FOR IMMEDIATE RELEASE

Alpha and Omega Semiconductor Releases 700V and 600V αMOS5™ Super Junction MOSFETs in SMD-type DFN5x6 and DFN8x8 Packages

Optimized for High-Density, Low Profile and Small Footprint Power Systems

SUNNYVALE, Calif., March 5, 2020 – Alpha and Omega Semiconductor Limited (AOS) (Nasdaq: AOSL) a designer, developer, and global supplier of a broad range of power semiconductors and power ICs, today announced the release of 700V and 600V αMOS5™ Super Junction MOSFET families in SMD-type DFN5x6 and DFN8x8 packages. αMOS5 is AOS’ latest generation of high voltage MOSFET, designed to meet the high efficiency and high-density needs for Quick Charger, Adapter, PC Power, Server, Industrial Power, Telecom, and Hyperscale Datacenter applications.

The new αMOS5 DFN8x8 product’s footprint is only 64 mm², which is 57% smaller than that of D2PAK. Its package thickness is 0.9mm, an 80% height reduction versus D2PAK. The much lower source inductance of DFN8x8 package versus D2PAK helps significantly reduce gate ringing and Turn-on loss (Eon), and further improves the whole system’s reliability.

The new αMOS5 DFN5x6 product’s footprint is more compact at 30 mm², 61% smaller than that of DPAK. Its package thickness is only 0.75mm, a 67% height reduction versus DPAK. The αMOS5 DFN5x6 package’s low source inductance provides a distinct benefit over DPAK package, which is ideal for fast switching and small form-factor PCB layout.

Additionally, αMOS5 DFN8x8 features Kelvin Source connection, which greatly improves switching performance by reducing switch-on loss through separate power and drive sources.

The first wave of αMOS5 DFN products will be available as one 600V device of 210mOhm in DFN8x8 (AONV210A60) and two 700V devices of 660mOhm and 1.6Ohm in DFN5x6 respectively (AONS660A70F and AONS1R6A70). The future DFN product families will provide a much broader range of Rds(on). AOS αMOS5 DFN8x8 and DFN5x6 products also come with an MSL1 rating, meaning longer floor life and less maintenance concern.

“With 20 years of MOSFET development experience, AOS has a deep understanding of our customers’ needs toward High Performance and High-Density power system designs, which are key differentiators for SMPS. The launch of our DFN8x8 and DFN5x6 high voltage product families will allow us to expand application coverage on ultra-slim power supplies, from quick chargers/adapters to solar inverters and telecom rectifiers. Our DFN products’ superior Die-to-Footprint ratio and Kelvin Source feature enable board space-saving and fast switching, as well as Ease-of-Use through lower gate oscillation.” said Richard Zhang, Director of High Voltage MOSFET Product Line at AOS.

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Pricing and Availability

As part of the first wave release, AONV210A60 (600V 210mOhm DFN8x8), AONS660A70F (700V 660mOhm DFN5x6) and AONS1R6A70 (700V 1.6Ohm DFN5x6) are immediately available for production quantities. For 1000pcs, the unit prices are $2.7 for AONV210A60, $1.05 for AONS660A70F and $0.72 for AONS1R6A70.

About AOS

Alpha and Omega Semiconductor Limited, or AOS, is a designer, developer and global supplier of a broad range of power semiconductors, including a wide portfolio of Power MOSFET, IGBT, IPM, TVS, HVIC, GaN/SiC, 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, smart phones, battery packs, consumer and industrial motor controls 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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