



Luminus Leverages APC Electronics Partnership to Enhance Next-Generation Energy-Efficient LED Lighting Solutions

Strategic collaboration combines high-performance LEDs with advanced SiC power semiconductors to unlock unprecedented energy savings and system efficiency.

SUNNYVALE, CA, February 12, 2026 – Luminus Devices Inc., a leader in solid-state lighting technology, and APC Electronics (APC-E), an innovator in power semiconductor solutions, have teamed up to deliver energy efficiency gains for the global LED lighting industry. This exclusive collaboration pairs Luminus' renowned high-brightness LED products with APC-E's advanced silicon carbide (SiC) power semiconductors, enabling customers to build system architectures that maximize luminaire power efficiency thus reducing operational costs and environmental impact.

The partnership between Luminus LEDs and APC-E SiC power semiconductors represents a breakthrough in lighting system optimization. While Luminus delivers world-class light-emitting devices such as the latest MP-5050 "P" series with luminous efficacy as high as 244 lumens per watt, APC-E's proprietary SiC technology eliminates the efficiency losses that traditionally occur in power conversion stages. Switching a LED luminaire power supply design from traditional silicon to APC-E SiC components can reduce power supply weight and volume by 50% in 200W systems and improve system efficiency as much as 15% in very high power (1000W) applications from street lighting, high mast, high bay, stadium, as well as industrial applications such as UV curing and horticulture. Even lower power applications such as 100W fixtures can significantly benefit from the efficiency gains of SiC, and with SiC market prices having decreased by ~25% annually during the past few years, the low cost of SiC components makes the switch from silicon or even GaN to SiC especially attractive in today's market. Together, the complementary LED and APC-E SiC technologies from Luminus create end-to-end solutions that fundamentally transform how customers think about lighting performance.

"Luminus has established a leading reputation for LED efficacy, quality of light and reliability since our first generation of COBs in 2013," said Mark Pugh, CEO of Luminus Devices. "When paired with APC-E's SiC power devices, we're helping our customers take their systems to new levels of efficiency, which not only reduces energy usage and helps the environment but also enables rebates and other local government incentives. This partnership with APC-E brings value to our existing illumination customers and will expand widely into other industries in the coming years as they leverage unique, elegant solutions for demanding applications across industrial power supplies, data centers, EVs, and medical systems."



The Luminus + APC-E combination enables new energy-efficient system designs with critical optoelectronic and power components available through one convenient channel since Luminus has a strong global sales and distribution network.

APC-E's SiC MOSFETs eliminate tail current and reduce switching losses, while shrinking complementary passive components. These solutions enable compact luminaire power supply designs with lower capacitance and reduced on-state resistance compared to legacy systems.

APC-E's SiC Schottky Barrier Diodes (SBDs) feature remarkably low forward voltage with reduced capacitive charge, minimizing reverse recovery losses. These are ideal for power factor correction (PFC) stages, on-board chargers, and EV charging applications—markets experiencing explosive demand.

About Luminus Devices

For nearly 20 years, Luminus Devices has been at the forefront of LED technology, solving the lighting industry's toughest challenges. Luminus designs and manufactures high-performance solid-state lighting solutions for general illumination, specialty lighting, and emerging applications in healthcare, industrial, automotive, and entertainment sectors. Luminus LEDs deliver exceptional color quality, beam precision, energy efficiency, and longevity.

www.luminus.com

About APC Electronics

APC Electronics (APC-E) is an innovator in wide-bandgap power semiconductor design and manufacturing, led by power semiconductor veterans CEO Dr. W Albert Gu and CTO Dumitru G. Sdrulla. APC-E's team has invested years developing proprietary intellectual property around silicon carbide (SiC) po

wer devices and gate drivers. APC-E's technologies improve reliability, switching speed, and energy efficiency while enabling new system architectures across industrial power supplies, renewable energy, EV infrastructure, data centers, and advanced transportation applications.

About This Partnership

Luminus Devices is the exclusive worldwide sales channel and go-to-market partner for APC Electronics. Through this strategic collaboration, customers worldwide gain access to cutting-edge SiC power semiconductor solutions through Luminus' established regional representatives and distribution network. This ensures rapid local support, accelerated delivery timelines, and seamless integration with Luminus' LED product lines.