

## EMBEDDED SOFTWARE ENGINEER (C, C++ and VHDL)

### Interfaces:

Reporting line:	Electronics and Firmware Engineering Manager
Direct reports:	None
Interfaces:	Technology Team Electronics, Software, Mechanical, Production and Operations Teams
Location:	Norwich

### Job Brief:

The position is within the Technology Team based in Norwich developing wellbore inspection tools for the energy industry. You will be working closely with engineers from a range of disciplines with a variety of skills and experience. EVs key technology revolves around video capture and image processing in extreme environmental conditions, including temperatures up to 175C. The role will allow you the freedom, but also the responsibility, to take ownership of current and future product designs. You will participate in decision making from the beginning of the design process and your input will be important to the success of future developments. The Technology Team is casual but fast paced environment where two days are rarely the same. As a small team many of the engineers are multiskilled and the ability to expand your skill set, with appropriate training, will be important for this role.

**Keywords:** C, C++, VHDL, Verilog, FPGA, Unix/Linux, Video Codex (H.265), CSI2-MIPI

### Role and Responsibilities:

- VHDL/Verilog development for EV's current and future well bore inspection tools
- C/C++ application development in a Linux based embedded environment
- Implementing video CODEX, Image sensor control and video pipeline
- Embedded development for microcontrollers/microprocessor in sensor control systems
- Support and maintenance existing product designs
- Developing component qualification test routines for high temperature operation
- Continually improving EVs design methodology and development processes
- Ensure compliance with company's HSE policy and actively promote safety within the work environment

## Essential Skills required:

Minimum:

2.1 Degree in Electronic Engineering or similar  
+3 experience in a design engineering role

- Proven background in VHDL and/or Verilog
- Experience developing C/C++ applications in an embedded environment
- Experience in embedded C or C derived language development for microcontrollers
- Comprehensive knowledge of full design lifecycle including specification, design, and test documentation
- Structured test implementation
- Excellent proficiency debugging code
- Motivated, quality-focused engineer with excellent team working skills
- Good English communication skills, oral and written

## Desirable Skills:

- Video Codex implementation (H.265)
- Linux and Unix scripting
- Video and image sensor control
- Assembler
- MATLAB

## Package:

- 30k-50k (dependant on qualification and experience)
- Subsidised private healthcare
- Salary sacrifice pension scheme
- Further education support
- 25 days holiday, plus public & additional day for long service
- Company supported fund raising
- Relocation assistance as appropriate