



NEWS RELEASE

Power Integrations Details 1250 V and 1700 V PowiGaN Technology for Next-Generation 800 VDC AI Data Centers

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Company is collaborating with NVIDIA on 800 VDC power architecture; new white paper shows advantages of 1250 V PowiGaN technology vs. 650 V GaN and 1200 V SiC

SAN JOSE, Calif.--(BUSINESS WIRE)-- **Power Integrations** (NASDAQ: **POWI**), the leader in high-voltage integrated circuits for energy-efficient power conversion, today outlined the benefits of its **PowiGaN™** gallium-nitride technology for next-generation AI data centers. The capabilities of 1250 V and 1700 V PowiGaN technology for 800 VDC power architectures are explained in a new white paper from Power Integrations, published at the 2025 OCP Global Summit in San Jose, where NVIDIA provided an update on the 800 VDC architecture. Power Integrations is collaborating with NVIDIA to accelerate the transition to 800 VDC power and megawatt-scale racks.

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The new white paper details the performance advantages of Power Integrations' industry-first

1250 V PowiGaN HEMTs, illustrating their field-proven reliability and their ability to meet the power-density and efficiency requirements (>98%) of the 800 VDC architecture. Further, the paper demonstrates that a single 1250 V PowiGaN switch delivers greater power density and efficiency compared to stacked 650 V GaN FETs and competing 1200 V SiC devices.

The white paper also highlights Power Integrations' **InnoMux™2-EP** ICs as a unique solution for auxiliary power supplies in 800 VDC data centers. The InnoMux-2 device's integrated 1700 V PowiGaN switch supports 1000 VDC input voltage, while its SR ZVS operation provides greater than 90.3 percent of 12 V system efficiency in a liquid-

cooled, fan-less 800 VDC architecture.

“With rising AI power demands, moving to an 800 VDC input simplifies rack design, makes more efficient use of space and reduces copper usage,” said Roland Saint-Pierre, vice president of product development at Power Integrations. “With rising rack power demands, we see 1250 V and 1700 V PowiGaN devices as ideal choices for main and auxiliary power supplies, delivering the efficiency, reliability and power density required in 800 VDC data centers.”

Power Integrations, the only supplier of high-voltage 1250 V and 1700 V GaN switches in volume production, introduced its first GaN ICs in 2018 and currently has more than 175 million GaN switches in use in end products ranging from fast chargers to data centers to EVs.

For more information on Power Integrations’ PowiGaN technology for AI data centers and to access the white paper, titled “1250 V / 1700 V PowiGaN for 800 VDC AI Data Center Architecture,” please visit power.com/ai-data-center. To read NVIDIA’s technical blog on 800 VDC, click [here](#).

About Power Integrations

Power Integrations, Inc., is a leading innovator in semiconductor technologies for high-voltage power conversion. The company’s products are key building blocks in the clean-power ecosystem, enabling the generation of renewable energy as well as the efficient transmission and consumption of power in applications ranging from milliwatts to megawatts. For more information, please visit www.power.com.

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