

# EPC Supports AI Infrastructure Built on NVIDIA MGX™ with High-Efficiency 800V-to-12.5V Power Conversion

*GaN-based design delivers 97% full-load efficiency for next-generation AI power*

EL SEGUNDO, CA, UNITED STATES, June 2, 2026 /EINPresswire.com/ -- [Efficient Power Conversion \(EPC\)](#) has provided additional details on its [EPC91123](#) evaluation board, an 800 VDC to 12.5 VDC,



The ISOP topology is particularly well suited for high step-down-ratio power conversion, enabling improved transformer optimization and interleaved operation.”

*Alejandro Pozo, Director of DC-DC System Engineering*

6 kW isolated converter designed to support next-generation AI data center power architectures. As a contributor to the [NVIDIA MGX™ AI Factory ecosystem](#), EPC contributes advanced GaN-based power conversion solutions designed to support emerging 800 VDC server architectures, enabling higher power density, improved efficiency, and scalable rack-level power delivery for next-generation AI infrastructure.

By enabling direct 12.5 V conversion and eliminating the need for a 48 V intermediate stage, the solution improves overall system efficiency by 1–2%. The converter is built on

an input-series, output-parallel (ISOP) LLC topology and leverages Gen7 devices, including the 3.3 mm × 2.6 mm, 40 V, 0.8 mΩ EPC2366 and 150 V, 2.2 mΩ EPC2305. The solution achieves 98.2% peak efficiency and 97% full-load efficiency. Optimized for space-constrained AI server environments, the board delivers high power density in a compact 104 mm × 47 mm × 8 mm form factor.

“AI data centers consume tremendous amounts of power, making it critical to reduce power conversion stages to improve efficiency and power density, especially in 800 V architectures,” said Alejandro Pozo, Director of DC-DC System Engineering. “The ISOP topology is particularly well suited for high step-down-ratio power conversion, enabling improved transformer optimization and interleaved operation. It has been selected for our next 800 VDC to 6 VDC platform.”

The EPC91123 builds on EPC’s broader strategy for 800 VDC AI power delivery, where the company is developing highly efficient conversion architectures spanning 800 VDC to 48 VDC, 12 VDC, and 6 VDC to address different system-level requirements in AI infrastructure. By leveraging

advanced GaN-based ISOP topologies and its latest Gen7 eGaN® technology, EPC aims to provide scalable, high-density power solutions that improve efficiency, reduce distribution losses, and support next-generation accelerated computing platforms.

“NVIDIA MGX provides a modular foundation for scalable accelerated computing. A key element of NVIDIA’s strategy for AI infrastructure is the use of 800 VDC power architecture, helping address the growing demands for efficiency and power density as AI compute scales. We are pleased to contribute to the NVIDIA MGX AI Factory ecosystem with advanced multi-level GaN-based power conversion solutions designed to support emerging 800 VDC server architectures and next-generation AI infrastructure,” said Alex Lidow, CEO and Co-founder of EPC.

For more information about the EPC91123 evaluation board, EPC’s Gen7 GaN technology, and its portfolio of 800 VDC power conversion solutions for AI infrastructure, visit EPC or contact the company directly.

#### About EPC

EPC is the leader in enhancement mode gallium nitride (eGaN®) based power management. Founded in 2007 by experts in power electronics, semiconductors, and business management, the company leverages cutting-edge technology to advance the field of power electronics through the development and commercialization of GaN-based power devices. eGaN FETs and integrated circuits provide performance many times greater than the best silicon power MOSFETs in applications such as DC-DC converters, remote sensing technology (lidar), motor drives for eMobility, robotics, and drones, and satellites.

Follow EPC on social media:

LinkedIn, YouTube, Facebook, Twitter, Instagram, YouKu,

Follow us on WeChat

eGaN is a registered trademark of Efficient Power Conversion Corporation, Inc.

Press contact: Efficient Power Conversion: Maurizio Di Paolo Emilio email:

maurizio.dipaoloemilio@epc-co.com

Maurizio Di Paolo Emilio

Efficient Power Conversion

maurizio.dipaoloemilio@epc-co.com

Visit us on social media:

[LinkedIn](#)

[Facebook](#)

[X](#)

---

This press release can be viewed online at: <https://www.einpresswire.com/article/916832202>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire,

Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2026 Newsmatics Inc. All Right Reserved.