

**Job Title:**

## Hardware Design Engineer

As a Hardware Design Engineer in the Ei Electronics Engineering and R&D group, you will be responsible for hardware architecture and board level design of new fire and gas detection products and the associated Gateway systems. In your role you will be a part of the team that brings new products from concept through to high volume manufacturing environment delivery. The role will include the component engineering activities that are vital to ensuring a secure supply chain through the life of the products.

**Experience Required:**

The candidate should have experience in some or all of the following areas:

- Low-power circuit design, DC/DC converters, power management methods, and analogue design and mixed-signal board-level design.
- Processor architecture, digital circuit design and embedded systems.
- Sourcing, evaluating & selecting components for new & established designs
- Various communications protocols such as I2C, UART, SPI, USB.
- Familiarity with RF technology - antenna design, impedance matching, performance tuning of RF circuits – 345MHz, 433MHz, 868MHz, 2.4GHz
- Experience integrating RF technologies such as Zigbee, Zwave, WIFI, BlueTooth.
- Leading and driving design development from schematic capture, PCB layout through assembly, and test house validation
- Robust designs for ESD/EMI immunities and RF de-sensitisation.
- Partnering with software teams to define and implement firmware, drivers and algorithms

**Additional Requirements:**

The Successful candidate should also:

- Have an honours degree, or post graduate qualification, in Electronic Engineering
- 6+ years of experience in consumer product design, including circuit design, component engineering, integration, embedded systems, and debugging
- Have strong leadership skills and the ability to communicate effectively with a diverse set of stakeholders across multiple disciplines
- Have strong communication and documentation skills and ability to operate autonomously
- Have a good understanding of manufacturing process including DFM and DFT for consumer products
- Have a good working knowledge of the technical concepts involved in the development of products and processes



Ei Electronics is a successful multinational Irish company with a leadership position globally in the design and manufacture of Fire and Carbon Monoxide detection products for the residential sector.

### **Ei at a glance**

Employing over 800 people, the company is headquartered in Shannon, Ireland, occupying a 23,000 m<sup>2</sup> campus where all key manufacturing, R&D and commercial functions are located. Overseas sales and marketing subsidiaries are located in the UK, Germany, France, Poland and the USA.

The Company's success is based on a culture of Quality, Service and Product Innovation over 30 years. R&D is the lifeblood of Ei Electronics, with sensor technologies at the core of our product advancement. As a global leader in the industry, Ei Electronics is now at the forefront of emerging Cloud-based "Connected Home" and IOT developments.

Working with one of Ireland's leading indigenous electronics companies, provides a wide array of opportunities and possibilities to grow.

### **Life at Ei**

- Work in dynamic and innovative business environment with unique cross functional involvement
- Exceptional learning and development opportunities through our Apprenticeship, Graduate and Engineering Leadership Programmes
- Excellent career advancement opportunities
- Prime Midwest location offering unrivaled work-life balance
- Inclusive Benefits package

We are constantly on the best talent in order to grow, expand and lead our teams. For any inquiries contact our HR Team at:

**[Liz.frawley@eielectronics.ie](mailto:Liz.frawley@eielectronics.ie)**

