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FOR IMMEDIATE RELEASE

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At APEC 2026, Alpha and Omega Semiconductor to Showcase Advanced Solutions for AI Core Power, AI Factory, and Industrial Power

Learn how AOS' cutting-edge products support intensifying AI performance, deliver enhanced protection and thermal management while maximizing design flexibility and end-to-end system efficiency

SUNNYVALE, Calif., March 11, 2026 – Alpha and Omega Semiconductor Limited (AOS) (Nasdaq: AOSL), a designer, developer, and global supplier of a broad range of discrete power devices, wide bandgap power devices, power management ICs, and modules will showcase its latest advanced power management solutions that support mounting AI core power, AI factory and industrial power needs at the Applied Power Electronics Conference (APEC). Meet with AOS to learn. These new products offer advanced features that enable designers to meet power management challenges in several key application areas.

Booth highlights-

AI Core Power:

- Specifically designed for high-performance GPUs and SoCs used in graphics cards, AI compute, and AI data centers, two new controllers are available. The AOZ73216QI is AOS' state-of-the-art 16-phase, 2-rail controller based on the company's high-performance, proprietary AOS Advanced Transient Modulator (A^2TM) control scheme and capably meets the latest OpenVReg16 (OVR16) specifications. While AOZ73104QI is a 4-phase controller compliant with OVR4-22, it helps safely throttle GPU power for maximum performance.
- The newly released AOZ71049QI, AOZ71149QI, and AOZ71146QI power Intel IMVP9.3 Panther Lake and Wild Cat Lake CPUs. Currently in mass production for several OEM/ODMs used in AI Notebook, these products support up to 9-phase, 4-rail configurations to meet Intel CPU power requirements.
- AOS released the latest AOZ52986QI Smart Power Stage (SPS) in a 2-paddle, QFN3x4 package, which is compliant with the Intel common footprint spec, offering a compact space-saving total solution, best-in-class efficiency, and enhanced thermal conductivity compared to conventional SPS solutions. AOS also released a new NCP/OCP DrMOS AOZ53228QI product family featuring accurate NCP and OCP protection, longer peak current durations, and survivability of unreasonable current imbalance conditions, ideal for GPU and SOC power in AI Compute equipment.
- The AOZ13058DI Type-C sink and AOZ15953DI Type-C source protection switches support Type-C EPR 3.1 extended power levels. This powerful protection switch duo provides capabilities that overcome risks of short circuits, enabling efficient, reliable, and safe Type-C EPR 3.1 designs up to 240W. The AOZ13058DI offers overvoltage/ overcurrent protection features suited for 48V Type-C sinking applications, while the AOZ15953DI provides the additional protection features needed for Type-C sourcing applications.

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AI Factory:

- AOS' leading technology solutions support AI factory intensive power delivery needs including current 48V/54V power requirements. For high-power-density DC-DC applications in Intermediate Bus Converters (IBC) for AI Servers, AOS offers MOSFET solutions in state-of-the-art double-sided cooling packages, including AONC40202 and AONC68816 in DFN3.3x3.3 source down configuration, and AONA66642 and AONA68815 in DFN5x6 drain-down configuration, that meet stringent thermal requirements.
- In addition, AOS αSiC and GaN wide bandgap solutions that can efficiently handle higher voltages and frequencies are available to address increasing power demands and scalable workloads in AI data centers with 800V DC power distribution.
- For high-voltage AC/DC conversion AOS' leading αSiC MOSFETs, including the third-generation AOM020V120X3 and several topside-cooled options, such as the AOGT020V120X2Q, deliver exceptional high-voltage performance with ultra-low conduction and switching losses. These devices excel in 800 VDC applications, supporting both power sidecar configurations and direct single-step conversion from 13.8 kV AC grid input to 800 VDC. By streamlining the power chain, AOS αSiC solutions significantly boost end-to-end system efficiency while reducing space and cooling requirements.
- For high-density DC-DC conversion inside server racks, AOS' GaN FET portfolio delivers compact, high-performance power conversion (800 VDC to the low voltage) for GPUs and other AI accelerators. Key solutions include the surface-mount topside-cooled 650V AOGT035V65GA1 and the 100V AOFG018V10GA1, which leverage superior high-frequency switching to enable smaller, lighter, and more thermally efficient converters.
- AOS offers breakthrough technology that meets rugged hot swap requirements for High Safe Operating Area (SOA) that is critical to AI data centers. The AOLV66935 in LFPAK8x8 has ultra-low $R_{DS(ON)}$ (<1.85 mOhm) and a junction temperature rating of 175° C, which reliably meets 48V hot-swap requirements for AI servers.

Industrial Power:

- AOS has solutions to meet BLDC requirements across a variety of motor applications, from MOSFETs and motor driver ICs (half-bridge and 3-phase) to dual-core motor control MCUs for sensor-less BLDC motors.
- To meet motor drive design needs, AOS advanced MOSFETs deliver low losses and high current capability across various power packages and voltages from 30V to 150V. To minimize heat to the board, the GTPAK™ is designed to mount to a heatsink with a large exposed pad on the package surface. The topside cooling technology effectively transfers most of the heat to the heatsink instead of the PCB. For higher thermal and electrical performance requirements, AOS offers a combined solution that supports BLDC motor drives and battery management for power/garden tools, as well as higher-power applications in e-mobility.
- The motor driver IC product series (3-phase and half-bridge) provides an industry-standard package ideal for power tools, outdoor equipment, and e-mobility. The 3-phase products feature an integrated bootstrap diode, adjustable dead-time control, sleep mode for power savings, and multiple protection functions, including fault indication output, in a simple design that reduces PCB layout area. The half-bridge series offers design flexibility, can be used across multiple topologies, such as buck and buck-boost converters, and can form a full-bridge configuration.
- Dual-core MCU motor control products provide a highly integrated solution for driving sensor-less or sensored BLDC/PMSM motors, single-phase/three-phase induction motors, and servo motors. The AOZ6812QI and AOZ6816QI integrate an 8051 core and a motor control engine (ME). The 8051 core performs parameter configuration and routine processing, while the ME core integrates FOC, MDU, LPF, PID, and SVPWM modules that enable automatic FOC calculation or square-wave control.

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AOS will also give an exhibitor presentation:

Time and Location: Wednesday, March 25th, Expo Theatre 4

Title: Simplified Thermal Modeling for Power MOSFETs

https://apec-conf.org/attendees/sessions-seminars/exhibitor-presentations/

Where: APEC 2026, San Antonio, TX, at the Henry B. Gonzalez Convention Center

When: March 22 - 26, 2026

Location: Alpha and Omega Semiconductor Booth #2127

About AOS

Alpha and Omega Semiconductor Limited, or AOS, is a designer, developer, and global supplier of a broad range of discrete power devices, wide bandgap power devices, power management ICs, and modules, including a wide portfolio of Power MOSFET, SiC, GaN, IGBT, IPM, TVS, HV Gate Drivers, Power IC, and Digital Power products. AOS has developed extensive intellectual property and technical knowledge that encompasses the latest advancements in the power semiconductor industry, which enables us to introduce innovative products to address the increasingly complex power requirements of advanced electronics. AOS differentiates itself by integrating its Discrete and IC semiconductor process technology, product design, and advanced packaging know-how to develop high-performance power management solutions. AOS' portfolio of products targets high-volume applications, including personal computers, graphics cards, data centers, AI servers, smartphones, consumer and industrial motor controls, TVs, lighting, automotive electronics, and power supply units for various equipment. For more information, please visit www.aosmd.com.

Forward-Looking Statements

This press release contains forward-looking statements that are based on current expectations, estimates, forecasts, and projections of future performance based on management's judgment, beliefs, current trends, and anticipated product performance. These forward-looking statements include, without limitation, references to the efficiency and capability of new products and the potential to expand into new markets. Forward-looking statements involve risks and uncertainties that may cause actual results to differ materially from those contained in the forward-looking statements.

These factors include, but are not limited to, the actual product performance in volume production, the quality and reliability of the product, our ability to achieve design wins, the general business and economic conditions, the state of the semiconductor industry, and other risks as described in the Company's annual report and other filings with the U.S. Securities and Exchange Commission. Although the Company believes that the expectations reflected in the forward-looking statements are reasonable, it cannot guarantee future results, level of activity, performance, or achievements. You should not place undue reliance on these forward-looking statements. All information provided in this press release is as of today's date unless otherwise stated, and AOS undertakes no duty to update such information except as required under applicable law.

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