

Light-Load Algorithm Improves Efficiency of DC-DC Buck Converters from Diodes Incorporated

Plano, Texas – September 10, 2015 – 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 the 1.5A AP65101 and 2A AP65201 synchronous DC-DC buck converters. These devices combine efficient operation with the standard pinout, space-saving TSOT26 package and are targeted toward consumer electronics, such as TVs, set-top boxes, computer monitors and home audio. These buck converters achieve maximum continuous current efficiencies up to 97%, with improved efficiency at lower loads ensured by an automatic light-load algorithm.

The AP65101 and AP65201 are designed for low-voltage regulation, especially in distributed power architectures, and operate from 4.5V to 16V inputs while delivering adjustable output voltage from 0.8V up to 80% of V_{IN} . A low quiescent supply current and integrated high- and low-side switches with low $R_{DS(ON)}$ both help to reduce power loss. Protection features, including under-voltage lockout, over-current, over-voltage and over-temperature, help prevent damage to downstream components and stress-induced premature component failure. The device enable pin also has a high voltage tolerance of up to 6V.

The high level of integration and minimal need for external components combined with the small-footprint TSOT26 package provide valuable cost and circuit board space savings. Current-mode operation enables fast transient response and easy loop stabilization, while other features like programmable soft-start and a 500kHz switching frequency contribute to ease of use. Further information is available at www.diodes.com.

About Diodes Incorporated

Diodes Incorporated (Nasdag: 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 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 located are in Kansas City, Missouri and Manchester, with two additional facilities located in Shanghai, Diodes has assembly and test facilities located in Shanghai and in China. Chengdu, China, as well as in Neuhaus and in Taipei. Additional engineering, sales, warehouse, and logistics offices are located in Taipei; Hong Kong; Manchester; Shanghai; Shenzhen, China; Seongnam-si, South Korea; and Munich, Germany, with support offices throughout the world. For further information, including SEC filings, visit Diodes' website at www.diodes.com.

###

Company Contact:

Diodes Incorporated Julie Holland VP, Worldwide Analog Products P: 972-987-3900 E: pressinquiries@diodes.com

Investor Relations Contact:

Shelton Group Leanne K. Sievers EVP, Investor Relations P: 949-224-3874 E: <u>Isievers@sheltongroup.com</u>