EPC · SPACE

CAPABILITY STATEMENT

Rad-hard GaN power management for space, defense and beyond

Our mission: *To power the systems that cannot fail. We make high-reliability electronics smaller, more efficient and more resilient with radiation-hardened GaN.*

~500K	19	>1 Mrad	15–300 V
devices in orbit since 2020	JANS (QPL) GaN part types	TID (Si), low and high dose rate	rad-hard GaN portfolio

CORE COMPETENCIES

- Radiation-hardened enhancement-mode GaN power transistors, 15–300 V, from 0.28 mΩ
- Rad-hard gate drivers, power-stage ICs and modules, and a CERN-developed PWM controller
- MIL-PRF-19500 JANS screening and qualification, with in-house MIL-STD-750 test
- Applications engineering and 13 reference-design boards for DC-DC, PPU, motor-drive and compute power

DIFFERENTIATORS

First JANS-certified GaN HEMT manufacturer
19 JANSH part types on the DLA QPL. Hermetic and PQFN packages.

14× better switching figure of merit than rad-hard Si
RDS(on)×QG of 120 vs. 1,700 mΩ·nC (100 V class) and zero reverse recovery: smaller, more efficient power stages.

Specified radiation hardness
>1 Mrad(Si) TID at low and high dose rate. SEE-hardened to LET 83+ MeV·cm²/mg at up to 100% rated VDS on hermetic HEMTs.

Proven at constellation scale
~500,000 devices in LEO and GEO since 2020, sized for proliferated-architecture volumes.

PAST PERFORMANCE

- Flight hardware on DoD, NASA and commercial programs in LEO and GEO since 2020
- ~220 customers, including leading U.S. space primes, NASA programs and government laboratories
- Multiple GaN motor-drive designs operating in low Earth orbit

COMPANY DATA

CAGE **8QKQ6**
UEI **JSKRG9VMWJZ6**
Size **Small business**

NAICS

334413 Semiconductor and Related Device Manufacturing
541330 Engineering Services

PRODUCT / SERVICE CODE

5961 Semiconductor Devices & Associated Hardware

CERTIFICATIONS

MIL-PRF-19500 JANS manufacturer
DLA QPL: 19 JANSH GaN part types
AS9100D · ISO 9001:2015 (NQA)
MIL-STD-750 lab suitability
U.S. export compliant

FACILITY

200 Bulfinch Drive, Suite 160
Andover, MA 01810
U.S. design, assembly, screening & test

POINT OF CONTACT

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MARKETS WE POWER

Commercial space · National security space · Civil space & science · Strategic & defense · Space compute & AI · Undersea & autonomy

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