

JOB DESCRIPTION



Job Title: PCB Engineer	Location: Hunmanby / Mansfield
Department: Engineering	Contract: Permanent
Reports To: Engineering Hardware Supervisor	Direct Reports: N/A

1.0 Job Summary & Role

The individual will work within the Engineering department located in either Hunmanby - North Yorkshire or Mansfield. They will perform PCB design work on new products and legacy products.

The role requires knowledge of Altium CAD design packages as well as expertise in PCB manufacture. (Additionally, experience with Cadstar is preferred). The role will involve very close working with the rest of the hardware design team for all aspects of PCB design and manufacture.

2.0 Key Responsibilities & Main Duties

- Design multi-layered PCB's using industry standard techniques, ensuring considerations for DFM and DFT have been made
- A good understanding of analogue, digital, high speed and power supply circuits
- Have an understanding of the PCB manufacturing process
- Be able to work closely with Design Engineers to create reliable circuits that meet DSE requirements
- Provide recommendations to Design Engineers regarding good PCB layout techniques
- Work with the project teams in understanding circuit requirements and limitations
- Actively participate in design reviews and provide feedback
- Be aware of project timelines and contribute to the Electronics CAD sections of the project plan with relevant tasks and estimated timescales
- Analyse and resolve PCB related issues in a timely manner
- Schematic capture and PCB layout experience with Altium Designer and / or Cadstar
- Provide support to the Engineering, Manufacturing and Purchasing teams when required
- Review and recommend improvements to existing designs and procedures
- Assist in developing bespoke test fixtures
- Maintenance of CAD libraries
- Work with the Mechanical Design Engineers to create physical CAD models and resolve issues related to mechanical constraints
- Administration of PCB, BOM and associated data within PCB CAD packages and factory ERP system

3.0 Internal & External Relationships

Hardware Engineering Supervisor – Direct report as well as technical guidance, direction and support.

Engineering Project Managers – Reporting line for project work, estimates and progress, project related issues.

Production Engineering – Design and PCB optimisation for manufacture.

4.0 Key Performance Indicators



JOB DESCRIPTION



- Very high attention to detail
- Able to work both individually and as part of a team
- Self-discipline required for PCB design
- High quality hardware development minimising the number iterations
- Ability to work against timescales and deliver the PCB with the expected quality on time

5.0 Essential/Desirable Factors

Knowledge	
Essential: <ul style="list-style-type: none"> • Expert in Altium Designer • Thorough knowledge of PCB design and manufacture • Design for EMC • High speed design for designs up to and including 1GHz processors • Familiarity with IPC standards in relation to PCB layout 	Desirable: <ul style="list-style-type: none"> • Expert in Cadstar • Knowledge of safety standards and implications for PCBs
Skills & Attributes	
Essential: <ul style="list-style-type: none"> • Comfortable collaborating closely with electronics engineers on hardware designs • Used to working to very high-quality standards. • Excellent team player with problem-solving and trouble-shooting capabilities • Used to defining a task breakdown for a give piece of work and provide estimates. • Ability to successfully translate requirements into a complete design • Used to working in a high-pace environment. • Computer proficient including Excel and Word • Enthusiastic and optimistic. 	Desirable: <ul style="list-style-type: none"> • Understanding of basic electronics design principles • Familiar with Concord Pro / Altium 365 environment
Experience	
Essential: <ul style="list-style-type: none"> • High speed circuit design • Design of SMPS circuits • DFM / DFT 	Desirable: <ul style="list-style-type: none"> • Volume PCB manufacture • Volume PCB assembly • Experience of designing for industrial environments

Created by	Dated Created
Derek Hand - Hardware Engineering Supervisor	10/08/23

