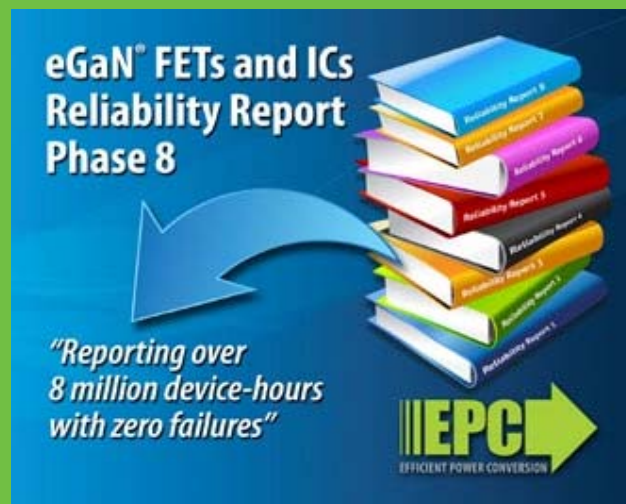


Documenting GaN Technology Reliability after Millions of Device Hours of Rigorous Stress Testing

EPC Phase Eight Reliability Report documents a combined total of over 8 million GaN device-hours with zero failures. The report examines, in detail, the stress tests that EPC devices are subjected to prior to release as qualified products and analyzes the physics of failure.

EPC announces its Phase Eight Reliability Report showing the results of the rigorous set of JEDEC-based qualification stress tests eGaN FETs and integrated circuits undertake prior to being considered qualified products.



In this report, product-specific detailed stress test results for over millions of actual device hours are provided. In addition to product qualification stress testing, due diligence is necessary in other areas of reliability such as field experience, failures over device operational lifetime, and board level reliability. More specifically, the three sections of tests covered in this Phase Eight Reliability Report are:

I: Field Reliability Experience

- Field Failures Examined
- Assembly Failures
- Applications Failures
- Intrinsic Die Qualification

II: Early Life Failure and Wear-out Capability

- Early Life Failure Rate
- Electromigration

III: Board Level Reliability and Thermo-mechanical Capability

- Intermittent Operating Life
- Temperature Cycling
- Board-Level Reliability

This report, coupled with the excellent field reliability of eGaN FETs and ICs given in the Phase Seven Reliability Report, which documented the accumulation of over 17 billion device operation hours combined with a very low failure rate below 1 FIT (failures per billion hours), demonstrates that the stress-based qualification testing is capable of ensuring reliability in customer applications. The cumulative reliability information compiled shows that eGaN FETs and ICs have solid reliability and are able to operate with very low probability of failures within reasonable lifetimes of end products manufactured today.

According to Dr. Alex Lidow, CEO and co-founder of EPC, "Demonstration of the reliability of new technology is a major undertaking and one that EPC takes very seriously. The tests described in this report, along with the reported results, show that EPC gallium nitride products have the requisite reliability to displace silicon as the technology of choice for semiconductors."

About EPC

EPC is the leader in enhancement mode gallium nitride based power management devices and was the first to introduce enhancement-mode gallium-nitride-on-silicon (eGaN) FETs as power MOSFET replacements in applications such as DC-DC converters, wireless power transfer, envelope tracking, RF transmission, power inverters, remote sensing technology (LiDAR), and class-D audio amplifiers with device performance many times greater than the best silicon power MOSFETs.

www.epc-co.com

World wide support in English by

Bodo's Power systems®

www.bodospower.com

Asian support in Mandarin in China

Bodo's Power systems®
China

www.bodospowerchina.de