



## Job Description

**Job title:** Senior Engineer - Hardware  
**Department:** Engineering: Switcher Product Group

**Location:** Saffron Walden  
**Reports to:** Technical Director, Switchers

### Main Purpose of Job

To Design Hardware and VHDL Firmware for a variety of high speed complex boards that fit within the Broadcast Vision Mixer/Switcher product range. This role will include Schematic Capture to complete board design, understanding of various algorithms, high speed DDR interfacing to FPGA, Serdes and system testing.

A strong technical background is necessary, combined with a flexible and open minded approach to problem solving, to provide solutions for our customers.

The role will work with the Technical Director of Switchers/Engineering Manager to ensure that product meets the customers' needs.

### Main Functions & Responsibilities

- Design of Digital Hardware Boards with FPGA, DDR Ram, Chip PSU requirements, High Speed Serdes
- Design and Debug of VHDL code
- Documentation of Software driver specification
- Assist in the Definition and Layout of PCBS (impedance matching, Power requirements etc)
- Understanding of Broadcast Video.
- Understanding Filter and functional algorithms – MatLab Functions/Simulations

### Qualifications / Knowledge / Experience

Education/Certification:

- Degree in Electrical and Electronic Engineering or a related discipline

Required Knowledge/Experience:

- The candidate should have experience in the commercial development of products, with a robust background of hardware analysis and design. Consequently needs to be conversant with current design technologies and practices. The candidate should be self-motivated and keen to succeed

Knowledge/Experience in the following areas is essential:

- Architectural System/Product design
- Assisting with product specifications –Firmware development from algorithm concepts and design. Verification of algorithm concept meets final firmware implementation
- Architectural FPGA design – VHDL language.
- Ability to perform system, application and product verification
- EDesign tools to assist in the development of products – Modelsim, XST, Board design – Schematic capture, net-listing, layout techniques and considerations, PCB layout support.

### Contacts

---



#### **Internal**

- Engineering Design services for PCB Layout and Mechanical Design
- Software Engineering
- Product Management

#### **External**

- Component Suppliers
- Third Party Tool suppliers
- 

#### **Performance Standards**

- Achieve mutually agreed objectives, standards and dates.
- Performance reviews will be conducted on an annual basis in addition to interim progress reviews.

To apply please forward your CV, covering note and salary details to [Laura.Powell@snellgroup.com](mailto:Laura.Powell@snellgroup.com)