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FOR IMMEDIATE RELEASE

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Alpha and Omega Semiconductor Introduces 25V MOSFET in DFN3.3x3.3 Source-Down Packaging that Meets Power Demands in AI Servers

Designed to support high-power density, state-of-the-art DFN3.3x3.3 Source-Down packaging features center gate technology for easier routing on the PCB

SUNNYVALE, Calif., June 17, 2025 – Alpha and Omega Semiconductor Limited (AOS) (Nasdaq: AOSL), a designer, developer, and global supplier of a broad range of discrete power devices, wide band gap power devices, power management ICs, and modules, today introduced its AONK40202 25V MOSFET in state-of-the-art DFN3.3x3.3 Source-Down packaging technology. Designed for high power density in DC-DC applications, the AONK40202 provides features that meet the requirements of AI servers and data center power distribution. In particular, its Source-Down packaging technology offers a larger source contact to the PCB, and its center gate pin layout allows easier routing on the PCB, so the gate driver connection can be minimized.

Offering outstanding current handling capabilities, the AONK40202 MOSFET's DFN3.3x3.3 Source-Down packaging technology with clip enables continuous current capabilities up to 319A with a maximum junction temperature rated at 175°C. This provides significant potential for system-level improvements, such as better thermal management, enabling higher power density and greater efficiency.

"AONK40202, which utilizes advanced DFN3.3x3.3 Source-Down technology, offers a reduction in power losses and delivers better thermal performance compared to traditional DFN3.3x3.3 Drain-Down packaging solutions. The AONK40202, with its lower on-state resistance ($R_{DS(on)}$) and enhanced thermal performance, provides designers with the advanced technologies necessary to utilize PCB space more effectively. These features and many more in the AONK40202 are specifically designed to meet the increasing power density demands of AI servers," said Peter H. Wilson, Sr. Director of MOSFET product line at AOS.

Technical Highlights

Part Number	Package	V_{DS} (V)	V_{GS} (±V)	T_J (°C)	Continuous Drain Current (A)		Pulsed Drain Current (A)	$R_{DS(ON)}$ Max (mOhms) @10V
					@25°C	@100°C	@25°C	
AONK40202	DFN3.3x3.3B	25	12	175	319	224	644	0.7

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Pricing and Availability

The AONK40202 is immediately available in production quantities with a lead time of 14-16 weeks. The unit price in 1,000-piece quantities is $1.65.

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, 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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