

**FOR IMMEDIATE RELEASE**

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## Alpha and Omega Semiconductor Offers Efficient Solutions for Solar Micro-Inverters

**SUNNYVALE, Calif., Sept. 20, 2011** – [Alpha and Omega Semiconductor Limited](#) (AOS) (Nasdaq: AOSL), a designer, developer and global supplier of a broad range of power semiconductors, today announced new AlphaMOS ( $\alpha$ MOS™) solutions that are optimized for emerging DC to AC power inverter applications. The new line up of products is ideally suited for use in solar micro-inverter modules, which are becoming the popular topology in residential and portable solar applications.

Traditional solar setups involve a single inverter for an entire panel array, and thereby are only as efficient as the least performing panel. In contrast, micro-inverters are installed on each panel and can be individually tuned to optimize performance and produce more energy. As the limited space for many solar installations constrain arrays sizes, it is imperative to maximize the performance from every panel. Among the many topologies employed by solar vendors, most solutions require MOSFETs to deliver the power harnessed from the panels to the load or grid.

“Solar energy systems endeavor to capture as much power as possible, and therefore, require high efficiency MOSFETs that minimize conduction and switching losses.” said Stephen Chang, Sr. Product Marketing Manager at AOS. “AOS AlphaMOS solutions are designed to dissipate less power through very low  $R_{DS(ON)}$  and Qg in order to maximize the performance of solar applications.”

For primary DC side control, AOS offers 40V to 100V AlphaMOS medium voltage MOSFETs with ultra-low  $R_{DS(ON)}$  and gate charge (Qg) in the industry standard TO-220 green package. These devices are 100% UIS and Rg tested to ensure high reliability.

Part	Package	VDS	VGS	$R_{DS(ON)}$ @10V	Qg
AOT240L	TO220	40V	20V	2.9m $\Omega$	22nC
AOT260L	TO220	60V	20V	2.5m $\Omega$	150nC
AOT290L	TO220	100V	20V	3.5m $\Omega$	90nC

For the line voltage side of the inverters, AOS also offers a wide range of 600V AlphaMOS solutions, including options with an internal fast recovery diode. The 600V AlphaMOS solutions provide maximum efficiency with low losses signified by their low  $R_{DS} \cdot Qg$  figure of merit. For applications that require higher power levels, the recently launched  $\alpha$ IGBT™ technology platform will soon provide a series of high power IGBTs to complete AOS’ solar micro-inverter product portfolio.

Part	Package	VDS	VGS	$R_{DS(ON)}$ @10V	Qg	Type
AOTF42S60	TO220F	600V	30V	99m $\Omega$	60nC	$\alpha$ MOS
AOD11S60	DPAK	600V	30V	399m $\Omega$	11nC	$\alpha$ MOS
AOTF12N60FD	TO220F	600V	30V	650m $\Omega$	41nC	$\alpha$ MOS with Fast Recovery Diode

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**Pricing and Availability**

These MOSFET devices are immediately available in production quantities with a lead-time of 12-14 weeks with the following unit prices for 10,000 pieces.

AOT240L	\$0.88
AOT260L	\$1.39
AOT290L	\$1.76
AOTF42S60	\$4.50
AOD11S60	\$1.25
AOTF12N60FD	\$0.65

**About AOS**

Alpha and Omega Semiconductor Limited, or [AOS](http://www.aosmd.com), 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](http://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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