

TMD TECHNOLOGIES VACANCY

Title: Senior Design Engineer

Responsible to: Head of Product Development

Scope: To lead the design and development of RF amplifiers and power conditioning equipment incorporating both low and high voltage power supplies using the latest technology & circuit topologies. To support team members and other engineers in the development of new and existing products. To investigate design issues and assist in the development of solutions, tools and processes to prevent future occurrences. This role also requires the support of key product lines as a technical authority, and support of the NPI process through to production readiness review. He or she will be required to collaborate with mechanical design, production engineering and manufacturing teams to provide a robust, repeatable and reliable product within cost and schedule.

This role is also key to providing design solutions and technical support to the sales team during the bid process and supporting customer requests where necessary.

ACCOUNTABILITIES AND RESPONSIBILITIES

- Leading the project team in the design and development of new power conditioning and RF amplifier products
- Designing power converter architectures and topologies to provide robust solutions to meet exact customer specifications
- Design and development of both analogue and digital circuits to control, monitor and interface to various power converters that form the basis of our high power RF amplifiers
- Work with the Mechanical team to design products to withstand the effects of the specified environment, including temperature extremes, vibration, shock, and EMC
- To investigate, resolve and prevent product defects
- Maintain up to date knowledge of new techniques and technologies
- To consider and implement improvements and changes to improve efficiency and product costs
- To support product transition from design into manufacture
- Translate customer specification into test and verification requirements (ATP and DVT where appropriate) and internal test specifications
- Drive internally funded (PV) work packages to completion on time and within budget
- To investigate, resolve and prevent product defects by use of root cause analysis tools such as 8D, 5 why, Ishikawa etc. and work with customer and suppliers as necessary
- To lead feasibility design concept reviews at bid and scope stage, and provide cost estimates for development based on agreed concepts
- To evaluate design requirements and develop designs capable of meeting all aspects of the specification and enable efficient manufacturing (DFMA)
- To ensure that configuration control practices are maintained, in line with the appropriate company procedures.
- Using models and simulation tools to provide an in-depth analysis of circuit operation in support of our right first time objectives
- Produce technical proposals and compliance matrices to support new business proposals
- Support customer meetings with sales to promote TMD products and core competencies
- Review customer returns ensuring resolutions are driven into design and build processes. Lessons log to be maintained and referenced for new designs
- Collaborate in engineering forums, presenting key achievements in design or problem solving to create a 'learning environment'
- Support bid process
- Drive NPI process, taking ownership for completing preliminary, critical, and first article design reviews and handover through Production Readiness Review and Test Readiness Reviews to Operations

- Leading, guiding and mentoring less experienced Engineers
- To support production test engineers with trouble shooting, and new product training
- Act as technical authority, authorising changes to products as required
- Maintain an 'Engineers Daybook' to allow visibility of activities in the event of absence
- Ensuring compliance with TMD processes and procedures
- Planning activities in conjunction with the programme manager to meet customer and company needs
- To comply with the Company Policy on Health & Safety

QUALIFICATIONS REQUIRED

- PhD, MSc or Degree level qualification in electronics together with appropriate experience in relevant product design

RELEVANT EXPERIENCE

- Knowledge of power supply design and parameter trade-offs including high voltage design techniques
- Knowledge of TWT power converter design including monitoring and control circuits
- Knowledge of military specifications, requirements and design processes
- Strong knowledge of RF test and measurement methods including pulse noise measurements
- Experience of designing for manufacture and assembly
- Familiar with production build processes within electronics environment
- Familiar with and able to apply FMEA and DFMA practices
- Knowledge and competence in problem solving techniques – able to demonstrate correct application
- Able to interpret customer requirements into design efficiently ensuring form fit and function of products
- Leading project teams in the development of new products.

COMPETENCIES

- Analogue and power supply circuit design skills
- Strong interpersonal skills, capable of communicating cross functionally
- Organised and focussed
- Results driven ,meeting deadlines and commitments
- Ownership

Job Reference: Senior Design Engineer April 2019

Note for Recruitment Agencies

We have a dedicated HR team that manages TMD recruitment. With the help of our PSL, Company Website and online advertising we plan to occupy our vacancies. CVs will only be accepted from the above mentioned methods. TMD will contact recruitment agencies should we wish to engage their services; please do not contact us as CVs will not be accepted.



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