

# FIRMWARE DESIGN ENGINEER



AN R&D DESIGN ROLE WITH AUTONOMY AND DIRECT IMPACT ON PRODUCT STRATEGY

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

Supply Design utilises digital control of power to improve critical performance figures-of-merit and add functionality without the size, weight, and cost penalty of hardware. The output is a high-performance product that provides system level differentiation.

Prior experience of power conversion is not necessary for the role. A sound understanding of coding principles and how to write development firmware for prototype testing prior to full implementation is critical to our design ethos. This is an important role to support our transition from a services to a high-value product supplier.



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: SD18FDE02

## ROLE:

Firmware 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+

## 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](http://www.supplydesign.com)

# FIRMWARE DESIGN 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; Code management; Optimising Hardware and Firmware integration testing.

WE DO NOT EXPECT APPLICANTS TO HAVE COVERED ALL OF THESE

## ROLE:

The successful candidate will be expected to support the project's technical lead in meeting requirements contained in the product definition, from initial customer specification to prototype and/or low scale production. You will be supported by power electronics and control engineers with domain expertise and will be expected to deliver and manage firmware to deliver critical functionality. 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:

- Proficiency in embedded C/C++
- Proven experience with; 16/32-bit Microcontrollers (TI Piccolo, preferably),
- Experience with multi-threaded and multi-processor systems, communication protocols (SPI, I2C, CAN) and device drivers.

The candidate should be familiar with developing firmware in collaboration with hardware engineers and have experience in all stages of the software life cycle.

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

- Development of safety critical software
- Real time operating system (VxWorks for example)
- Version control systems (SVN / GIT)
- Bug tracking software (BugZilla)
- configuring Linux distributions (Ubuntu, Red Hat)
- UML / SysML
- Awareness of basic Power Electronics functions

## 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](mailto:administration@supplydesign.com)

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