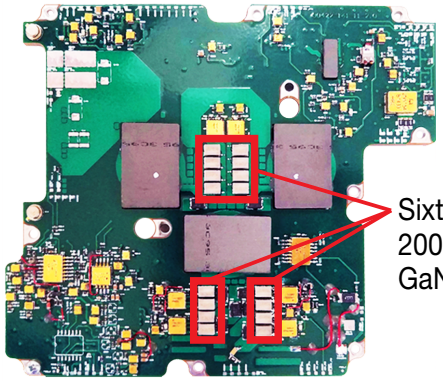
GaN in Space

- Smaller
- More Efficient
- Space Heritage

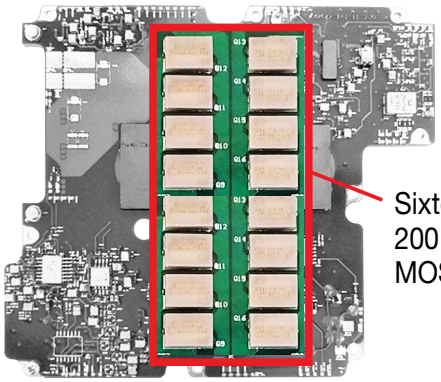
Moving Beyond the Limitation of Radiation-Hardened MOSFETs

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

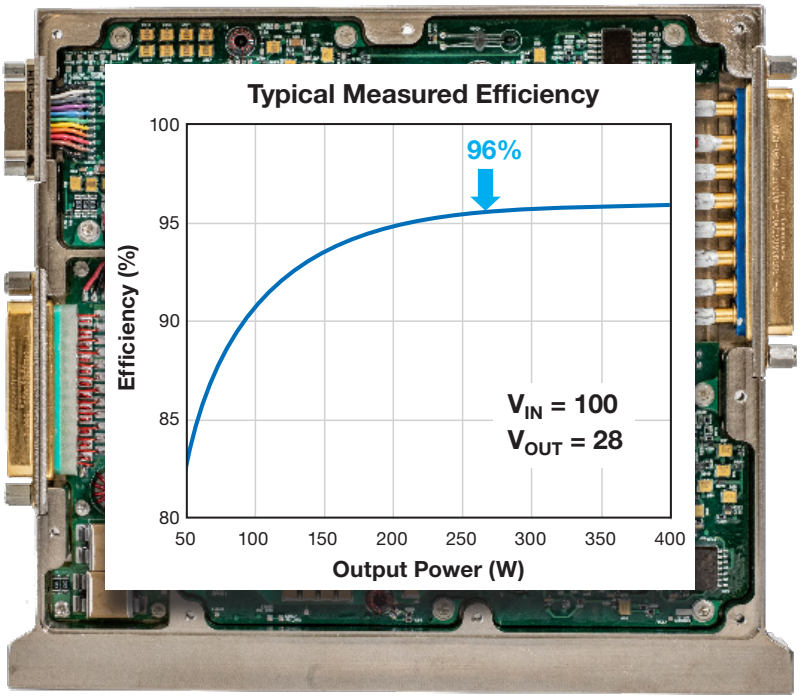
High Efficiency DC-DC Converters



Sixteen 200 V GaN FETs



Sixteen 200 V MOSFETs



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/cm^2 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 10^{15} Neutrons/cm^2

Rad Hard GaN QPL Product Offering*

EPCS Base Part No.	JEDEC Part No.	Slash Sheet	Drain Voltage (V)	Gate Voltage (V)	$R_{\theta JC}$ (°C/W)	$R_{DS(on)}$ (mΩ)	Q_G (C)	ID1 (A)	ID2 (A)	PD (W)	Package	Launch Date
FBG04N30B	JANSH2N7667UFBC	/782	40	+6 , -4	2.25	11	11.4	30	19	56	FSMD-B	2Q2025
FBG10N30B	JANSH2N7668UFBC		100	+6 , -4	2.25	16	11	30	18	56	FSMD-B	4Q2025
FBG20N18B	JANSH2N7669UFBC		200	+6 , -4	4.02	30	7	18	11	31	FSMD-B	2Q2025
FBG10N05A	JANSH2N7671UFAC	/783	100	+6 , -4	10.6	58	2.2	5	3	12	FSMD-A	4Q2025
FBG20N04A	JANSH2N7672UFAC		200	+6 , -4	17.2	130	3	4	2.5	7	FSMD-A	4Q2025
EPC7008C	JANSH2N7685UFGC	/784	300	+6 , -5	16.4	404	2.6	4	0.6	8	FSMD-C	1Q2026
EPC7014UB	JANSH2N7674UBC	/785	60	+6 , -4	35	580	0.18	1	0.6	2	LCC3	3Q2025
EPC7001B	JANSH2N7675UFBC	/786	40	+6 , -4	2.25	11	12	50	32	56	FSMD-B	1Q2026
EPC7004B	JANSH2N7676UFBC		100	+6 , -4	2.25	16	11	46	29	56	FSMD-B	3Q2025
EPC7007B	JANSH2N7677UFBC		200	+6 , -4	4.02	29	7	24	15	31	FSMD-B	3Q2025
EPC7019G	JANSH2N7678UFGC	/787	40	+6 , -4	1.55	4.5	15	90	57	81	FSMD-G	1Q2026
EPC7019D	JANSH2N7679UFDC		40	+6 , -5	1.89	5	22.5	81	51	66	FSMD-D	1Q2026
EPC7018G	JANSH2N7680UFGC		100	+6 , -4	1.55	6	15	90	57	81	FSMD-G	4Q2025
EPC7018D	JANSH2N7686UFDC		100	+6 , -4	1.89	6	22.5	81	51	66	FSMD-D	4Q2025
EPC7020G	JANSH2N7681UFGC		200	+6 , -4	1.55	14.5	25	76	48	81	FSMD-G	1Q2026
EPC7002A	JANSH2N7682UFAC	/788	40	+6 , -4	10.6	28	3.4	15	9	11.8	FSMD-A	4Q2025
EPC7003A	JANSH2N7683UFAC		100	+6 , -4	10.6	58	2.2	10	7	11.8	FSMD-A	3Q2025
EPC7030M	JANSH2N7684UFMC	/789	300	+6 , -4	1.55	35	20	50	32	80	FSMD-M	1Q2026

*JANS Qualification Pending