

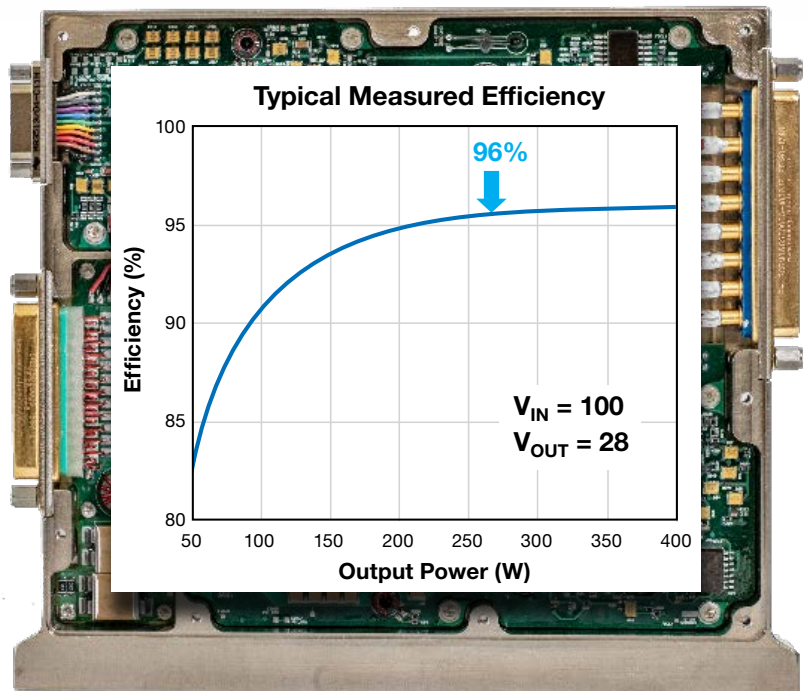
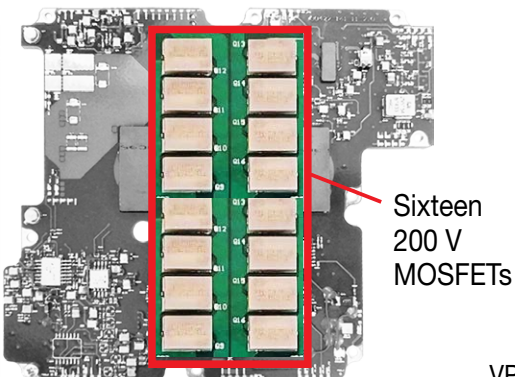
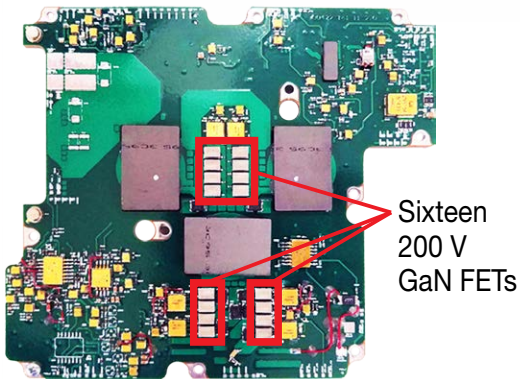
GaN in Space

- Smaller
- More Efficient
- Space Heritage

Moving Beyond the Limitation of Radiation-Hardened MOSFETs

Revolutionary high-reliability radiation-hardened enhancement-mode gallium nitride power management solutions for Space and other harsh environments.

High Efficiency DC-DC Converters



VPT's SGRB10028S Series Converter

Email: sales@epc.space
Website: epc.space

Motor Drives

Key Satellite Applications

- Reaction Wheels / Momentum Wheels
- Solar Array Drive Assembly
- Micro-pumps for propulsion systems



Radiation Effects Features

- Total Ionizing Dose – Rated to 1000 kRad
- Single Event Effects – SEE immunity for LET of 84 MeV/mg/cm² with V_{DS} up to 100% of rated Breakdown
- Low Dose Rate at 100 mRad/sec – Maintains Pre-Rad specification
- Neutron – Maintains Pre-Rad specification for up to 1 x 10¹⁵ Neutrons/cm²

Rad Hard GaN QPL Product Offering*

JEDEC Part No	Slash Sheet	Drain Voltage (V)	Gate Voltage (V)	R _{thjc} (°C/W)	R _{DS(on)} (mΩ)	Q _G (C)	ID1 (A)	ID2 (A)	PD (W)	Package
JANSH2N7667UFBC	/782	40	+6 , -4	2.25	11	11.4	30	19	56	FSMD-B
JANSH2N7668UFBC		100	+6 , -4	2.25	15	11	30	19	56	FSMD-B
JANSH2N7669UFBC		200	+6 , -4	4.02	30	7	18	11	31	FSMD-B
JANSH2N7670UFAC	/783	40	+6 , -4	10.57	28	2.8	8	5	12	FSMD-A
JANSH2N7671UFAC		100	+6 , -4	10.57	50	2.2	5	3	12	FSMD-A
JANSH2N7672UFAC		200	+6 , -4	17.2	130	3	4	2.5	7	FSMD-A
JANSH2N7673UFCC	/784	300	+6 , -4	12	350	2.6	4	2.3	10	FSMD-C
JANSH2N7674UBC	/785	60	+6 , -4	35	580	0.18	1.8	1.1	4	LCC3
JANSH2N7675UFBC	/786	40	+6 , -4	2.25	11	11	50	32	56	FSMD-B
JANSH2N7676UFBC		100	+6 , -4	2.25	13	11	46	29	56	FSMD-B
JANSH2N7677UFBC		200	+6 , -4	4.02	28	7	24	15	31	FSMD-B
JANSH2N7678UFGC	/787	40	+6 , -4	1.55	4	22	90	57	81	FSMD-G
JANSH2N7679UFDC		40	+6 , -5	1.89	5	22	81	51	66	FSMD-D
JANSH2N7680UFGC		100	+6 , -4	1.55	5	12	90	57	81	FSMD-G
JANSH2N7681UFGC		200	+6 , -4	1.55	14	14	55	34	81	FSMD-G
JANSH2N7682UFAC	/788	40	+6 , -4	10.57	28	8	15	9	12	FSMD-A
JANSH2N7683UFAC		100	+6 , -4	10.57	50	2.2	10	6	12	FSMD-A
JANSH2N7684UFGC	/789	300	+6 , -4	1.55	35	20	50	32	80	FSMD-G

*JANS Qualification Pending