



A Halma company



## Lead Electronics/Application Engineer

### About Us

Halma Water Management (HWM) is a group of successful water conservation companies who have joined forces under a single sales, design and distribution network to manufacture and supply flow measurement, data logging, and leak detection solutions for the water industry. Our extensive experience and unrivalled innovation has made us a world leading team with an international reputation for technology, quality and service. Together, we provide an unparalleled range of products and services for the water industry.

We are proud to be part of Halma, a major worldwide technology group making safety products and products that improve quality of life. As an integral part of the Halma Group plc, Halma Water Management has the strength and credibility of a FTSE 100 plc Company with the financial resources to match.

Halma has been trading for over a century and has a level of corporate pride second to none. Their customers range from small enterprises through to some of the largest companies in the world, and they export products globally, currently to over 50 countries.

### Job Purpose

The Electronic Application Engineer is part of the Application Engineering team and reports to the Application Engineering Manager. This role will involve time spent defining the hardware specifications, designing the electric circuit diagram and board layout, and will also require a sufficient seniority level to help and support the Application Engineering manager in delivering projects on time and within the company design quality standards.

The role will focus primarily on smaller Application projects, whereby the Electronic Application engineer will be expected to assess and develop new Application technologies before integrating into existing products.

This includes assessing electronic datasheets for technology compatibility, developing and testing prototypes, liaising with customers for trials, and releasing products into a production environment.

### Main Responsibilities

- Driving development and innovation taking on responsibility for product electronic designs and prototyping.
- Able to work in the front-end R&D part of the business, capturing early-stage requirements, define, develop, and test Proof of Concepts that could enable NPD projects.
- Leading product design reviews & continuous improvement activities.

- Develop and test solutions to problems to ensure product quality.
- Identify and recommend product improvements to improve technical performance.
- Understanding, compiling, and managing the implementation of customer requirements flow for hardware design through to internal and external suppliers.
- Leading the qualification, test, and requirements management aspects of physical design, including EMC and radio performance.
- Carrying out feasibility studies for new technical innovations.
- Attending meetings, writing reports, and giving presentations to managers and clients.
- Travel within UK and abroad may occasionally be required.

### **Experience and Skills Required**

- Excellent academic record in Electrical/Electronic Engineering.
- 5-10 years' experience in both analogue and digital Electronic Hardware Design within a relevant industry.
- Extensive experience of Analogue and Digital Design including: Microcontrollers, low power design, high-speed digital design, amplifiers, filters, ADC/DAC, designing for low cost/high volume and lithium battery power management.
- Experience of simulation using Spice as well as schematic capture, PCB layout and library management (Altium or similar).
- Self-motivated to work with minimal supervision on multiple simultaneous projects as part of a small team of engineers.
- Good communication skills verbally and in writing (producing design documentation).
- Good knowledge of compliance requirements – CE, FCC, EMC, RoHS, etc.
- Undertake activities related to product certification.
- High volume manufacturing experience.
- Experience of working in a highly regulated environment (medical, aviation etc).

### **Desirable Skills and Experience**

- Experience working in the design, implementation and testing of algorithms and digital signal processing.
- Strong embedded firmware skills in C.
- Strong modelling and analytical skills in MATLAB or similar.
- Radio system and antenna design including certification.

- Design-in experience with microcontrollers such as ARM, AVR or MSP430. Experience with GSM/GPRS technology.
- Power converter systems design.
- FPGA/CPLD & HDL experience.
- Audio systems design.
- DFMEA/RA/DFM experience.
- Experience of designing products for intrinsic safety (ATEX, IECEx, Hazloc).
- Experience of working with/selection of contract electronics manufacturers.

### **Qualifications/Training**

- Educated to Degree level within a relevant field.

### **Personal Attributes**

Committed, flexible, excellent time management skills, ability to work under pressure. Occasional international travel may be necessary.

*The above is not an exhaustive list of duties and you will be expected to perform different tasks as necessitated by your changing role within the Company and its overall business objectives.*

### **How to Apply**

To apply for this vacancy please contact [hr@hwm-water.com](mailto:hr@hwm-water.com), sending your CV along with a covering letter stating why you feel you are particularly suited to this role.