Press Release

Infineon Introduces OptiMOS™ 5 25V and 30V Product Family, Exceeding 95% Efficiency, Delivering Highest Power Density for Voltage Regulator Solutions

Munich, Germany – March 12, 2015 – Infineon Technologies AG (FSE: IFX / OTCQX: IFNNY) today introduced the OptiMOS™ 5 25V and 30V product family, the next generation of Power MOSFETs in standard discrete packages, a new class of power stages named Power Block, and in an integrated power stage, DrMOS 5x5. Together with Infineon’s driver and digital controller products the company delivers full system solutions for applications such as server, client, datacom or teleocom.

Megatrends such as Cloud Computing, Internet of Things and Social Media drive an ever increasing demand for computing power in modern society. This is accompanied by a boost in energy consumption which, in return, triggers the need for energy efficiency within the power conversion chain. The newly introduced OptiMOS 25V and 30V product family offers benchmark solutions with efficiency improvements of around 1 percent across the whole load range compared to its previous generation, exceeding 95 percent peak efficiency in a typical server voltage regulator design. This improved performance is based for example on the reduction of switching losses (Q\text{switch}) by 50 percent compared to the previous OptiMOS technology. Thus, implementing the new OptiMOS 25V would lead to energy savings of 26.3kWh per year for a single 130W server CPU working 365 days. Adding 50,000 servers working in a server farm on average this would amount to savings of 1.3GWh per year.

New Packaging Technology

The launch of the OptiMOS 25V and 30V product family is accompanied by the introduction of a new packaging technology offering a further reduction in PCB area consumption. It is used in the Power Block product family and in the integrated powerstage DrMOS 5x5 and offers a source down low-side MOSFET for improved
thermal performance, with a reduction by 50 percent of the thermal resistance in comparison to standard package solution, such as SuperSO8.

Infineon`s Power Block is a leadless SMD package comprising the low-side and high-side MOSFET of a synchronous DC/DC converter into a 5.0x6.0mm² package outline. With Power Block, customers can shrink their designs up to 85 percent by replacing two separate discrete packages, such as SuperSO8 or SO-8. Both, the small package outline and the interconnection of the two MOSFETs within the package minimize the loop inductance for best system performance.

OptiMOS 5 25V is also used in an integrated power stage, combining DrMOS 5x5, driver and two MOSFETs, for a total area consumption on the PCB equal to 25mm². The integrated driver plus MOSFETs solution results in a shorter design time and is easy to design-in. Additionally, the dovetailed power stage includes a high accurate temperature sense of +/-5°C (compared to +/-10°C of an external one) which enables higher system reliability and performance.

Offering Complete System Solution
“With the significant reduction in switching losses, the OptiMOS 5 products allow engineers to operate their designs at higher switching frequencies, reduce energy consumption and save overall system costs. Together with our digital IC and driver family we offer a broad range of complete solutions for DC/DC voltage regulation applications, where DrMOS 5x5 and Power Block products are the designers’ choice for highest efficiency in industry standard footprints,” stated Richard Kuncic, Vice President and General Manager Power Management & Multimarket at Infineon Technologies.

Infineon at APEC 2015
Infineon will showcase the OptiMOS 5 25V and 30V product family as well as the Power Block and DrMOS 5x5 packages at the Applied Power Electronic Conference and Exposition (APEC) at Charlotte, North Carolina, from March 15 to 19 at Booth 509 and Booth 705.

Availability
Samples of the new OptiMOS 25V and 30V devices in SuperSO8, S3O8 and Power Block packages, with on-state resistances from 0.9mΩ to 3.3mΩ are avail-
able. Additional products with monolithic integrated Schottky-like diode and products in 30 V will be available from Q2 2015 onwards. DrMOS 5x5 will be released in Q2 2015. Samples are available. Further information is available at www.infineon.com/optimos5-25V30V, www.infineon.com/powerblock and www.infineon.com/drmos.

About Infineon
Infineon Technologies AG is a world leader in semiconductors. Infineon offers products and system solutions addressing three central challenges to modern society: energy efficiency, mobility, and security. In the 2014 fiscal year (ending September 30), the company reported sales of Euro 4.3 billion with about 29,800 employees worldwide. In January 2015, Infineon acquired US-based International Rectifier Corporation, a leading provider of power management technology, with revenues of USD 1.1 billion (fiscal year 2014 ending June 29) and approximately 4,200 employees.

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