Alpha and Omega Semiconductor, Inc.
475 Oakmead Parkway
Sunnyvale, California 94085 USA
408.830.9742

FOR IMMEDIATE RELEASE

Media Contact: Mina Galvan
Tel: 408.789.3233
Email: mina.galvan@aosmd.com

Alpha and Omega Semiconductor Introduces Ultra-Low Capacitance TVS Diode Series

New AOZ8S205BLS TVS Diodes Deliver Superior ESD Protection for High-Speed Line, Thunderbolt 5, USB4 v2.0, and Antenna-based Applications

SUNNYVALE, Calif., May 14, 2024 – 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 AOZ8S205BLS Series transient voltage suppressor (TVS) diodes. These ultra-low capacitance TVS diodes are designed to meet the increasing ESD protection needs in today's sensitive high-speed line and antenna-based applications. AOZ8S205BLS is engineered using AOS' innovative high-trigger voltage TVS platform, combined with its advanced packaging and the series' industry-leading low 0.075pF capacitance. It is ideal to protect high-speed serial interfaces such as USB4 v2.0 and Thunderbolt 5 that are used in a broad range of electronic systems.

Additional features that boost the protection capabilities of AOZ8S205BLS TVS diodes include lower insertion loss, reverse working voltages (VRWM) of 3.3V, 5V, and 24V, and accurate clamping voltage. The AOZ8S205BLS is a single-channel device housed in a 0.6x0.3mm leadless surface-mount device (SMD), which allows it to meet the small footprint requirement of a USB Type-C connector.

"At AOS, we recognized the need to increase the feature benefits of widely adopted 24V (VRWM) devices with high-trigger-voltages used for Short-to-VBUS protection in many computing industry designs. By offering ultra-low 0.075pF capacitance and high-trigger voltage in a single device with the introduction of the AOZ8S205BLS, AOS is delivering a space-saving and enhanced ESD protection solution to designers of high-speed interface and sensitive antenna applications," said Charles Chen, Marketing Director at AOS. "Solving a challenging problem in our partners' and customers' electronic products, we designed our new TVS diode series to help significantly reduce ESD failure rates, further safeguarding systems while streamlining design efforts."

-more-

Technical Highlights

Part Number	Channel	V_{RWM} (V)	Rated I_{PP} (A)	Capacitance C_J (pF)	V_{CL} (V) at $I_{TLP=12A}$	Application
		Max	Max	Typ	Typ	
AOZ8S205BLS-03	1	3.3	3	0.075	10	Thunderbolt 5, USB4 v2, Antenna
AOZ8S205BLS-05	1	5	3	0.075	10	Thunderbolt 5, USB4 v2, Antenna
AOZ8S205BLS-24	1	24	3.5	0.075	11	Thunderbolt 5, USB4 v2, Antenna, PD3.1 VBUS 20V

Pricing and Availability

The AOZ8S205BLS series is immediately available in production quantities with a lead time of 16 weeks. The unit price in 1,000-piece quantities is $0.066.

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 band gap 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 portable computers, flat-panel TVs, LED lighting, smartphones, battery packs, consumer and industrial motor controls, automotive electronics, and power supplies for TVs, computers, servers, and telecommunications 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.

# # #