

JOB DESCRIPTION

Job Title: Systems Architect

Purpose of Job: PPM is designing an innovative new range of RF, microwave, and optical solutions for satcom, cellular, and defence markets. The Systems Architect role will define, specify, and architect a wide range of new products, and ultimately demonstrate their compliance to users' needs.

Location: Swindon

Reporting to: Technical Director

Role:

This role is to be responsible for the solution architecture of new product developments undertaken by the engineering team. The role will include, but not be limited to:

- Drafting of technical proposals
- Research of solution viability
- Requirements capture and database management
- Feature specification, functional design, and interface control
- Integrated product test and completion of factory acceptance reports.

As the successful candidate you will expand PPM's current product lines and develop next generation architectures to dislodge incumbent solutions. The role will immediately engage on development of:

- X / Ku / Ka-band optical convertor architectures
- Proof of concept and product definition for radio signal matrices
- Radio transceiver antenna remoting
- Electronic threat detection, location, and defeat
- Q/V-band optical conversion
- Implementation of RF transport protocols for digitisation and distribution over fibre

The role will have a high level of technical autonomy when defining and proposing solutions and will also be required to work as part of a larger team. Secondary functions of the role may include:

- Schematic entry and PCB layout
- Cost estimation for special project tender responses
- Advanced test and characterisation of existing product
- Enhancement of internal engineering processes and supporting quality documents.

Skills / experience / qualifications:

It is *essential* you have:

- An electronics degree or equivalent, with at least 5 years of equivalent experience
 - Experience producing RF systems architectures
 - Practical experience of characterising RF systems
 - Expertise with circuit simulation software (Microwave Office, ADS, Serenade, SPICE)
 - Proven ability using PCB layout tools (OrCAD, Cadence, Mentor Graphics, Altium, PADS)
 - Knowledge of architecting embedded software systems for custom hardware solutions
- It is *desirable* you have: Experience with military VHF/UHF line-of-sight tactical radios and UHF MilSatCom
- Experience of defining requirements for FPGA / ASIC designs

- Familiarity with electronic countermeasures and device: stimulation, detection, and location
- Experience of designing open system architectures such as OpenVPX & OpenCPI.
- Practical experience of converting signals between analogue and digital domains
- Practical knowledge of antenna design and signal propagation principles

Person:

The successful candidate will work within a multi-disciplined engineering team and will use their interpersonal skills to draw upon internal expertise of product designers, mechanical engineers, software developers, photonics experts, and microwave specialists. The candidate will have a proven record of absorbing and analysing knowledge to rapidly become a subject matter expert, and demonstrate technical leadership in applying that knowledge to product solutions within short time frames.

Required behaviours:

- *Creativity and innovation* – Possessing a passion for driving continuous improvement by spotting opportunities and seeking the views of others
- *Keeping Commitments* – You demonstrate a can-do attitude and you drive to complete tasks and projects and report that they are completed, even when other opportunities arise which appear to be more interesting
- *Collaboration and Communication* – ability to develop relationships with colleagues outside your department built on mutual trust, respect and drive for sharing and success
- *Impact and influence* – You listen to different perspectives, evaluate, persuade and carefully shape your work to deliver excellent results
- *Teaching and Sharing* – You share what you know with others and seek to learn from the vast pool of knowledge in others at PPM
- *Company Focus* – Put the needs of the company first before your team needs, drive to achieve the goals of the company as well as your own team