



## Job Title – Principal Electronic Hardware Engineer

<b>Date position required:</b>	July 2019
<b>Reports:</b>	None
<b>Salary:</b>	Competitive (Permanent)
<b>Benefits:</b>	Pension, 28 days holiday (+ bank hols), salary sacrifice
<b>Site:</b>	hofer powertrain UK, 2 Titan Business Centre, Spartan Close, Warwick, CV34 6RR
<b>Applications required by:</b>	ASAP
<b>Application format:</b>	CV and covering letter

### hofer powertrain – Part of the hofer AG (Group)

hofer, established in the 1980's, is a privately owned, German based, automotive powertrain production design and supply company employing over 850 people within the Group. We work with many of the world's automotive OEMs, Tier 1 suppliers and automotive technology centres and have numerous powertrain components in production; including hofer designed electric motors and hybrid modules through to full dual clutch transmissions.

With numerous offices across Germany, Austria, Italy, America, China and the UK, hofer has a truly global presence allowing comprehensive support for powertrain system design and supply projects across all vehicle sectors.

- System supplier for complete automotive powertrain systems.
- Full electrical and mechanical capability from clean sheet through to quality accredited production.
- Specific sites setup to support a lot of the global OEMs.
- Production supplier for many of the current and future advanced powertrain systems and components.

As part of hofer group's global growth, and the continuing expansion of hofer powertrain UK, a vacancy has arisen for a Principal Electronic Hardware Engineer to join the business at the Warwick office.

Reporting to the Chief Engineer of Electrical Systems, hofer powertrain UK seeks an Electronic Hardware Engineer with a broad experience of automotive electronic components/ECUs and their development for production; particularly e-powertrain solutions and their associated power electronics and energy storage systems.

The hofer powertrain UK Electrical department is currently involved in the customer-facing delivery of both hybrid and pure electric drivetrain solutions, supported by a team of over 110 e-machine; power electronics; electronic hardware and software specialists based in Würzburg and Lenting, Germany.

**The key functions of the role:**

Lead the design and delivery of electronic hardware components and solutions for customer applications, interfacing directly with the electronic design teams in the UK and Germany and/or the appropriate hofer project team.

Capture, manage and develop electronic hardware requirements; specifications and schematics, ensuring alignment between internal team(s) and the customer.

Develop client electronic hardware system(s) and components to the agreed requirements and processes, from concept level through to production.

Contribute to system and lead component-level safety case development, and follow industry standard techniques to ensure a robust design, e.g. FMEA.

Plan and action Design Verification (DV) and Production Validation (PV) activity at a component level.

Manage interfaces between the electronic component(s) and the rest of the vehicle, liaising with cross-functional teams within hofer and the customer.

Liaison with, including travel to, other hofer sites in order to co-ordinate design activities and ensure delivery is in line with the programme requirements.

**Qualifications / Education / Experience required:**

Degree or equivalent in a relevant Engineering or Science related discipline.

A minimum of 10 years' demonstrable electronic design experience in an automotive or similar engineering environment.

Proven experience of working on automotive electronics for production applications and understanding their interfaces and integration into the vehicle.

Strong background and knowledge of analogue and digital circuits and schematic capture and development.

Working understanding of automotive HV standards; design methodologies and working practices.

Experience of designing ECUs in accordance with ISO26262 Functional Safety processes and concepts, and an understanding of what this means for hardware design processes and the design realisation.

Verifiable experience in Component Specification; Requirements Capture/Management and DV and PV processes.

Familiarity with automotive network communications, e.g. Flexray, LIN, CAN, CAN-FD, Ethernet.

An understanding of the implementation of automotive-qualified microcontrollers, specific experience with the Infineon Aurix family would be advantageous.

Design experience of switch-mode power supplies or similar power switching systems.

Confident user of MS Office products and competent user of industry-standard network and calibration tools, e.g. Vector CANalyzer, Vector CANape, ETAS INCA.

Experienced user of electronic CAD packages (e.g. Altium designer) and simulation packages (e.g. PSpice, LTspice).

Confident at reading vehicle wiring diagrams, and understanding component electrical interfaces, e.g. Device Transmittals; External World Diagrams.

### **Other beneficial attributes:**

Experience in automotive HV (60-1000V) component development

Familiarity with MATLAB/Simulink.

Detailed vehicle networks knowledge (e.g. LIN, CAN, Flexray)

Knowledge of German or other European languages.

### **Personal attributes:**

Excellent attention to detail with good planning skills.

Strong communicator, capable of interacting with cross-functional teams both internally and externally.

Highly self-motivated and independent, with a willingness to seek guidance and involve others whenever required.

Remain focussed under pressure, familiar with working outside their normal comfort zone.

Proven record of operating in a customer-facing environment.