IDEAL POWER INC.

Ideal Power (NASDAQ: IPWR) is pioneering the development of its broadly patented bidirectional power switches, creating highly efficient and eco-friendly energy control solutions for electric vehicle, electric vehicle charging, renewable energy, energy storage, UPS / data center, solid-state circuit breaker and other industrial and military applications. The Company is focused on its patented Bidirectional, Bipolar Junction Transistor (B-TRAN™) semiconductor technology. B-TRAN™ is a unique double-sided bidirectional AC switch able to deliver substantial performance improvements over today's conventional power semiconductors. Ideal Power believes B-TRAN™ modules will reduce conduction and switching losses, complexity of thermal management and operating cost in medium voltage AC power switching and control circuitry. For more information, visit www.IdealPower.com.

CURRENT OPPORTUNITY

Position Title: Director of Module Engineering
Department: Engineering
Location: Austin, TX

POSITION SUMMARY

This is an excellent opportunity for a highly creative power semiconductor engineer/solid state physicist to design and develop next generation power packaging technologies based on Ideal Power's low loss BTRAN™ technology. This role is ideal for a future focused, hands-on engineer who thrives in a fast paced environment and is looking to make a significant technical impact in the power semiconductor industry. The successful candidate will play a pivotal role in the commercialization of a new low-loss, bidirectional power semiconductor architecture. The candidate will play a leading role in product design, optimization, fabrication, testing, manufacturing, reliability, and long-term product planning and have the opportunity to fulfil their potential and demonstrate their engineering talents as the owner of power modules within company.

ESSENTIAL DUTIES AND RESPONSIBILITIES

- Work with device engineers, process engineers and product engineers to design and develop power modules that meet electrical, mechanical reliability, and cost requirements.
- Leading projects from concept to production. Perform thermal, mechanical, thermal-mechanical, and electrical simulations to ensure power modules meet requirements.
- Work closely with manufacturing partners to implement the design, optimize the packaging process, verify performance to ensure designs are robust and meet customer requirements and functional specifications, and are manufacturable without defect.

- Develop all required development/verification testing and Reliability/Quality methodology to ensure achievement of all functional objectives and assure compliance to industry/customer standards.
- Interface with customers for sampling, evaluation, Failure Analysis and recommend changes to device, process, product engineers as necessary.
- Take ownership, leadership and accountability for module designs.
- Actively participate and contribute to determining near term and long term technology and product roadmaps and specifying development milestones and prioritizing development activities

CORE SKILLS, EXPERIENCE AND EDUCATION

- Master or PhD degree in Electrical Engineering, Mechanical Engineering or solid state physics
- Minimum of 5 years of experience in power semiconductor technology and product development
- Thorough knowledge of power semiconductor topologies with emphasis on MOSFETs and bipolar devices such as IGBTs and BJTs.
- Degree in Electrical, Computer, Mechanical or equivalent Engineering with minimum 5 years industry experience. Technicians with rich hands-on experience will also be considered.
- CAD experience: SolidWorks®, AutoCAD®, ProE, Creo Parametric, Altium.
- Simulation experience: COMSOL Multiphysics®, Ansys®, or SolidWorks® Simulation
- Knowledge in power module reliability and failure modes.
- General knowledge of power devices such as IGBT, BJT, MOSFETs and Diodes (Si or SiC).
- Knowledge in industry standard and/or next generation assembly packaging processes such as wire bonding, double side cooling, die/substrate attach, vacuum reflow soldering, encapsulation, molding, plating, etc.
- Knowledge or experience working with common packaging materials such as solders, ceramics, silicone gel, epoxies, polymers, DBC, etc.
- Knowledge in electronics packaging test equipment: C-SAM, x-ray, pull tester, shear tester, etc.
- Knowledge in Design of Experiments, 8D, and data analysis.
- Results orientated team player.