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## **Alpha & Omega Showcases Green Power Technologies at APEC 2009**

### *New Low, Medium, and High Voltage MOSFETs in Halogen Free Packages Enable Green Power Supply Designs*

**SUNNYVALE, Calif, February 18, 2009** – Alpha & Omega Semiconductor, Inc. ([AOS](#)) today announced the release of several new silicon and package technologies aimed at providing Green solutions for power supply designers. These products will add high performance low- (30V), medium- (100V) and high-voltage (650V) [MOSFETs](#) to AOS' portfolio. The new devices are tailored to meet the high efficiency, low switching noise, and Green compliance requirements of the latest power supplies used in datacom, industrial, computing and high-end consumer power supply products.

#### **Low Voltage**

AOS' new combination of AON6200 high-side and [AON6702](#) low-side 30V N-Channel MOSFETs enable high efficiency and low noise power conversion. The AON6200 is the first product released on AOS' proprietary Split Gate (SGT) process that provides industry leading Ciss and Crss performance to reduce switching transition losses. The 2m $\Omega$  max AON6702 low side MOSFET is the flagship product of AOS' second generation SRFET™ (Soft Recovery MOSFET) process that integrates a Schottky diode monolithically with the MOSFET. The Schottky's low forward voltage drop and low stored charge, Qrr, provide high efficiency by reducing conduction and switching losses.

The AON6200 and AON6702 configured together can easily support 25A per phase with high efficiency, and offer 25% lower ringing than competing solutions. The lower noise operation improves overall system reliability and performance while also reducing EMI emissions. Both products are housed in <1mm profile DFN5x6 packages that utilize a Green, Halogen Free, molding compound.

AOS is also expanding its low voltage P-Channel MOSFET product offering. The [AON6403](#) is built on AOS' fourth generation (G4) P-Channel Trench process and offers the lowest on-resistance in its class. With a maximum on-resistance of 3.2m $\Omega$  it can provide the most efficient load and power switching in battery disconnect or hot swap applications.

## Mid Voltage

AOS released its first two 100V N-Channel MOSFETs on its proprietary SDMOS™ (Soft Diode MOSFET) series. The 14mΩ [AON6450](#) is housed in the Halogen Free DFN5x6 package and is ideally suited for half- and full-bridge telecom power supplies. The 15mΩ [AOT412](#) is housed in the Halogen Free TO-220 package, for which AOS is one of the first vendors to release a Green version. The AOT412 is specifically designed to provide more efficient synchronous rectifier solutions in AC-DC adapters when compared to traditional diode solutions, allowing compliance to the new 80+ power supply standard. The soft diode performance of AOS' SDMOS products reduces noise, simplifying the task of power supply designers to design reliable systems and release their products on time.

## High Voltage

AOS is expanding its high-voltage 500V to 600V MOSFET offering to include 650V options. AOS will release a full range of 650V products from 6A to 12A to support AC/DC applications that need more voltage design margin. The new MOSFETs allow high efficiency power conversion with reduced switching losses by offering an optimized combination of low  $R_{DS(ON)}$  and  $C_{rSS}$ . These devices are also offered in the Halogen Free TO-220 and TO-220F packages.

“Our goal is to offer high performance power technologies for each of the power supply building blocks. This begins at the AC input with Power Factor Correction and culminates at the heart of most modern electronic systems with a high power density Point of Load DC-DC converter,” said David Grey, Marketing Director for AOS' MOSFET products.

“AOS' growing MOSFET technology portfolio is a key part of our plan to develop total power solutions including both discrete and [Power IC](#) products. The release of our latest generation Green products and technologies demonstrates AOS' commitment to providing high performance and environmentally friendly power solutions to our customers,” added Tony Grizelj, AOS' Vice President of Marketing.

## Pricing and Availability

The new products are available immediately in production quantities. The table below shows brief specifications and pricing.

Part No.	Package	$V_{DS}$ (V)	$R_{DS(ON)}$ (mΩ max)	$C_{iss}$ (pF typ)	$C_{rSS}$ (pF typ)	$I_{DS}$ (A)	Unit Price (1k pcs)
AON6200	DFN5x6	30	8.5	1100	31	50	\$0.58
AON6702	DFN5x6	30	2.0	5900	560	85	\$1.10
AON6403	DFN5x6	-30	3.2	7600	1050	-85	\$1.25
AON6450	DFN5x6	100	14.5	2570	80	52	\$1.15
AOT412	TO-220	100	15.8	2680	100	60	\$0.90

## **About APEC 2009**

As The Premier Event in Applied Power Electronics™, [APEC](#) focuses on the practical and applied aspects of the power electronics business. APEC 2009 was held in Washington, DC on February 15-19, 2009 where AOS was an exhibitor.

## **About AOS**

Alpha & Omega Semiconductor, Inc. is a fabless semiconductor company that develops leading-edge analog power management solutions. AOS offers a wide portfolio of power MOSFET, Power IC and Transient Voltage Suppressor products that incorporate advances in device design, silicon and packaging technologies. AOS' products meet the ever-increasing performance and power efficiency requirements in high volume consumer applications such as portable and desktop computers, digital cameras, cell phones and LCD panels. AOS has offices and sales representatives worldwide including the Americas, Europe and Asia Pacific. For more information, please visit [www.aosmd.com](http://www.aosmd.com).

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