

Electrical Engineer (Yeadon or Cannock)

Working within the Development team, you will be focusing on both the new product design and current product development as well as managing existing designs and enhancing functionality. You will be responsible for managing and delivering individual projects from concept to completion by advancing the concept designs into a finished product ready for manufacture. Development of many of our products will need to be in-line with the Hazardous area standards (EU and North America).

Key responsibilities and accountabilities:

1. Responsible for the full code lifecycle, including requirements, design, implementation and test of key enhancement as required.

- a) Thorough testing of both hardware and firmware at development stages.
- b) Run multiple tasks/projects in parallel (switching to the highest priority task as and when required).
- c) Prioritise workload based on resources available.
- d) Work out the mechanical aspects of the product by liaising with our mechanical engineers.

2. Responsible for Hardware and PCB design and development by choosing appropriate components and modules.

- a) Develop firmware for microcontroller-based projects using C language.
- b) Thorough testing of both hardware and firmware at development stages using the principal of unit testing, destructive testing/HALT testing.

3. Designing and testing prototypes and realising a manufacturable product.

- a) Log and maintain an organised record of all the tests conducted on hardware and firmware during product development.
- b) Work closely with Test Engineers in order to develop the production test rigs.
- c) Provide initial support for product testing after the production grade product is released.

4. Create and manage product documentation such as: technical files, product manuals, troubleshooting guides, manufacturing and test procedures.

- a) Maintenance of design files such as Schematic, PCB, BOM, firmware, release notes and mechanical documents.
- b) Provide product maintenance support.
- c) Research suitable solutions and estimating costs and timescales.

Competence:

a) Essential

- (i) A minimum of 3 years of commercial design experience in Electronics and Embedded C
- (ii) A proven track record in designing PCBs using Proteus or Altium
- (iii) Dedicated, hard-working and well organised with a quality focus to achieve the assigned targets with the ability to constantly learn and improve skills.
- (iv) Detail orientated and used to working in a fast paced, changing environment

- (v) A positive “can do” attitude towards addressing assigned issues and projects that is capable of delivering results under pressure to strict deadlines
- (vi) Comfortable writing drivers for SPI, UART, I2C, CAN, USB etc
- (vii) Experience of developing GUI's using C#

b) Desirable

- (i) Experience with ARM microcontrollers – especially the ST microcontroller range
- (ii) Experience of developing GUI's by utilising OOP concepts

Knowledge:

a) Essential

- (i) Master's or Bachelor's degree in a related discipline
- (ii) Experience of working with PIC microcontrollers (8/16/32 bit) using MPLABX IDE and XC compilers
- (iii) Experience of working with standard industrial network protocols (such as Modbus RU/TCP, Ether-Net/IP, Profinet etc)
- (iv) Highly proficient in C firmware development

b) Desirable

- (i) Advantage to have a working knowledge of JIRA and version control system (SVN)
- (ii) A knowledge and understanding of SIL/PL
- (iii) Experience of programming PLC's

Skills:

a) Essential

- (i) Strong analogue electronics skills
- (ii) Good development, documentation, release and revision management skills
- (iii) Good project management skills

b) Desirable

- (i) Strong electromechanical skills
- (ii) Experience of designing products for Hazardous Areas (Dust environment)

Apply Now

**If you'd like to join our diverse and inclusive team send your CV to:
careers@don.co.uk**

Make sure to include the location you would like to work at.

We look forward to hearing from you,

The DonElec Group