



## VHDL Design Engineer - Permanent

Requirement for a VHDL engineer to work within a multi-disciplined engineering team, consisting of mechanical, electronic and firmware engineers.

Pektron designs and manufactures a wide range of products for Gas, Automotive, Safety and Consumer industries and typical systems are: Vehicle Body Controllers, Immobilisers, Alarms, Telematics, Display, Gas Controls, Driveline and Transmission Control.

This is an excellent opportunity for someone to work on interesting and varied projects, who will specify tools, requirements and drive the software discipline within the company. This role involves every aspect of the product lifecycle from quotations, conception and design through to manufacture.

### ***Experience Required***

Total FPGA life cycle design and management – Requirements capture, system partitioning, coding, functional verification, floor-planning and timing closure.

High Speed Synchronous system specification and design

Efficient, highly structured (hierarchical) VHDL and C language skills

Recent experience with Xilinx medium to high density FPGAs. Spartan 3A a particular advantage

Xilinx ISE / SDK and / or Altera Quartus II tool-chain

Embedded Microprocessor design 8, 16 and 32 bit. Required to integrate FPGA functions with internal / external microprocessor

Hands-on experience with embedded “soft” processing cores. Microblaze or Nios a particular advantage

Managing 3<sup>rd</sup> party IP cores

Demonstrable track record for Design for Test (DFT), Design for Manufacture (DFM) and Design for EMC applied to FPGA design

Highly Developed Documentation Skills

Version Control

Static Analysis / Code Metrics

Low Level Drivers For External Hardware / CPU Peripherals

5+ Years of Design in a Commercial Environment

### ***Essential Attributes***

Self managing

Highly motivated

Customer facing

Good Technical Writing Experience

Willingness to work to existing software design ethics and style

Full Driving Licence (You could be working on vehicle systems!)

Willingness to travel, some customers are based in US / Eu

### ***Additional Experience That Would Be An Advantage***

Programming Languages: Programming Language C,

Windows Programming WinCE/XP/98 (Visual Basic, C++), Assembler

Simple Electronic Design: Analogue / Digital

Schematic Capture

Control of Graphic Displays



## ***Interview Stages***

### ***Telephone Conversation***

A general chat to see if the candidate and Pektron have a good fit in terms of project work and design ethic.

### ***First Interview***

Candidates who come for an interview must bring some evidence of project work undertaken, e.g. Specs, Circuits, Listings, Photos etc. These will only be looked at and will be used to gauge the whether or not they fit in with the scope of work for the role.

Depending on the type of job applied for, a software or hardware test to look if basic skills are adequate. A tour around the company and introduction to Pektrons product ranges.

### ***Second Interview***

Meet a director and a general chat about the way Pektron operates internally and a factory tour.

### ***General***

Working hours 8:30am – 5:00pm Mon -Thu, 8:30am – 4:00pm Friday, 1/2 hour lunch breaks, 39 hours per week. 25 Days holiday per year (some kept for Christmas shutdown, generally 2 – 4 days).

Company will match 2% of salary paid into a stakeholder pension scheme.

Medical Cover (Currently Bupa)

Apply With CV To:

Guy Wilkinson

Engineering Manager

+44 1332 832424 Ext 334

gwilkinson@pektron.co.uk

Pektron Group Ltd

Alfreton Road, Derby

Derbyshire DE21 4AP

United Kingdom

<http://www.pektron.co.uk/>