



News Release / Presseinformation

Infineon Introduces New OptiMOS™ 40V and 60V Devices Setting Highest Standards in Power Density and System Efficiency: 45 Percent Lower Figure of Merit than Alternative Devices

Neubiberg, Germany and Orlando, FL (USA) – February 6, 2012 – Today at the Applied Power Electronics Conference & Exposition (APEC) 2012, Infineon Technologies AG (FSE: IFX/OTCQX: IFNNY) introduced the new OptiMOS™ 40V and 60V power MOSFET families. These devices are optimized for synchronous rectification in Switched Mode Power Supplies (SMPS) such as those deployed in servers and desktop PCs. In addition, they are a perfect choice for a broad range of industrial applications like motor control, solar micro inverter and fast switching DC/DC converter. The new Infineon OptiMOS™ 40V and 60V families support high efficiency and power density with the lowest on-state resistance ($R_{DS(on)}$) and optimized switching behavior.

Due to constantly growing speed and power requirements of data processing, AC/DC designers face the challenge to improve system efficiency and power density while at the same time having to reduce system costs. Infineon's new 40V and 60V MOSFETs address this variety of challenges concurrently.

"Infineon is the first semiconductor company to introduce a 1mΩ, 40V MOSFET in a SuperSO8 package. This cuts the number of MOSFETs in the synchronous rectification of a 1,000W server power supply by half. Paralleling is no longer required and power density is increased dramatically," said Richard Kuncic, Senior Director Low Voltage Power Conversion at Infineon Technologies.

Solar applications also benefit from higher performance levels of semiconductor components. In typical photovoltaic topologies such as buck/boost for power optimizers or resonant full bridge for micro inverters, both $R_{DS(on)}$ and switching characteristics are important. By using the BSC016N06NS device from Infineon's

For the Trade Press: INFPM201202.022e

Media Relations:
Worldwide Headquarters
U.S.A.
Asia
Japan
Investor Relations

Name:
Christian Hoenicke
Mitch Ahiers
Chi Kang David Ong
Yoko Sasaki
EU/APAC/USA/CAN

Phone:
+49 89 234 25869
+1 408 503 2791
+65 6876 3070
+81 3 5745 7340
+49 89 234 26655

Email:
christian.hoenicke@infineon.com
mitch.ahiers@infineon.com
david.ong@infineon.com
yoko.sasaki@infineon.com
investor.relations@infineon.com

new 60V family, in a SuperSO8 package that measures 5mm x 6mm, a 1.5% higher efficiency can be achieved at a 20% load condition in a solar micro inverter.

Additional Information on New OptiMOS™ 40V and 60V Families

Implemented on Infineon's advanced thin wafer technology, the new OptiMOS™ 40V and 60V families offer 35 percent lower $R_{DS(on)}$ and lower gate charge (Q_g) reducing the Figure of Merit ($R_{DS(on)} \times Q_g$) by 45 percent when compared to alternative devices. This allows power loss reduction of ten percent when the devices are used in the secondary side rectification of a server power supply.

A monolithically integrated Schottky-like diode in the 1mΩ and 1.4mΩ 40V SuperSO8 devices reduces the reverse recovery charge (Q_{rr}) in synchronous rectification applications. This leads to lower conduction losses and higher efficiency. Furthermore, significant reduction of the voltage overshoot reduces the need for snubber circuitry, saving engineering cost and effort.

Availability and Pricing

The new OptiMOS™ 40V devices in SuperSO8 and S3O8 (3mmx3mm) packages are available in $R_{DS(on)}$ ranges from 1.0mΩ to 2.3mΩ and are priced at \$0.50 USD and \$1.05 USD per piece (10k pieces quantity).

The new OptiMOS™ 60V devices in SuperSO8 packages are available in $R_{DS(on)}$ classes of 1.6mΩ and 2.8mΩ and are priced at US \$0.85 and \$0.65. Additional devices are available in TO-220, S3O8, I²PAK (TO-262), D²PAK and DPAK (TO-252) packages with pricing from \$0.54 USD for 6.0mΩ $R_{DS(on)}$ to \$1.5 USD for 1.0mΩ $R_{DS(on)}$ ratings for 10k pieces quantity.

Further information on the New OptiMOS™ 40V and 60V devices is available at www.infineon.com/newoptimos

The new Infineon OptiMOS™ 40V and 60V products are highlighted at APEC 2012 (February 5-9) in Orlando/Florida, USA (Booth 801).

For the Trade Press: INFPM201202.022e

Media Relations:
Worldwide Headquarters
U.S.A.
Asia
Japan
Investor Relations

Name:
Christian Hoenicke
Mitch Ahiers
Chi Kang David Ong
Yoko Sasaki
EU/APAC/USA/CAN

Phone:
+49 89 234 25869
+1 408 503 2791
+65 6876 3070
+81 3 5745 7340
+49 89 234 26655

Email:
christian.hoenicke@infineon.com
mitch.ahiers@infineon.com
david.ong@infineon.com
yoko.sasaki@infineon.com
investor.relations@infineon.com

About Infineon

[Infineon](http://www.infineon.com) Technologies AG, Neubiberg, Germany, offers semiconductor and system solutions addressing three central challenges to modern society: [energy efficiency](#), [mobility](#), and [security](#). In the 2011 fiscal year (ending September 30), the company reported sales of Euro 4 billion with close to 26,000 employees worldwide. Infineon is listed on the Frankfurt Stock Exchange (ticker symbol: IFX) and in the USA on the over-the-counter market OTCQX International Premier (ticker symbol: IFNNY).

Further information is available at www.infineon.com

This news release is available online at www.infineon.com/press

For the Trade Press: INFPM201202.022e

Media Relations:
Worldwide Headquarters
U.S.A.
Asia
Japan
Investor Relations

Name:
Christian Hoenicke
Mitch Ahiers
Chi Kang David Ong
Yoko Sasaki
EU/APAC/USA/CAN

Phone:
+49 89 234 25869
+1 408 503 2791
+65 6876 3070
+81 3 5745 7340
+49 89 234 26655

Email:
christian.hoenicke@infineon.com
mitch.ahiers@infineon.com
david.ong@infineon.com
yoko.sasaki@infineon.com
investor.relations@infineon.com