EPC Space Introduces High-Accuracy GaN Linear Regulator Evaluation Boards

New designs offer low dropout operation, tight regulation, and configurable loop compensation for demanding applications

EPC7C023 and C024

ANDOVER, MA, UNITED STATES, April 6, 2026 /EINPresswire.com/ -- EPC Space, a manufacturer of radiation-hardened, high-performance, and enhanced-reliability GaN discrete transistors, integrated circuits, and modular devices, today announced two additions to its demonstration/evaluation board lineup supporting applications including rad-hard linear regulators and space control electronics.

The EPC7C023 is a 5A linear regulator that can be user configured as a standard linear regular or a low-dropout voltage (LDO) linear regulator. This evaluation board utilizes the EPC7019G HEMT as the pass element.

> These boards demonstrate how radiation-hardened GaN devices can enable tight regulation, low dropout performance, and flexible loop compensation in compact architectures”
>
> *Bel Lazar, EPC Space CEO*

The EPC7C024 is a 0.5A linear regulator that can be user configured as a standard linear regular or a low-dropout voltage linear regulator (LDO). This evaluation board utilizes the EPC7014UB HEMT as the pass element.

Both these demonstration boards utilize TL1431 shunt regulator as the controller, and both regulator boards have a preset 5.0Vdc output voltage.

When configured as a standard linear regulator, the input voltage must remain at least 3 V above the output voltage. When configured as an LDO, the bias voltage must be 8.5 Vdc minimum, and the power input

may be as low as:

- VOUT + 0.175 Vdc to maintain 1% regulation at a 5 A load current for the EPC7C023
- VOUT + 0.390 Vdc at a 0.5 A load current for the EPC7C024

Both boards include provisions for end users to implement various loop compensation schemes, and the output voltage may be adjusted using a single resistor. A Kelvin-connected current sense resistor is also provided to enable accurate load current monitorin. An operating guide that contains connection instructions, typical line and load regulation and load-step dynamic performance, schematic and bill of material is available on the EPC Space website.

“With the introduction of the EPC7C023 and EPC7C024 evaluation boards, EPC Space is expanding designers’ access to high-accuracy GaN-based linear regulation solutions tailored for demanding space and high-reliability applications. These boards demonstrate how radiation-hardened GaN devices can enable tight regulation, low dropout performance, and flexible loop compensation in compact architectures - helping engineers accelerate development of next-generation satellite and control electronics power systems,” said Bel Lazar, EPC Space CEO.

For pricing, availability, and ordering information for the EPC7C023 and EPC7C024 evaluation boards, please contact EPC Space directly.

Maurizio Di Paolo Emilio
Efficient Power Conversion
+13108749787 ext.
email us here
Visit us on social media:
LinkedIn
Instagram
Facebook
YouTube
X
