



## **Buck Converters from Diodes Incorporated Combine High Current and High Efficiency**

**Plano, Texas – February 25, 2014** – Diodes Incorporated (Nasdaq: DIOD), a leading global manufacturer and supplier of high-quality application specific standard products within the broad discrete, logic and analog semiconductor markets, today introduced a pair of synchronous DC-DC buck converters for use in applications such as monitors, TVs and STBs. The AP65500 and AP65400 deliver continuous load currents of 5A and 4A respectively, 7A peak, at an efficiency as high as 96%. These devices operate at a switching frequency of 340kHz and incorporate a light-load efficiency improvement algorithm that maintains the devices' low-loss performance across a wide load range.

These buck converters provide current mode control for point-of-load power management and offer excellent line and load regulation, as well as a fast response to transient loads. A wide operating voltage range of 4.75V to 18V means the devices readily support 5V, 9V and 12V bus systems; the output is adjustable from 0.8V to 16V.

To safeguard downstream circuit components, the buck converters' built-in protection features include current limit and output over-voltage protection, under-voltage lockout and thermal shutdown. To prevent excessive in-rush current and output-voltage overshoot, the converters also provide a programmable soft-start function.

The buck converters' compact SO-8EP packaging, high level of component integration including on-chip low  $R_{DS(ON)}$  high- and low-side MOSFETs, and their minimal external support circuitry, simplifies board layout and minimizes space requirements for a wide range of distributed power architectures. For further information, visit the Company's website at [www.diodes.com](http://www.diodes.com).

**About Diodes Incorporated**

Diodes Incorporated (Nasdaq: DIOD), a Standard and Poor's SmallCap 600 and Russell 3000 Index company, is a leading global manufacturer and supplier of high-quality application specific standard products within the broad discrete, logic and analog semiconductor markets. Diodes serves the consumer electronics, computing, communications, industrial, and automotive markets. Diodes' products include diodes, rectifiers, transistors, MOSFETs, protection devices, functional specific arrays, single gate logic, amplifiers and comparators, Hall-effect and temperature sensors; power management devices, including LED drivers, AC-DC converters and controllers, DC-DC switching and linear voltage regulators, and voltage references along with special function devices, such as USB power switches, load switches, voltage supervisors, and motor controllers. Diodes' corporate headquarters, logistics center, and Americas' sales office are located in Plano, Texas. Design, marketing, and engineering centers are located in Plano; San Jose, California; Taipei, Taiwan; Manchester, England; and Neuhaus, Germany. Diodes' wafer fabrication facilities are located in Kansas City, Missouri and Manchester, with four manufacturing facilities located in Shanghai, China, and two joint venture facilities located in Chengdu, China, as well as manufacturing facilities located in Neuhaus and Taipei. Additional engineering, sales, warehouse, and logistics offices are located in Fort Worth, Texas; Taipei; Hong Kong; Manchester; Shanghai; Shenzhen, China; Seongnam-si, South Korea; Suwon, South Korea; Tokyo, Japan; and Munich, Germany, with support offices throughout the world. For further information, including SEC filings, visit Diodes' website at <http://www.diodes.com>.

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