

EPC Showcases GaN Power Solutions for Robotics, Drones, and AI Servers at PCIM Europe 2026

High power density DCDC converters from 800 V to point-of-load use EPC's latest-generation GaN devices.

EL SEGUNDO, CA, UNITED STATES, May 19, 2026 /EINPresswire.com/ -- Efficient Power Conversion (EPC), the world's leader in enhancement-mode gallium nitride (GaN)-based power solutions, will showcase the company's newest generation GaN technology for humanoid robotics, drones and compact electrified motion systems at PCIM Europe 2026, taking place June 9-11, 2026 in Nuremberg, Germany, Hall 9, Stand 304. At the show, EPC will demonstrate how its Gen 7 GaN platform enables compact, production-ready power architectures for next generation intelligent motion systems and AI power delivery. These devices offer higher switching frequency, lower losses and tighter layouts - improving efficiency and integration in robotic motion control.

The motion platforms are powered by EPC's latest GaN power devices including the EPC33110 integrated three-phase ePower Stage IC for compact humanoid joint and drone propulsion control. The EPC23108/09 and EPC23110/11 integrated ePower Stage IC families support operation up to 100 V, with load current capability of 35 A (EPC23108, EPC23109) and 20 A (EPC23110, EPC23111), enabling reliable high-frequency switching performance. In the power-conversion stage, EPC will also highlight the EPC2366 40 V eGaN FET with ultra-low 0.84 mΩ RDS(on) specifically designed for synchronous rectifier applications on the secondary side of a 48 V-12 V LLC converter; and the EPC2361, 100V with typical Rds(on) of 0.75 mΩ. EPC2304 (200 V, 3.5 mΩ), EPC2305 (150 V, 2.2 mΩ) for high-power isolated DC-DC conversion, and the EPC2057 (50 V, 6 mΩ) for compact intermediate-bus regulation. EPC will also highlight the latest Gen7 products: EPC2370 (15 V, 0.28 mΩ), EPC2378 (25 V, 0.35 mΩ), and EPC2377 (40 V, 0.5 mΩ) in compact 3.3 × 3.3 mm dual-cool QFN packages, along with the EPC2375 (100 V, 0.9 mΩ) in a 3 × 5 mm dual-cool QFN. These devices deliver benchmark RDS(on) and low gate charge for high-efficiency, high-power-density modules and DC-DC power supplies used in AI data centers, robotics, and advanced motor-drive applications.

These devices are demonstrated on different platforms, shown at PCIM Europe, for development of humanoid robotics and drone propulsion. The EPC91122 and EPC91132 are motor drive reference designs based on the EPC33110. The EPC91122 will be demonstrated in both a large drone propulsion system and a robotic arm platform to demonstrate suitability for high torque,

high power density motion architectures. A small drone propulsion system designed for lightweight, space-constrained applications with rapid dynamic response will also be showcased. Other motor-drive reference designs include EPC91121 (using the EPC2366), EPC91135 with the EPC2376 for higher-voltage 150 V inverter operation, EPC9186HCx with the EPC2361 for scalable high-current three-phase motor-drive architectures, and EPC91128/29/30/31 with the EPC231x Family which contain all the necessary critical functions circuits to support a complete motor drive inverter including gate drivers, regulated auxiliary power rails for housekeeping supplies, voltage, and temperature sense, accurate current sense and protection functions.

High-density DC-DC conversion platforms include EPC91123, 6 kW, 800 V to 12.5 V Isolated Converter Evaluation Board; EPC91134, 11 kW, 400/800 Vdc to 50 Vdc Isolated Converter; EPC91107 (EPC2304), a 4-level totem-pole PFC delivering 12.5 A at 400 VDC; EPC90167, a half-bridge evaluation board for EPC2366, and EPC91109 (EPC2057), a compact two-phase synchronous buck converter supporting 20–36 V to 12/16/20 V conversion - demonstrating efficient front-end and intermediate-bus architectures for compact robotic and aerial power systems.

EPC will also show beyond robotics and drones, how GaN technology enables smaller and more efficient electrified platforms such as power tools and e-bikes where higher switching frequency and smaller system size directly translate into better performance, lighter weight and longer run time. Additionally, the company will demonstrate how the same GaN technology platform enables scalable, high-efficiency power conversion for emerging AI infrastructure, supporting the move to distributed power architectures and higher-density computing environments.

“PCIM Europe is the ideal platform to demonstrate how GaN is driving a new generation of intelligent motion and AI platforms,” said Alex Lidow, CEO and co-founder of EPC. “Engineers are embedding power electronics into moving and thinking structures, whether those are humanoid robots, drones or AI servers. Our Gen 7 GaN technology enables designers to reduce size and weight, while improving efficiency and reliability - critical requirements for scaling these systems from prototype to production deployments.”

EPC will also host special guest Mike Engelhardt, inventor of QSPICE, at its booth in Hall 9, Stand 304, where he will demonstrate how engineers can now simulate Efficient Power Conversion GaN discrete devices, half-bridges, and integrated circuits directly in QSPICE.

Visit EPC at PCIM Europe 2026 – Hall 9, Stand 304. For more information, please visit our PCIM Europe landing page.

Schedule a Meeting: EPC’s technical experts, including CEO Dr. Alex Lidow, will be on-site to discuss how GaN is enabling innovation across Humanoid Robots, Drone, Power tools, e-bike and AI infrastructure. To schedule a meeting during PCIM Europe 2026, contact info@epc-co.com.

Exhibition Booth - Hall 9, Stand 304: Visit EPC's booth to explore the company's comprehensive portfolio of GaN-based solutions and experience live demonstrations highlighting performance, density and efficiency advantages.

LIVE Technical Presentations - EPC Booth Hall 9, Stand 304

June 9, 14.45 – 15.00: Where is GaN Going? - Alex Lidow, CEO, EPC

June 10, 11.30 – 12.00: Building Humanoids and Drones with Scalable Motor Control Architectures - Marco Palma, Director, Motor Drives Systems and Applications, EPC

June 10, 14.30-15.00: Low Voltage GaN FETs as Synchronous Rectifiers - Steve Colino, V.P., Strategic Technical Sales, EPC

June 10, 15.00-15.30: Combining EPC Modeling IP with QSPICE Technology - Mike Engelhardt, Qspice Inventor

June 11, 11.00-11.30: Disrupting High Voltage Applications using Low Voltage GaN FETs in Multi-kW Isolated Converters - Michael De Rooij, GaN Applications Fellow, EPC

Conference presentations

June 10, 15.30 – 17.00: Poster Session – Hall 4A

Parallel Connection of GaN FET Switching Legs for Modular High-Current Device Applications

Marco Palma, Director, Motor Drives Systems and Applications, Efficient Power Conversion (EPC)

Co-Authors: Salvatore Musumeci, Polytechnical University of Turin; Federico Unnia, Simone Scano, EPC, IT

June 10, 15:50-16:10: AI & Data Centers Stage Hall 5, 320

End-to-End With GaN - Alex Lidow, CEO

June 10, 16:40-17:00: Exhibition Stage, Hall 4A, 320

Making Humanoid Robots and Drones Better with GaN - Alex Lidow, CEO, EPC

June 11, 10.50 – 11.10: Technical Presentation, Stage: Kyiv, Level 2 – Wide Bandgap Semiconductors

Advanced Three-Phase GaN-Based Power Micro-Module for Motor Drives in Robotic Hands

Marco Palma, Director, Motor Drives Systems and Applications, Efficient Power Conversion (EPC)

Co-Authors: Salvatore Musumeci, Fausto Stella, Polytechnical University of Turin; Francesco Musumeci, EPC, IT

June 11, 11.45 – 12.45: Technology Stage - Hall 4, stand 139.

What's up, what's next for GaN?

Bodo Power Systems Panel - Alex Lidow, CEO, EPC

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

Press contact: Efficient Power Conversion: Maurizio Di Paolo Emilio email:
maurizio.dipaoloemilio@epc-co.com

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

Maurizio Di Paolo Emilio
Efficient Power Conversion
maurizio.dipaoloemilio@epc-co.com

This press release can be viewed online at: <https://www.einpresswire.com/article/913666382>

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.