

Position: Principal Electronics Design Lead

This is an outstanding opportunity to develop your career in a dynamic and rapidly growing design consultancy with an ethos of building lasting partnerships with clients. It has never been a better time to join the team as we are at the point of significant expansion with a number of new and existing clients. Based in the i4 Product Design studio in Edinburgh, our design team are constantly expanding their engineering horizons in order to create custom-designed products which are specific to the clients' market needs. The net result is a highly creative and progressive work environment.

An opportunity has arisen for an Electronics Design Lead who will play an important role in strengthening our electronics capability. You will hold a principal electronics system position within i4, forming the basis of a team of electronics hardware and software engineers to complement our mechanical engineering and product design expertise.

About You

You are a highly experienced electronics hardware design engineer with a track record of product design. You are a highly motivated individual who is quick to learn and able to manage working on multiple projects without direct supervision. You are already, or have the desire and capabilities to become, a team leader who is able to speak with clients and non-technical stakeholders to understand their requirements and explain technical concepts. You always document your designs to a high level of quality and have worked on full product releases. You have multi-market product development experience which includes consumer and/or regulated environment products like medical or similar.

Key Responsibilities:

The remit for the role will be to:

- Take on a systems design lead role for interdisciplinary projects involving electronics, software and mechanics, liaising with i4 in-house designers and engineering partners.
- Work with clients to define detailed electronics & software requirements.
- Guide designs towards meeting regulatory requirements as required.
- Work with project managers to develop proposals and project plans.
- Provide in-house electronics system design for analogue and digital products
- Specify, design, and test electronics systems.
- Develop prototype systems for proof of concept work / early product prototypes using custom hardware and off-the-shelf modules.
- Develop test circuits including interfacing sensors, communications and basic automation.
- Review the work delivered to ensure it meets functional and quality requirements.
- Implement embedded software for prototypes / test circuits and products.
- Support full-lifecycle product development.

It is expected that the role will develop as the Electronics team at i4 is built up and the successful applicant should expect to play a significant part in developing both their own role and the nature of the team.

Qualifications/requirements:

Essential Technical Skills / Experience

1. Degree level qualification in Electronics Engineering or equivalent.
2. 6+ years of industry experience
3. Electronics Systems hardware design expertise for products at medium to high volumes i.e. have a good knowledge of EMC, DfM etc.
4. Broad electronics experience – analogue, digital, power supply, signal conditioning & sensors.
5. Schematic capture experience (e.g. Altium).
6. Circuit simulation (Matlab, PSPICE or similar).
7. Circuit build, test & debug.
8. Testing / Debugging / Troubleshooting of designs
9. Highly competent at MS Office (Excel, Word, PowerPoint).

Desired Technical Skills

1. Experience with Systems / Single Board Computers / Modules.
2. Embedded micro-controller design (e.g. ARM).
3. Analogue circuit design including Analogue to Digital and Digital to Analogue systems
4. Wireless connectivity (including Bluetooth / BLE).
5. Serial communications – USB, RS232, SPI / I2C / 1-wire other serial bus protocols.
6. Familiar with analogue & digital sensors and interfacing to acquisition electronics.
7. Data acquisition and analysis techniques.
8. Familiarity with PCB layout guidance.
9. EMC testing and troubleshooting.
10. Design for medical / regulated device.
11. Embedded software capable
12. IT networking.

This is a superb opportunity to join a forward thinking and successful SME business. In return you can expect a highly competitive salary & company workplace pension in a challenging and supportive culture and the opportunity to grow your career with a company that is set to expand rapidly.

Email jobs@i4pd.co.uk quoting job reference '**Principal Electronics Design Engineer**' and include the following:

- Your CV.
- A covering letter briefly describing the contribution your skills & experience would bring to the team.