



Coherent Advances Silicon Carbide Thick Epitaxy Capabilities for High-Voltage AI Datacenter and Industrial Power Applications Up to 10kV

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SAXONBURG, Pa., April 09, 2026 (GLOBE NEWSWIRE) -- Coherent Corp. (NYSE: COHR), a global leader in photonics, today announced advancements in its silicon carbide (SiC) epitaxy capabilities, enabling power devices up to 10kV for next-generation AI datacenter and industrial power applications.

As industrial electrification accelerates, demand is rising for more efficient, higher-voltage power systems across renewable energy, rail, fast-charging infrastructure, and grid infrastructure. Meanwhile, the growth of AI workloads is driving the need for ultra-efficient, high-power-density architectures in datacenters, where every gain in conversion efficiency reduces energy consumption and operating cost.

Coherent's latest 150mm and 200mm thick epitaxy platforms support device architectures up to 10kV in production. These platforms have demonstrated capability extending even beyond 10kV, enabling improved performance in demanding operating environments. These advancements allow customers to develop more compact, energy-efficient power conversion systems for both multi-megawatt datacenters as well as industrial infrastructure, while meeting the reliability requirements of large-scale deployments.

"Next-generation datacenter power architectures and high-voltage industrial systems are key drivers for silicon carbide adoption," said Gary Ruland, Senior Vice President, Silicon Carbide LLC. "Our new thick epitaxy capability for multi-kilovolt SiC devices enables customers to achieve higher efficiency and power density in critical applications such as energy infrastructure, high-capacity uninterruptible power supplies, and advanced power distribution systems in AI datacenters."

Coherent continues to expand its silicon carbide technology portfolio, from substrates to advanced epitaxy, to support customers across industrial, automotive, and energy markets, including the rapidly growing segment of high-efficiency datacenter power systems, reinforcing its leadership in wide-bandgap semiconductor materials.

For more information, please visit:

<https://www.coherent.com/materials/wide-bandgap-electronics/sic-substrates-epitaxy>

About Coherent

Coherent is the global photonics leader. We harness photons to drive innovation. Industry leaders in the datacenter, communications, and industrial markets rely on Coherent's world-leading technology to fuel their own innovation and growth. Founded in 1971 and operating in more than 20 countries, Coherent brings the industry's broadest, deepest technology stack; unmatched supply chain resilience; and global scale to help its customers solve their toughest technology challenges. For more information, visit us at [coherent.com](https://www.coherent.com).

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