CANDIDATE SPECIFICATION

JOB TITLE	Senior Electronic Engineer
REPORTING TO	Engineering Development Manager
DEPARTMENT/SUB DEPARTMENT	Ipeco Electronics/Engineering
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

- To interpret requirements specifications and generate design proposals, identify, assess and manage risks, implement conceptual and detail designs, and all other associated development activities such as projects planning support, technical documentation, etc.
- Lead technical discussions and design reviews with team members and with customers.
- Mentor and support electronics engineers with different levels of experience.
- Generate technical documentation such as design verification matrices, test results, simulations, analysis, block diagrams, etc. Reports and presentations to be pitched at the appropriate level dependent on the intended audience.
- Electronic hardware design and practical hands-on bench commissioning 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.
- To efficiently and effectively perform various engineering activities including but not limited to; schematic capture, simulation, component selection, analysis/calculations, BoM generation, prototyping, design verification and qualification, commissioning, technical report generation, configuration control and post development tasks.
- Ability to articulate clearly and concisely using a range of methods. Verbal, email, waveforms, test results, simulations, reports or practical demonstration.
- Being able to reform opinion after feedback from Engineering Development Manager or provide evidence to help others reform their opinion.
- Ability to multitask on several projects simultaneously.
- Ability to efficiently conduct fault-finding down to component level and perform root cause analysis with sound methodologies.
- To design for manufacturability, testability and cost effectiveness.
- Apply fundamental electronic principles to new designs or circuits you are not familiar with.
- To support transition of products from engineering to production e.g. test specifications, work instructions and procedures, etc.
- A ‘can do’ attitude with a willingness to learn new concepts and strive to continuously develop knowledge and skills.
- 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 and promote good working relationships.
- 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 5 years work experience on the bench, working on practical power electronics and/or analogue electronics based circuits – *including placement experience*		✓
A strong foundation in analogue principals and analogue design	✓	

A strong 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		✓
Experience with schematic capture and PCB layout using CAD and strong understanding of PCB layout design principles	✓	
Ability to produce technical report with concise and methodological technical reasoning	✓	
Ability to efficiently operate in a test lab environment various test equipment such as bench supplies, Oscilloscope, DVM, spectrum analysers, etc and have the ability to solder.	✓	
Experience in the use of simulations package tool e.g. LTSPICE and validity of results at the relevant times in the design life cycle	✓	
An understanding of configuration control in designs	✓	
An ability to carry out Root Cause Analysis down to component level	✓	
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**
Honest / Trustworthy	✓	
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	✓	
Takes Responsibility for actions	✓	
Learn, Apply and Improve	✓	