



Job Description

Title: Chief Engineer - Power Electronics Engineer

Purpose:

- Developing electronic systems for the D&V products, which includes: analog, digital and power electronic systems architecture, control methods, multi-pulse inverters, wide bandgap semiconductors, PWM architectures, digital control systems and adaptive control algorithms
- Lead a team that will be developing software and hardware for advanced control systems
- Provide technical expertise in power electronics and controls, with associated safety function concepts

Responsibilities:

- Responsible for the entire development cycle of power electronics system architecture and controls; including requirements definition, specifications, design, analysis, prototypes, validation, builds and production launch support
- Develop power electronics products, including circuitry and firmware from concept through to manufacture, meeting safety, reliability, cost, manufacturing and performance requirements
- Provide technical expertise in the development of electronic systems, including electronic control units, algorithms, application software and system validation
- Provide technical expertise to specify, design and develop system diagnostics and application specific calibration plans
- Work with cross functional team, customers and key partners developing specifications for test solutions; to ensure product meets customer needs/specifications, quality and safety standards
- Participation in development, testing and approval of complex electro-mechanical systems
- Plan and execute verification and validation activities
- To develop new product using modular approach maximizing reusability and efficiency
- Use computer assisted engineering and design software and tools to perform engineering tasks
- Participate in design reviews, project meetings and time/cost budgeting
- Meeting project schedules, deadlines and budgets
- Identify components, tools and services as required for product and prototype development
- Keep up to date on the latest technologies in the market
- Attend trade shows and other relative activities to learn the latest market trends on power electronics and other new technologies/methods

Education and Experience

- Master's degree in power electronics, PhD or equivalent experience preferred
- 10+ years' experience in motor control, switching power supplies, DC/DC converters, or other power electronics architecture; analog, digital and power electronic systems architecture, and control methods, multi-pulse inverters, wide bandgap semiconductors, PWM architectures, digital control systems and other advanced electronic technologies.
- Requires working knowledge of designing analog and digital devices from concept
- Experience in design software i.e. Altium for modeling, control design and simulation is required
- Able to lead a cross functional team to ensure product compliance required
- Subject Matter Expert to lead teams in product development to include; validation and verification testing
- Experience in algorithms development
- Basic knowledge of .NET, C# and embedded programming is an asset
- Possess strong analytical, organizational, and problem solving skills
- Goal-oriented, self-motivated, and able to work with minimal supervision
- Ability to travel up to 25% as required