

JOB DESCRIPTION



FPGA Engineer

This document is an external facing document provided as part of the recruitment process

Overview

Active Silicon is a market leader in the design and manufacture of leading-edge computer imaging products. These products are used in many areas of science and industry, including manufacturing, life sciences, medical imaging, robotics and security, with many products targeted to specific customer requirements. The current range of products can be seen on the company's website. The type of customers we have, are in general, medium to large companies with which we forge strong long-term relationships and are located all over the world.

Active Silicon is part of the Solid State plc group, listed on the AIM stock market. As part of Active Silicon's expansion there is now the need for a FPGA Engineer. The ideal candidate will be able to take ownership of complex FPGA related projects from a design, support and maintenance perspective.

Summary Details

Job Type:	A technical role for advanced FPGA design, verification and support
Job Title:	FPGA Engineer
Location:	Langley, UK (just outside M25, NW London) with option of hybrid home/office working
Hours:	37.5 hours per week Holiday: 26 days (plus public holidays)
Salary Package:	Competitive depending on skills and experience, plus salary-sacrifice pension (5% employer, 3% employee) and discretionary bonus scheme. Life assurance at 4x basic salary. Option to join Electric Vehicle salary-sacrifice scheme. Access to Westfield Health Scheme including: - Corporate Health Cash Plan including cover for dependents - Employee Assistance Programme - Discounted gym membership - Retail discount scheme - Wellbeing app
Qualifications:	Typically a Bachelors degree in electronic engineering or similar, and maybe a post-graduate Masters degree
Experience:	Likely to be 3+ years commercial FPGA and general hardware design experience

The type of person we are looking for:

The right candidate is likely to have a good engineering degree, plus perhaps other post-graduate qualifications and a track-record of design engineering in the field of high-speed digital/FPGA. One of the most important traits is the desire, drive and enthusiasm to produce the world's best-in-class products.

Key Competencies

- Focussed – able to work to deadlines and meet targets.
- Success driven – having the desire to produce the best products, right first time.
- Experienced in FPGA design using VHDL/SystemVerilog with AMD (Xilinx), Lattice or Intel (Altera) products.
- Familiarity with high speed interfaces in FPGAs such as PCI Express, Ethernet, CoaXPress, MIPI, QSFPI and DDR4/5.
- Familiarity with advanced simulation methods including OSVVM/Systemverilog.
- Familiarity with general hardware, PCB and EMI/EMC best practice.
- Communication – good written, verbal and presentation skills – the ability to communicate to the rest of the engineering team, as well as to customers from a support perspective.

Key Responsibilities

- Provide direct input into the product specifications from a hardware/FPGA viewpoint.
- Write low-level specifications for system, algorithm and architecture design.
- Take ownership of FPGA design tasks for new key product developments across the range.
- Implement, verify, test, document and support new designs.
- Work with other disciplines to ensure quality of products.

Useful Additional Areas of Expertise

The following are a benefit but not a requirement:

- Knowledge/background in imaging.
- Knowledge of JTAG-based test, in particular XJTAG.
- Knowledge of C / C++ and scripting languages such as Python/TCL/Shell
- Experience with CI/CD
- Experience in agile working practices