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FOR IMMEDIATE RELEASE

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Alpha and Omega Semiconductor Enables 48V Hot Swap in AI Servers with New High SOA MOSFET

State-of-the-art MOSFET handles higher peak currents, delivering a cost-effective, high-performance, and enhanced reliability hot swap solution

SUNNYVALE, Calif., May 1, 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 announced its AOTL66935 utilizes AOS' 100V AlphaSGT™ proprietary MOSFET technology which combines the advantages of trench technology for low on-resistance with high safe operating area (SOA) capability that meets 48V hot swap requirements in AI server and telecom applications.

The AOTL66935 hot swap MOSFET prevents damage to the system by limiting the high inrush current with low power losses due to the very low on-resistance ($R_{DS(ON)}$). These features help deliver increased performance and reliability in harsh application conditions required in latest AI server designs. The AOTL66935 is available in TO-Leadless (TOLL) package, which is 30% smaller footprint compared to TO-263 (D2PAK). AOTL66935 is manufactured in IATF 16949-certified facilities. TOLL package technology is compatible with automated optical inspection (AOI) manufacturing requirements.

"48V hot swap in AI servers requires a MOSFET that excels in high current capability while providing exceptional SOA robustness with high reliability. We designed the AOTL66935 to meet these demands, and the low on-resistance reduces the power losses and can enable less devices in parallel," 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	
AOTL66935	TOLL	100	20	175	360	258	1440	1.95

Pricing and Availability

The AOTL66935 MOSFET is immediately available in production quantities with a lead time of 14-16 weeks. The unit price in 1,000-piece quantities is $4.2.

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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. 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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