

CANDIDATE SPECIFICATION



JOB TITLE	Electronic Engineer	
REPORTING TO	Engineering Development Manager	
DEPARTMENT/SUB DEPARTMENT	Ipeco Electronics	
LOCATION	St Neots	
OVERALL PURPOSE		
To carry out all engineering activities in support of new and existing projects as designated by the Engineering Development Manager in line with customer and company expectations.		
PRINCIPLE ACCOUNTABILITIES		
<ul style="list-style-type: none"> • Electronic hardware design and verification for Switch Mode Power Supplies, DC-DC Converters, AC-DC Converters, Linear Regulators, Analogue & Digital design for current & voltage monitoring circuits, custom alarm circuits and protection circuits. • Electronic hardware design for Ipeco Galley inserts. Analogue circuits for sensor interfaces, Power Electronics solutions to control relays, solenoids, heaters and other System electronics. • Experience in producing PCB layouts for power electronics. Component placement, decoupling techniques, power planes and understand how the PCB layout can affect EMI/EMC. • Experience in reviewing PCB layouts and working with other engineers to arrive at solutions. PCB Draughtmen and mechanical design engineers. • To efficiently and effectively perform various engineering activities including but not limited to; schematic capture, simulation, component selection, derating, MTBF, analysis/calculations, BoM generation, prototyping, design verification and qualification, commissioning, technical report generation, configuration control and post development tasks, • To design for manufacturability, test plan generation and cost effectiveness, • To support transition of products from engineering to production e.g. test specifications, work instructions and procedures, production readiness reviews etc., • To work independently and/or within a team to support programs led by senior members of staff in both R&D privately funded and customer driven projects, • To ensure that activities and projects are delivered within the agreed timelines, • To promote and develop good working relationships within engineering and all internal and external customers, • To support Engineering teams and other departments with tasks as and when necessary, • To research and promote design improvements, cost reductions, new materials, better components and design techniques, • To help create and maintain a safe working environment and be responsible for ensuring that all Health and Safety policies are adhered to, • To carry out all duties in a proper and efficient manner, acting wholeheartedly in the interest of the Company at all times complying with the Company Rules and Regulations, • To carry out any other tasks where reasonable and relevant, when required. 		
QUALIFICATIONS	ESSENTIAL	DESIRABLE
Bachelors/Masters in Electronics/Electrical	✓	
EXPERIENCE/ SKILLS	ESSENTIAL	DESIRABLE
A minimum of 1 years work experience on the bench, working on practical power electronics and/or analogue electronics circuits – <i>including placement experience</i>		✓

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Schematic capture experience using Altium or other software package	✓	
PCB Layout experience using Altium or other software package		✓
A good foundation in analogue principals and analogue design	✓	
A good understanding of different switch mode topologies, how they work and the different benefits and limitations of each topology	✓	
An appreciation of EMC/EMI, how it is generated and how it is controlled	✓	
An ability to program and code Microcontrollers in C		✓
Ability to demonstrate understanding of thermal design considerations		✓
Some experience with schematic capture and PCB layout using CAD – <i>Mentor Graphics is preferred</i>		✓
Ability to produce technical report with concise and methodological technical reasoning	✓	
Ability to efficiently operate in a test lab environment e.g. operate various test equipment such as bench supplies, Oscilloscope, DVM, etc and soldering.	✓	
Ability to simulate electronics circuits using a computer simulation tool e.g. LTSPICE	✓	
An understanding of configuration control in designs		✓
An ability to carry out Root Cause Analysis down to component level	✓	
Ability to reform opinion after feedback from seniors or provide evidence to help others reform their opinion	✓	
Ability to apply fundamental electronic principles to new designs or circuits	✓	
Ability to prioritize and determine your own workload based on high level objectives	✓	
Ability to work independently while collaborating in a team environment	✓	
Ability to work under pressure and to deadlines	✓	
PERSONAL SKILLS	ESSENTIAL	DESIRABLE
Team Player	✓	
Strong Work 'Can-do Ethic'	✓	
Exceptional at building relationships	✓	
Excellent Customer Service skills	✓	
Strong attention to detail and time management	✓	
Exceptional Planning and Organisation skills	✓	
High awareness of Productivity and Quality	✓	
Excellent Communication skills	✓	
Flexibility	✓	

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Takes Responsibility for actions	✓	
Learn, Apply and Improve	✓	