

Electronics Design Engineer

Salary: £35,000 - £45,000 per annum.

Position: Permanent, Full time.

Location: Romsey, Hampshire, UK.

Reference: VC013

Link: <https://www.altertek.com/careers/electronics-design-engineer-vacancy/>

Position Overview

Altertek Ltd are seeking an **Electronics Design Engineer** to join the growing engineering team to create and support the design of Battery Management Systems and supporting electronic systems for advanced Lithium-Ion battery systems.

Altertek Ltd – Overview

Altertek is a specialist niche Lithium-Ion battery development, integration and manufacturing company that produces battery systems for exciting applications such as motorsport, subsea, automotive and industrial.

Altertek are one of very few companies in Europe that design and manufacture high voltage batteries making demand for our services very high.

We offer complete turnkey battery solutions including electronics development, embedded software development, battery enclosure design, manufacturing and testing and all to our ISO9001:2015 management system.

Benefits

- Modern, air-conditioned facility located in a quiet leafy area.
- Ample on-site parking.
- Secure pushbike parking.
- Modern powerful multiscreen PCs and equipment.
- Small close knit friendly team.
- Company pension scheme.
- Private health care*
- Childcare voucher scheme.
- A short distance to Romsey train station with direct links to Eastleigh, Southampton and Salisbury.
- Free tea and coffee with modern dedicated break facilities
- A flexible working week based around core hours which is great for working parents, gym sessions and other hobbies and interests.
- Ability to accumulate hours to accrue additional days of leave. *
- Midday finish on a Friday. *
- 30 days annual holiday (including bank holidays)
- Additional day of holiday each year for every year you work for the company. *

*Additional terms apply.

Position - Detailed

Altertek are currently looking to recruit a highly motivated, passionate and focused **Electronics Design Engineer** to be part of the engineering team at their facility based in Romsey, Hampshire, UK.

The role will be to design and develop Battery Management Systems, electronic sub systems for use in the monitoring and control of advanced Lithium-Ion battery systems and supporting hardware.

The successful candidate will work with highly skilled likeminded people who are proactive and passionate about what they do in a company that is guided by core values, including: environmental, social, ethical and moral responsibility and integrity. As a result, we do not engage with products that cause deliberate harm to people or the environment.

As part of this company, the candidate will not simply be a number, you will be involved in decision making, customer interactions and helping to create exciting products in one of the world's fastest growing industries.

Key Responsibilities

- Develop and design hardware solutions to meet the required specifications.
- Create and maintain hardware specifications derived from system documentation.
- Create schematic designs and PCB layout for systems and circuits.
- Design optimisation for performance, safety and cost.
- Work in compliance with the company's engineering design rules, development guidelines and the product development process.
- Ensure that development work adheres to the requirements of project design specifications and other supporting documentation.
- Play an active role in projects, team meetings etc. Liaise with other cross-functional team members, suppliers and other interested parties throughout projects and encourage their involvement and participation.
- Participate and where necessary lead design reviews, communicate ideas and solutions, influence decisions and problem solving.
- Test, validate and document design solutions ensuring they are robust and reliable by using relevant tools and techniques and evaluate outcomes and act as required.
- Support the creation and maintenance of technical files as new products are designed, or existing products are changed.
- Have a detailed and thorough understanding of our own products, and proactively seek to learn about competitors' products.
- Provide technical support to other areas of the business when required.
- Design and develop new products and product improvements, balancing innovative engineering design, functional requirements and aesthetic appeal

with product safety, cost effectiveness, ease of manufacture, installation and maintainability.

- Assist the commercial team in creating quotations for potential new projects.
- Provide regular reports to senior members of staff on project progress.

Essential Attributes (Must have these otherwise the role is not for you)

- Experience in electronic hardware and / or system design (schematic and layout)
- A higher education qualification in electronic design (or related) OR a proven track record in electronic design.
- 'Self-starter' capable of working with minimal guidance and solving problems using available resources.

Ideal Required Attributes (All, some or part of any of these would be really good)

- Ability to understand software and hardware integration requirements.
- Experience in designing safety critical circuits.
- Experience in design for manufacture and to a desired cost.
- Capable of producing well thought out, maintainable and readable schematic designs.
- Ability to debug hardware issues and resolve problems.
- Ability to use standard test equipment to test hardware and PCBs.
- Ability to review hardware designs.

Desired Attributes (Not essential but would be really useful)

- Degree educated in a related field.
- Experience in embedded software design (C) and software architecture design.
- Experience in circuit design using Proteus.
- Experience of CAN bus protocol.
- Experience in designing for EMC compliance.
- Experience of battery management systems.
- Experience of working to functional safety concepts (IEC 61508 / ISO 26262 etc).
- Experience of battery design.
- Experience of Lithium-Ion batteries and cells.
- Experience of working with battery powered / electric vehicles.
- Experience of working in the subsea industry.
- Experience in working within an ISO9001 environment.

Personal attributes and behaviours

- Care about the environment and want to use your skills to create products that work towards helping the environment and improving the future.
- A strong personality to be able to solve problems and making sound decisions when under pressure.
- Has a creative mind and ability to innovate.
- Has a high level of tenacity and drive.
- Has excellent problem-solving abilities and use of problem-solving tools and techniques.
- Has excellent organisational skills and is highly task focused and able to prioritise, whilst also being flexible.
- Is a good communicator interpersonal and relationship forming skills, able to communicate effectively and interact at all levels of the business.
- Has an excellent if not an **obsessive** attention to detail.
- Committed to actively improving own skills, knowledge, business awareness and performance through ongoing personal development.
- An interest in electric vehicle / renewable energy technologies.