# POWER ELECTRONICS ENGINEER



A ROLE IN CUTTING EDGE R&D DESIGN WITH AUTONOMY AND DIRECT IMPACT ON PRODUCT ROADMAP

## Supply Design are seeking a Power Electronics Design Engineer to enhance and support the implementation of our development strategy.

Supply Design specialise in state-of-the-art power conversion design for next-generation power product applications. Customers and clients come from various industry sectors, with specific attention to Wave Energy power conversion and highly efficient liquid-cooled power converters for high-end data centres.

A sound understanding of power conversion and its control, especially digital control, is required, but types of converters or drives worked on is not. This role is essential to support our transition from services to a high-value product supplier.













#### **ROLE:**

Power Electronics engineer working across a variety of power conversion products and platforms. You will be part of a small team with direct access to the CTO and Leadership team.

#### **SALARY:**

Negotiable. Typical ranges are: Eng £38-45k, SNR. Eng £45-55k. Principal. £55k+

Supply Design are power conversion specialists working in two of the most dynamic and vital fields for Net-Zero 2050 climate action success: Electrification and Renewable Energy.

Supply Design's work includes all-electric power systems for wave energy, next-generation solar inverters and novel liquid-cooled power systems.

The company's success has been built on years of project and consultancy accomplishments, and we are now commercialising our technology roadmap and patent portfolio.

Recent project wins and investments are funding growth, and we need talented engineers to deliver technology to some of the biggest companies in the world.

And, more importantly to act for our climate in these areas of energy generation and management.

Our team includes hardware and firmware engineers with complementary skills-sets and domain knowledge. Externally, Supply Design is supported by a network of specialist consultants, supply-chain partners, and academic researchers.

Reference Number: SD22PE01

#### LOCATION:

Our Laboratory is in Rosyth, KY11 2WX. 5mins from Queensferry Crossing. Staff commute from Edinburgh, Glasgow and beyond.

A mix of office and home working is our norm.

#### **BENEFITS:**

25 days + Public holidays 5% Pension contribution Parental friendly, flexible hours. Others being added as we grow.

www.supplydesign.com

### POWER ELECTRONICS ENGINEER - R&D

#### **INDUSTRIES:**

Net-Zero and Electrification applications including Wave Energy, DC Power, Electric Aircraft, & Critical Power.

#### **TECHNOLOGY:**

Power conversion of AC-DC, DC-DC, Inverter and Battery charging systems. Motor control and power conditioning.

#### **DEVELOPMENT ETHOS:**

Fast prototyping; Agile Methodology; Optimising Hardware and Firmware integration testing.

WE DO NOT EXPECT APPLICANTS TO HAVE COVERED ALL OF THESE

#### ROLE:

The successful candidate will work as part of the technical team to provide power conversion and control solutions to meet product electrification goals. Our lifecycle starts with initial customer concepts and specifications and progresses through prototypes into production. You will collaborate with the power electronics and control engineers to deliver critical functionality on various power conversion products. The small, close-knit nature of the design team means a successful candidate will be in a position to influence the future direction of the company's technology.

#### SKILLS & EXPERIENCE

To be successful in the role, you should exhibit:

- A passion for power electronics and how to implement ideas into solutions
- A collaborative attitude to explore ways to create high performance power conversion techniques
- Experience with the development of power conversion products

The candidate should be familiar with the state-of-art power conversion components, their use and working to deliver products to a product development life-cycle.

#### Experience of any the following will also be an advantage:

- Development of high power (kW MW) converters
- Use of digital control in the operation of power conversion products
- Simulation (e.g. PSPICE) of power converter circuit
- Electronic Schematic capture & PCB layout
- Design of custom magnetic components
- Design of electric drives and their control
- Development of firmware to manage peripherals for control and monitoring
- Test techniques for analysis and monitoring of power conversion operation

#### **CONTACT US TO APPLY:**

Supply Design offer mentoring and support. The role offers significant career and technical knowledge progression in some of the most rewarding and high-growth technology fields.

Please send your CV and cover note to Linda on administration@supplydesign.com

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