Printed Circuit Board Design Engineer

XCAM (www.xcam.co.uk) is a small and rapidly growing technology business which manufactures highly bespoke, custom and low volume digital cameras for scientific and increasingly for space applications.

XCAM's first camera for space flew in July 2014 on the UK Space Agency's first CubeSatellite, rapidly followed by a second UK Space Agency launch in 2016. We are involved in developing the world's first cubesat-based Cold Atom Experiment for space (CASPA), as well as cameras to be launched on NASA sounding rockets. Many other exciting projects are underway for science and industrial applications.

Currently our business requires us to make small numbers of highly complex, high value camera systems with the numbers supplied at very low volumes. This often requires the design of customised printed circuit board assemblies and cables for use in our systems.

We are therefore looking for a printed circuit board design engineer who is willing to become our in-house designer working on a wide range of designs ranging from detector control boards, to systems for spaceflight. The package we use is CADSTAR.

This role requires an electronic engineer with a few years of experience working in industry who would like to develop their career in this role. There will be a requirement for the successful candidate to learn to design to ECSS standards for boards, which are intended for spaceflight, as well as developing the capability to design high frequency systems. Full training will be provided in all aspects of the job, depending on the experience level of the successful candidate.

The role will involve schematic capture working in conjunction with our systems engineering team, PCB design and manufacturing file generation. The role will also require design of electrical and fibre optic cables.

As XCAM is a small business, we value flexibility in our employees, and it would be desirable if the successful candidate would also be able to assist with practical testing and debugging of new systems, on occasion.

Whilst XCAM is a small business, we have a great friendly team of employees. We took on our first employee 10 years ago, and 75% of our staff have been with the business for longer than 7 years. We are looking for someone who will want to join this close-knit team and grow their role with us on a long-term basis, as we grow.

The successful candidate will need to be precise in their work, and love attention to detail.

CVs should be submitted to Chloe.Pulo@srg.co.uk. Direct applications and applications from other agencies will not be accepted for this role.

Job Description

Job Title	Printed Circuit Board Design Engineer
Salary	£30,000-£35,000 depending on experience; up to +7.5% pension contribution
Location	Moulton, Northampton
Reports to	Engineering Manager
Direct reports	None
Other key relationships	XCAM Development Engineering Team
Job summary	- Design and simulation of PCB designs - Schematic capture and BOM creation - PCB design - Generation of manufacturing files - Design of electrical and fibre optic cables - Supporting product design, integration, validation and handover to production with other Engineering team members

Person Specification

Job title	PCB Design Engineer
Qualifications:	- Degree in Electronics - Minimum 3+ years experience working in Electronics Design
Essential Skills	- Demonstrable Analogue/Digital circuit design - Schematic Capture (preferably CADSTAR) - Part Library Creation (preferably CADSTAR) - PCB design (preferably CADSTAR) - Attention to detail - Good communication and documentation skills - Able to work evenings and weekends when required
Desirable Skills	- Experience of high-speed digital circuit design would be an advantage - Experience of processor interfacing e.g. I²C, SPI and asynchronous protocols - Design for test - Awareness of manufacturing standards such as IPC, ECSS - Experience of all aspects of Q.A. including Documentation, Reviews, Validation, Change and Configuration Management - Ability to assist with diagnostics, debugging of new systems and support the engineering team with other electronics-based activities as required