

FOR IMMEDIATE RELEASE

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Alpha and Omega Semiconductor Introduces New RigidCSP™ Technology for Battery Management Applications

SUNNYVALE, Calif., (July 23, 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 RigidCSP™ for battery management. Alpha and Omega Semiconductor has developed a RigidCSP technology where you can decrease the on-resistance while increasing the mechanical strength to reduce breakage during assembly and stress during the lifetime of the battery MOSFET. The new package technology is ideal for applications such as smartphones, tablets, and ultra-thin notebooks.

As requirements increase for higher charging current, then ultra-low electrical resistance is needed for improved performance. In standard WL- CSP, the substrate can be a significant portion of the total resistance on the back-to-back MOSFETs. A thinner substrate will reduce the overall resistance but also will drastically reduce the mechanical strength. This reduction of mechanical strength can lead to more stress during the PCB assembly reflow process, which can lead to die warpage or die crack, which leads to failure in the application.

"Using RigidCSP technology offers performance improvement with high robustness. RigidCSP can be used for high aspect ratio CSP die size, and RigidCSP can enable an overall reduction in warpage/breakage from assembly board manufacturing," said Peter H. Wilson, Marketing Director of MOSFET product line at AOS.

Technical Highlights

| Part Number | Dimensions | V _{DS} (V) | V _{GS} (±V) | R _{SS(on)} Max (mOhms) @10V | R _{SS(on)} Max (mOhms) @8V | R _{SS(on)} Max (mOhms) @4.5V |
|-------------|--------------|---------------------|----------------------|---|--|--|
| AOCR32326 | 6.0mmx2.5mm | 30 | 20 | 2.6 | 2.9 | 4.2 |
| AOCR36330 | 6.22mmx2.5mm | 30 | 20 | 1.4 | 1.6 | 2.8 |

Pricing and Availability

The AOCR32326 and AOCR36330 are immediately available in production quantities with a lead-time of 14-16 weeks. The unit price for 1,000 pieces is \$1.44 and \$1.50, respectively.

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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 power semiconductors, including a wide portfolio of Power MOSFET, IGBT, IPM, TVS, HVIC, SiC/GaN, 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's portfolio of products targets high-volume applications, including portable computers, flatpanel TVs, LED lighting, smartphones, 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 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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