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FOR IMMEDIATE RELEASE

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Alpha and Omega Semiconductor Introduces First Generation αIGBT™ Technology Platform

High performance 600V IGBTs enable efficient inverter and motor control solutions

SUNNYVALE, Calif., Aug. 24, 2011 – Alpha and Omega Semiconductor Limited ("AOS") (Nasdaq: AOSL), a designer, developer and global supplier of a broad range of power semiconductors, introduces a new line of Insulated Gate Bipolar Transistors (IGBTs) to meet the growing need for energy efficient switching devices for motor control and power conversion applications.

AOS continues to execute its strategy to be a full service power solution provider by introducing its proprietary 600V αIGBT™ technology platform. The αIGBT™ devices combine a unique cell structure and vertical field stop technique to provide users with best-in-class performance, reducing both conduction and switching losses without compromising short-circuit robustness. The new technology platform is designed for ease-of-use and easy paralleling of devices for high current applications. The low Q_{GC}/Q_{GE} ratio allows the devices to withstand higher dV/dt transients and prevents oscillation issues in bridge applications. The αIGBT™ platform incorporates the world's thinnest IGBT devices fabricated on large diameter 200mm wafers, combined with cutting-edge deep trench technology to raise the bar for IGBT performance. The devices will be available in TO247, TO-220, TO-220F, TO-262, TO-262F and D^2PAK packages.

"By lowering $V_{CE(SAT)}$ and E_{ON}/E_{OFF} losses and incorporating a soft recovery diode, αIGBT™ technology will be an excellent asset for circuit designers using IGBTs for motor control, photovoltaic inverters and high current power factor correction applications," said Dr. Anup Bhalla, Vice President of High-Voltage Discretes at AOS. "This product delivers very attractive benefits in a whole new range of markets where power requirements are increasingly demanding."

"We are very pleased with the introduction of this new high-voltage technology platform, which marks another important milestone in the continued execution of our strategy. Together with the αMOS™ platform, the αIGBT™ establishes AOS as a strong player in the high voltage MOSFET and IGBT markets with best-in-class technology," commented Dr. Mike Chang, President and CEO of AOS. "These products will allow us to access the markets for industrial motor control, renewable energy inverters, consumer white goods, and other high voltage applications, achieving our twin goals of product diversification and rapid growth."

Technical Highlights

Device	$V_{DS(max)}$ Volts	$V_{CE(sat)}$ Volts	E_{OFF} (µJ/A)	Q_{GC}/Q_{GE}	Short-Circuit Withstand Time (µs)
αIGBT™	**600**	**1.6**	**14**	**1.5**	**>10**
Competitive Product A	600	1.7	12	7	>5
Competitive Product B	600	1.7	17	2.8	>5

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 and Power IC products. AOS seeks to differentiate itself by integrating its expertise in device physics, process technology, design and advanced packaging to optimize product performance and cost, and its product portfolio is designed to meet the ever increasing power efficiency requirements in high volume applications, including portable computers, flat panel TVs, battery packs, smart phones, portable media players, UPS, motor control and power supplies. 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, their potential to expand into new markets and the business goals of AOS. 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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