ALPHA & OMEGA SEMICONDUCTOR

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FOR IMMEDIATE RELEASE

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Alpha and Omega Semiconductor Announces Expanded Surface Mount and Module Package Options for its 1200V αSiC MOSFETs

SUNNYVALE, Calif., June 6, 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 announced the expansion of their package portfolio options available for their second generation 650V to 1200V αSiC MOSFETs. Applicable to many critical applications such as xEV charging, solar inverters, and industrial power supplies, the new package selections give designers the added flexibility of multiple system optimization options to further maximize system efficiency while streamlining their manufacturing process. AOS will showcase its expanded surface mount and module package options at PCIM Europe 2024 in Nuremberg, Germany, June 11-13.

The first new surface mount package is available for the AOBB040V120X2Q, AOS' new 1200V/40mOhm αSiC MOSFET in a standard D2PAK-7L surface mount package. This AEC-Q101 qualified product is designed to replace traditional through-hole packages. It is ideal for applications such as on-board chargers (OBCs) where efficient cooling can be provided by vias and backside PCB heatsinks, simplifying the assembly flow and maximizing the power density. In addition, the low inductance package combined with the fast driver source-sense connection positions these AOS αSiC MOSFETs as one of the most efficient power-switching solutions in the market.

For additional design flexibility, AOS is releasing its GTPAK™ surface mount package with topside cooling features. In designs where a topside-mounted heatsink is viable, the direct heat path from the GTPAK minimizes the thermal resistance. It enables higher power dissipation for more effective PCB routing. The first AOS product in GTPAK is the AOGT020V120X2. This 1200V/20mOhm αSiC MOSFET is an ideal solution to meet the requirements of high-efficiency solar inverter and industrial power supply applications.

Finally, AOS announced the AOH010V120AM2 as the first product in its new AlphaModule™ high power baseplate-less module family. This 1200V/10mOhm half-bridge αSiC module features press-fit pins and an integrated thermistor. It is in a standard footprint module that enables the replacement of multiple discrete devices into a single compact form factor while simplifying both the mechanical and electrical design by providing a clear separation of electrical and cooling paths. Single modules are suitable for residential solar inverters, or several modules in parallel will allow scaling to power levels necessary to drive the needs of fast DC charging stations.

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“With the continued growth in EVs, energy infrastructure, and renewable energy, we continue to see increased interest in our αSiC MOSFETs. The expansion of our product portfolio to include these new advanced package options gives our customers the design flexibility they need to take advantage of our superior αSiC performance and continue the trend of pushing power systems to higher density and efficiency,” said David Sheridan, Vice President of SiC products at AOS.

Pricing and Availability

Please contact your local sales representative for sample availability and pricing.

Where: PCIM Europe 2024, Nuremberg, Germany

When: June 11 to 13, 2024

Location: Alpha and Omega Semiconductor, Booth# 9-519

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.

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