



Wireless Application Engineer

GaN Systems is actively hiring to expand its team. GaN Systems is the leading place electronics designers go to realize all the system benefits of gallium nitride transistors in their power conversion applications. To overcome legacy solution limitations in switching speed, voltage and current, the company develops the most complete range of gallium nitride power switching transistors for consumer, datacenter, industrial and transportation markets. GaN Systems' technology addresses today's challenges of cost, performance, and manufacturability resulting in products that are smaller and more efficient than other GaN design approaches.

Job Description

The application engineer will be responsible for applying leading edge GaN technology in existing as well as new wireless power topologies, evaluating and documenting performance, authoring application notes and white papers, meeting with customers, defining new products and promoting the benefits of GaN devices in the power electronics industry. A highly technical, lab-oriented individual who can also meet with customers is sought. GaN Systems offers the opportunity to be involved with the most leading edge power semiconductor technology worldwide.

Responsibilities

- Provide direct customer support including device selection, circuit design/troubleshooting, thermal/electrical and system solution analysis.
- Respond to technical inquiries from existing and prospective customers with proper documentation and timely feedback/analysis.
- Analyze, develop and optimize wireless power electronics topologies and circuits that demonstrate the advantages of GaN E-HEMTs.
- Use calculation and simulation tools for application analysis and circuit concept evaluation including the switching characteristics, power loss and thermal analysis
- Test, evaluate and provide feedback on state of the art GaN Systems GaN E-HEMT prototype products.
- Work with customers, marketing and product managers to define product roadmap and product enhancements
- Prepare technical collateral including application notes, technical papers and customer presentations
- Develop, test and document reference design, evaluation platform for GaN E-HEMT target applications.

Skills & Experience

Required:

- 7+ years of experience in the fields of designing power electronics.
- Design knowledge of power semiconductor devices including gate driver design, turn-on/off switching behavior, miller effect, circuit parasitics and loss calculation.
- Good understanding of different topologies; for wireless, Class D, E, EF and Single stage AC/RF; half/full bridge, PFC, inverter and resonant circuit; and power electronics control theory.
- Perform and oversee laboratory prototyping and testing with experience in high power system design.
- Strong written and communication skills with experience in technical writing and customer presentation.
- Familiarity with at least one calculation/simulation and PCB design tools.
- Basic knowledge of analog and digital control circuit/programming.

- A passion for power systems, power devices and providing world-class technical support to customers.
- Work as part of a highly productive team.
- Expect 15-20% domestic and international travel

Desired:

- Previous application experience in power semiconductor industry is preferred.
- Knowledge and design/application experience with GaN and/or SiC power device is a plus.
- Project experience with high power (5+kW) system designs including thermal solutions.
- Experience working with internal and external customers internationally.
- An individual who desires to influence the direction of a leading emerging technology company.

Education:

- Degree in Electrical Engineering required, MSc or PhD degree with an emphasis on power electronics is preferred.