

Design Higher Power Density USB-C PD Applications with New 50 V GaN FET in Tiny 1.8 mm2 Footprint from EPC

EPC introduces the 50 V, 8.5 mOhm EPC2057 GaN FET in tiny 1.5 mm x 1.2 mm footprint, offering higher power density for USB-C PD applications.

EL SEGUNDO, CA, USA, June 11, 2024 /EINPresswire.com/ -- EPC, the world's leader in

As USB-C PD continues to gain traction, efficient, compact, high-performance power solutions are vital. Our new GaN FET meets these needs with a reliable, efficient solution that enhances performance," *Alex Lidow, CEO, and cofounder of EPC.*

enhancement-mode gallium nitride (GaN) <u>power FETs and</u> <u>ICs</u>, launches the 50 V, 8.5 m Ω <u>EPC2057</u>. This GaN FET is specifically designed to meet the evolving needs of highpower USB-C devices including those used in consumer electronics, in-car charging, and eMobility.

Key Features and Benefits:

• High Efficiency: The new 50 V GaN FET boasts an ultralow on-resistance of just 8.5 m Ω , significantly reducing power losses and enhancing overall efficiency.

• Compact Design: Its tiny footprint makes it ideal for

space-constrained applications, allowing for smaller, more efficient power adapters and chargers.

• Fast Switching: The GaN technology enables faster switching speeds, improving power density and reducing the size of passive components, leading to more compact and lightweight designs.

"As USB-C PD continues to gain traction, efficient, compact, high-performance power solutions are vital. Our new GaN FET meets these needs with a reliable, efficient solution that enhances performance," said Alex Lidow, EPC CEO and co-founder.

Industry Impact:

With the increasing adoption of USB-C PD, there is a growing demand for power components that can deliver higher efficiency and performance while minimizing size and heat generation.

EPC's new GaN FET is designed to meet this demand, offering a superior alternative to traditional silicon-based FETs.

Development Board

The EPC90155 development board is a half bridge featuring the EPC2057 GaN FET. It is designed for 40 V maximum operating voltage and 10 A maximum output current. The purpose of this board is to simplify the evaluation process of power systems designers to speed their product's time to market. This 2" x 2" (50.8 mm x 50.8 mm) board is designed for optimal switching performance and contains all critical components for easy evaluation.

Faster USB-C Charging with GaN



Higher Power Density USB-C PD Applications with New 50 V GaN FET in Tiny 1.8 mm2 Footprint from EPC

Price and Availability

The EPC2057 is priced at \$0.67 each in 2.5 Ku volumes.

The EPC90155 development board is priced at \$200.00 each.

Product is available through any one of EPC's distribution partners or order directly from the EPC website.

Designers interested in replacing their silicon MOSFETs with a GaN solution can use the EPC GaN Power Bench's cross-reference tool to find a suggested replacement based on their unique operating conditions. The cross-reference tool can be found at: <u>https://epc-co.com/epc/design-support/part-cross-reference-search</u>

Renee Yawger Efficient Power Conversion +1 908-619-9678 email us here Visit us on social media: Facebook X LinkedIn This press release can be viewed online at: https://www.einpresswire.com/article/718861228

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. © 1995-2024 Newsmatics Inc. All Right Reserved.