GaN Reliability Engineer

GaN Systems Inc.- Ottawa, ON, Canada

GaN Systems is the place electronics designers go to realize all the benefits of gallium nitride in their power conversion and control applications. To overcome silicon's limitations in switching speed, temperature, 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' unique Island Technology® addresses today's challenges of cost, performance, and manufacturability resulting in devices that are smaller and more efficient than other GaN design approaches. A fabless power semiconductor company, GaN Systems is headquartered in Ottawa, Canada.

The Company also leverages existing multi-sourced manufacturing processes due to its transportable, fabless model, and through additional innovations, makes it easy to incorporate gallium nitride into any design. GaN Systems is run by a seasoned semiconductor team with decades of industry experience and a track record of repeated success. The Company stands to do more for gallium nitride adoption in power conversion than any other.

Job description

As a GaN reliability engineer you will be part of the reliability group, driving qualification/reliability/failure analysis of GaN Systems products. You will interact with design/marketing/operations and develop appropriate reliability qualification plan for our products based on the core technology as well as the market it serves. You will develop test plans and procedures to calculate MTTF of our products. You will be the main interface to external test houses, as well as various suppliers we work with. You will also be responsible for customer quality issues and fault analysis.

Responsibilities

- Drive qualification plans, schedules, meetings, conference calls, communications with suppliers & customers.
- Root cause analysis of reliability test or field failures and propose corrective actions.
- Prepare qualification/failure analysis reports for both internal use and external customers.
- Function as technical resource for reliability lab operations.
- Co-ordinate all the logistic in preparing samples, allocating test time, reviewing the test data and initiating and coordinating the failure analysis process

Qualifications

- Bachelor / Masters in electrical engineering, physics or a related engineering discipline, with 3+ years of experience as Reliability, Product, Package or Process Engineer in a semiconductor company
- GaN HEMT Technology development and reliability knowledge
- III-V device and failure mechanisms knowledge
- Hands on experience of FA techniques like Cross Sectioning, X-ray, CSAM, FIB, SEM, and TEM is required
- Good understanding of the semiconductor technologies and processes (Assembly, Testing, and Packaging)
- Good understanding of product function and basic electronics
- Experienced in FMEA/ FMECA methodologies
- Innovative and Creative with troubleshooting techniques
- Enjoy hands-on work and working in a lab environment
- Good customer and vendor management skills
- Ability to work well in cross functional teams in a fast-paced collaborative team environment

• Ability to work independently, multi-task, and attention to details

Job type: full time

Experience level: Intermediate

Job Location: GaN Systems Inc., 1145 Innovation Drive, Ottawa, Canada K2K 3G8

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