

Who We Are

Comelit-PAC is a leading provider of advanced security solutions including Door Entry, Access Control, CCTV, Intruder Detection, Home Automation and Fire Safety Systems.

Founded in Italy with nearly 70 years of design and manufacturing expertise, our products are sold in more than 90 countries through a well-established global sales and technical support network.

With a group turnover exceeding €189 million and over 1,000 employees worldwide, Comelit-PAC continues to expand its reach and capabilities.

In the UK, we've been established for more than 20 years, with our headquarters in Luton and our global centre of excellence for access control based in Manchester. Together, these sites are home to over 100 dedicated professionals.

We lead the way in delivering integrated, innovative security solutions that are scalable, straightforward to install, and engineered for long-term performance. Our broad product portfolio is designed to meet the needs of every stakeholder from developers and consultants to installers and end users.

Our success is fuelled by continuous investment in both our people and product development. By partnering closely with architects, specifiers, distributors and installers, we ensure our technologies evolve in step with the demands of modern security environments.

At Comelit-PAC, we don't just follow the future of security we help define it.

We are currently seeking to employ a **Senior Embedded Electronics Engineer** based at our **Manchester Office** within our **Research & Development Team**.

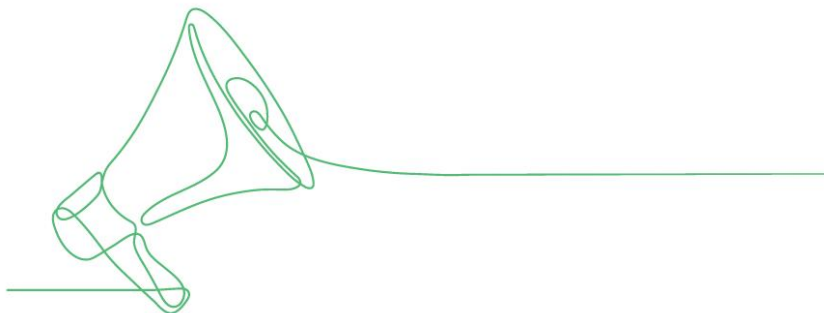
Your hours will be 37.5 hours per week, working across, Monday to Friday between the working hours of 8am and 5:30pm.

Are you looking for your next challenge? Kick start, your career and become a part of our Comelit Community. See our [careers page](#) for more information.

Some of Our Benefits Include:

Here at Comelit-PAC, our employees enjoy a range of benefits to name a few:

- Competitive Salary
- 25 days Annual Leave plus 8 bank holidays, allowance increase dependant on length of service
- Xmas Shut Down
- Modern working environment
- Training and Development Opportunities
- Yearly Events Calendar including Charity Events and health & well-being days
- 4 * Life Assurance
- Treat Days/Daily Fresh Fruit
- Smart Health including 24/7 online GP appointments
- Employee Health and Wellbeing Portal
- Free Eye Tests and Flu Vaccines
- Company Social Events
- Bonus/Commission Schemes
- Long Service Awards
- Recruitment Finder Fees
- Salary Sacrifice Pension Scheme
- Employee of the Month Awards
- Perkbox



Job Description

Job Title	Senior Embedded Electronics Engineer
Department	Research & Development Team
Location	Manchester Office
Reporting To	Embedded Team Lead
Direct/Indirect Reports	None

Job Summary

We design and develop electronic products for a range of applications within the residential, commercial and social housing sectors. Due to continued growth and ongoing development of multiple new projects, we are now looking to add a Senior Embedded Electronics Engineer to the expanding R&D team.

This is an excellent opportunity for a senior Embedded Electronics Engineer with seasoned industry experience to further develop their skills in a hands-on and collaborative environment.

The role requires deep expertise in C/C++, MCU/ MPU, RTOS, Unit Test, bootloader developments along with hardware proficiency to facilitate architectural design and bring up. Good analytical skills are essential with system-level debugging and ability to lead architecture decisions whilst also mentoring junior team members.

You will work across the full product development lifecycle-from concept through to production-alongside a team of experienced engineers developing innovative and reliable electronic systems.

Main Duties and Responsibilities

- Lead embedded architecture and system-level design for new and existing products.
- Develop robust, real-time firmware in C/C++ with strict timing and memory constraints.
- Design and implement peripheral drivers (SPI, I2C, UART, USB, ADC/DAC, PWM, DMA, Ethernet).
- Configure and optimise RTOS components including scheduling, memory pools and ISRs.

- Perform board bring-up, bootloader development, power-mode configuration and hardware debugging.
- Support schematic development, PCB layout and hardware validation.
- Ensure designs meet security, reliability and EMI/EMC requirements.
- Mentor junior engineers and lead design reviews and risk assessments.
- Collaborate closely with software, hardware, production and technical support teams.
- Contribute to continuous improvement of CI/CD, testing and development processes.

Any Other Responsibilities

- Comply with all health and safety legislation and local policies and procedures.
- Adhere to all organisational policies and procedures.
- Role model, support and implement the company values and behaviours with fellow employees, customers', and any other stakeholders.
- Respect equality and diversity across all areas of working practice and communications with staff, customers', and other stakeholders.
- Attend all company training events and complete all mandatory training.

Candidate Specification

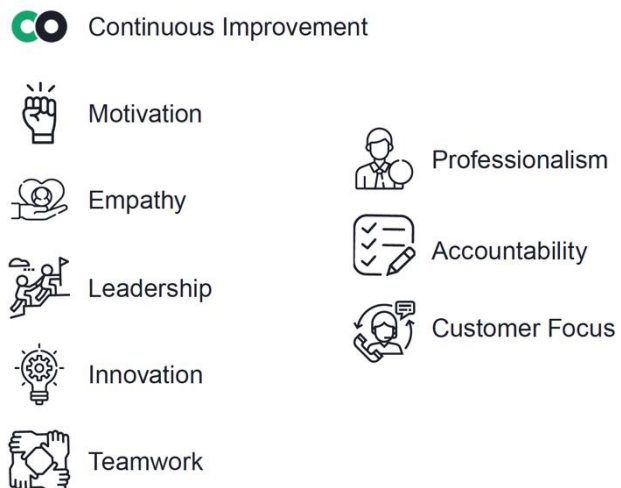
Qualifications and Training

- Degree in Electronics Engineering or a related discipline
- Embedded: C, C/C++, FreeRTOS, Schematics and Hardware
- Software expertise: KEIL, IAR, Visual Studio code, eclipse, STM32CubeMX, GCC, Altium, PSPICE, mbed Compiler.
- Hardware: ARM/NXP processors, RTOS, ST Microcontrollers, STM32/STM8.
- Others: Encryption and Flash programming via JTAG/Bootloaders, RS-232, SPI, I2C, IO, Serial Communications, USB, CAN Bus, RS485, TCP-IP, BLE, Wifi and Ethernet

Skills and Experience

- 7+ years of industry experience in an electronics engineering role
- Mastery of C/C++ and embedded toolchains (GCC, IAR, Keil).
- Strong understanding and experience of ARM Cortex-M, ESP32, or NXP Kinetis.
- Experience with RTOS, low-power design, and real-time constraints.
- Knowledge of secure coding, encryption and embedded cybersecurity principles.
- Git workflows and CI/CD pipelines, GitHub, Azure DevOps, Jira.
- Experience with unit testing frameworks and automated test systems.
- Good understanding of microcontrollers and microprocessor embedded systems.
- Solid understanding of analogue and digital circuits, schematics and pcb.
- Practical experience with CAD design tools and schematic capture (Altium)
- Experience with hardware testing and debugging principles and tools.
- Good soldering and prototyping skills

Comelit-PAC Values



Note: This job description summarises the main aspects of the job however does not cover all the duties that the jobholder may be required to perform. This document is intended to enhance the understanding between the manager and the employee and may be changed/amended as the job/business needs require.