Comfortable helping with any tasks and learning new skills in other engineering areas.



Desirable skills and attributes (but not essential)

- Experience in non-destructive testing (NDT/NDE), particularly ultrasonic testing would be beneficial.
- Experience in the design, modelling and construction of ultrasonic or piezoelectric sensors.
- Project management skills and experience of successful project delivery.
- Experience of FEA analysis or simulation tools, particularly ultrasonics, ie., OnScale, COMSOL etc
- Experience of electronics, embedded software and/or digital signal processing.
- Experience working within an ISO 9001 accredited environment.
- Experience with prototype manufacturing, including 3D printing, manual drilling & milling, and soldering.
- Experience in, or an understanding of basic electronic design and assembly.
- Experience in design of components for use in explosive environments (ATEX).
- Experience of working within an APQP framework.

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