



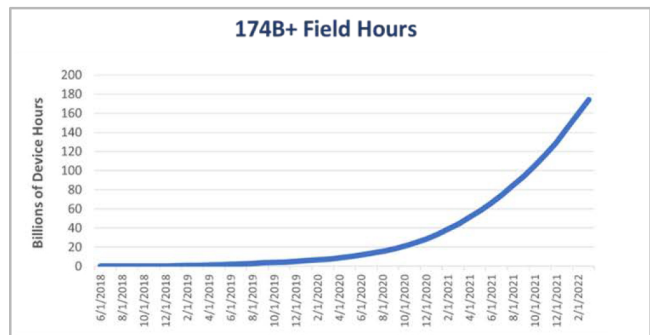
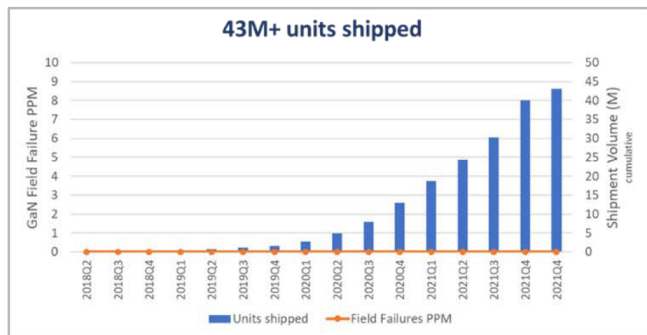
From Fast Chargers for Mobile to On-Board Chargers for EVs: GaNFast™ 20-Year Warranty

Industrial and Automotive applications demand the highest reliability and lifetimes. Stringent testing and standards are set throughout the industry to ensure power devices operate within their specification for 10 years or longer. Various internal and external stresses impact devices through their lifetime, such as thermal cycling, humidity, and voltage and temperature stresses.

For gallium-nitride (GaN) power devices, Navitas pioneered the type of high-frequency testing that became the JEDEC 70.1 standard, specifically created due to unique qualities of wide band gap and compound semiconductor characteristics. Navitas was a founder member of the committee.

Since qualification in early 2018, GaNFast™ power ICs have become the industry-leading solution for fast and ultra-fast mobile chargers, for customers including Samsung, Dell, Lenovo and LG. As of March '22, over 40,000,000 units had been shipped with zero reported GaN-related field failures.

Navitas is committed to accelerate innovation, performance and sustainability into high reliability markets, such as Data Center, EV, and Solar. With over 174 billion hours in the field, and 5.8 billion equivalent device hours tested, Navitas offers an industry-first 20-year warranty for its GaNFast technology – 10x-20x longer than for standard power electronics – and a critical accelerator for GaN's adoption into these markets. This unprecedented 20-year warranty is founded on Navitas' holistic approach to highest product reliability through design, testing, characterization and validation.

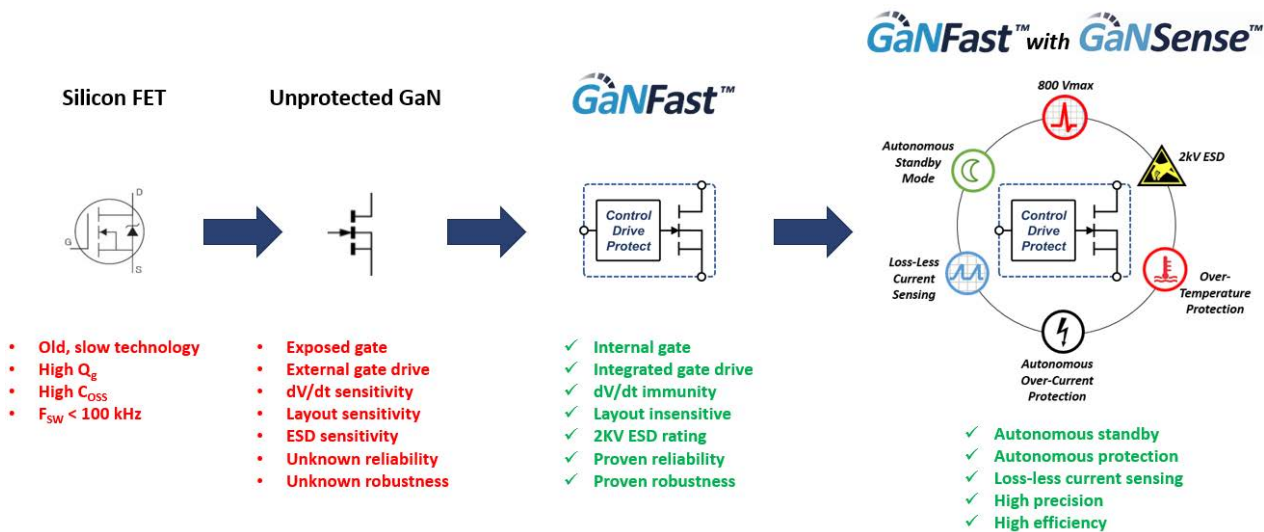


Ongoing Reliability Monitoring	Results
Equivalent Device Hours tested	5.8 Billion hours
FIT (Failures in Time) Failures in 1 billion device hours in the field	0.16

Proven quality and reliability with over 40 million GaNFast devices shipped, 174 billion hours in the field with zero GaN-related field failures, plus 5.8 billion equivalent device hours testing

Proprietary GaNFast power ICs integrate GaN power (FET) and GaN drive plus control and protection in a single SMT package. The result is easy-to-use, high-speed, high-performance 'digital-in, power-out' building blocks that runs up to 20x faster than legacy silicon chips, deliver up to 3x faster charging in half the size and weight, and with up to 40% energy savings compared with earlier silicon solutions.

To achieve lifetimes over 20 years, Navitas focuses on design, testing, and reliability validation of its device and partners with customers to ensure robust system level validation. GaNFast's unique ability to integrate power, drive, protection and sensing ensures a fully-protected gate input, whilst providing continuous, dynamic and accurate sensing of voltage, current and temperature to ensure protection, reliability and robustness.

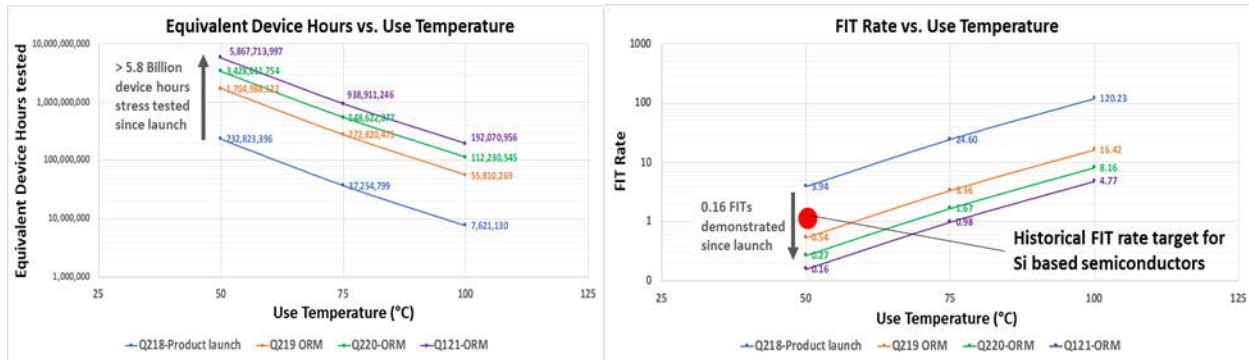


Navitas latest GaNFast with GaNSense™ enables highest level of protection, with accurate, low latency real-time sensing.

Proprietary production reliability test methods in which all GaN ICs are tested 400%, includes multi-temperature test conditions and extensive, high-frequency testing to ensure consistent, robust and high-quality performance for every GaN IC delivered. This results in a Failures In Time (FIT) rate (ie. 1 FIT equals one device failure in every 1 billion hours) of 6 times than silicon, positioning GaNFast ICs as a superior quality to silicon equivalents.

Navitas' exhaustive and unique reliability program includes proprietary operating life testing for application focused switching reliability, test to failure for acceleration factor determination for multiple factors including temperature and voltage for both static and switching reliability, a robust set of JEDEC-specific reliability tests, plus a proactive and thorough ongoing reliability monitoring program in high volume mass production for over 4 years.

Reliability Statistics
Calculated for High Line condition using HTOL (ZVS) results



Reliability monitoring of production material throughout 3 years of production tests 7,276 units on high-frequency, soft-switching application-focused stress testing from over 70 fab lots.

Conclusion

As leading-edge customers like Enphase (solar), Brusa (EV) and Compuware (data center) confirm GaN's technical and environmental benefits over legacy silicon chips, Navitas is committed to quality and reliability in these tough operational environments. GaNFast power ICs have a strong quality record, and GaNSense technology adds further system-level robustness. Navitas is proud to offer a 20-year, limited-liability warranty to all packaged GaNFast power ICs in mass production, targeting to accelerate market adoption for GaN into these demanding markets. For full details, please refer to Navitas' terms and conditions.