

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 Driver Engineering

Department: Engineering

Location: Austin, TX

POSITION SUMMARY

This is an excellent opportunity for a highly creative engineer to lead the further development of the B-TRAN™ driver and the corresponding integrated circuit (IC). The Director of Driver Engineering is responsible for the design, validation and continued advancement of the dual sided driver design for B-TRAN™. This position requires a hands-on individual with strong technical capabilities and problem-solving skills in semiconductor device driver design to play a key role in the development, validation testing and commercialization the Company's low loss power switch technology. The right individual will be a self-starter with a robust power electronics and device driver device design background and a strong team player with the ability to comfortably work in a start-up environment and interact with technology development and commercialization partners.

ESSENTIAL DUTIES AND RESPONSIBILITIES

- Lead device driver design and IC product development for our bidirectional double-sided power semiconductor device including developing design requirements, product specifications, circuit analysis, circuit simulations, prototype builds and validation test plans
- Collaborate with development partners and device engineers to implement device drive development requirements based on market requirements and semiconductor characteristics

- Active participant and contributor in determining technology and product roadmaps and specifying development milestones
- Work with a sense of urgency to manage design and development activities to meet program budgets and timelines
- Actively communicate with external suppliers, universities, research institutes and partners, keeping current on cutting-edge technology and future trending technology
- Develop and publish technical articles, whitepapers and other external-facing product presentations for customer and partner use

EDUCATION AND CORE SKILLS REQUIREMENTS

- Master's degree in power electronics or electrical engineering with at least 5 years of experience in power electronic circuits design and testing
- Familiarity with driver circuit design, driver IC design, layout, simulation, fabrication, testing and characterization
- Thorough knowledge of power semiconductor topologies with emphasis on MOSFETs and bipolar devices such as IGBTs and BJTs and the state of the art of WBG device driver development
- Working knowledge of hardware design and circuit analysis tools such as SPICE, DFMEA, De-rating/stress Analysis and FPGA application and coding experience
- PCB design experience with good knowledge of component selection, design trade-offs for function, heat dissipation, EMC, isolation, cost control and manufacturability
- General applications knowledge of semiconductor markets such as EV, VFDs, industrial applications (circuit breakers, traction drives), renewable energy, UPS systems a plus
- Familiarity with automotive international standards desirable