

New Series of High-Side/Low-Side Gate Drivers from Diodes Incorporated Delivers Higher Performance in an SO-8 Package

Plano, TX – February 26, 2019 – Diodes Incorporated (Nasdaq: DIOD), a leading global manufacturer and supplier of high-quality, application specific standard products within the broad discrete, logic, analog and mixed-signal semiconductor markets, today announced a new family of high-voltage, high-speed gate drivers for converters, inverters, motor control, and Class-D power amplifier applications. These devices are suitable for motor drive applications up to 100V, and simultaneously able to support power conversion and inversion applications operating at 200V. These features make them well-suited for a number of consumer and industrial designs, including power tools, robotics and drones, as well as small electric vehicles.

The DGD2003S8, DGD2005S8, and DGD2012S8 are 200V gate drivers covering halfbridge and high-side/low-side topologies, offered in the standard low-profile SO-8 package. These devices feature junction isolated level-shift technology to create a floating channel high-side driver for use in a bootstrap topology operating at up to 200V, with the ability to drive two N-channel MOSFETs in a half-bridge configuration.

All devices in the series feature standard TTL/CMOS logic inputs with Schmitt triggering and are able to operate down to 3.3V, making it simple to interface the drivers to control circuitry. The outputs are designed to withstand negative transients and include undervoltage lock-out for high-side and low-side drivers.

With a source and sink current of 290mA and 600mA, respectively for the DGD2003S8 and DGD2005S8, and 1.9A and 2.3A, respectively for the DGD2012S8, power efficiency is maintained across the range. The DGD2003S8 features a fixed internal deadtime of 420ns, while the DGD2005S8 has a maximum propagation time of 30ns when switching between high-side and low-side.

The DGD2003S8, DGD2005S8 and DGD2012S8 are available in the SO-8 package and operate across an extended temperature range of -40°C to +125°C.

Further information is available at <u>www.diodes.com.</u>

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 highquality application specific standard products within the broad discrete, logic, analog, and mixed-signal semiconductor markets. Diodes serves the consumer electronics, computing, communications, industrial, and automotive markets. Diodes' products include diodes, rectifiers, transistors, MOSFETs, protection devices, function-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 also has timing, connectivity, switching, and signal integrity solutions for high-speed signals. Diodes' corporate headquarters and Americas' sales office are located in Plano, Texas and Milpitas, California. Design, marketing, and engineering centers are located in Plano; Milpitas; Taipei, Taiwan; Taoyuan City, Taiwan; Zhubei City, Taiwan; Manchester, England; and Neuhaus, Germany. Diodes' wafer fabrication facility is located in Manchester, with an additional facility located in Shanghai, China. Diodes has assembly and test facilities located in Shanghai, Jinan, Chengdu, and Yangzhou, China, as well as in Hong Kong, Neuhaus, and Taipei. Additional engineering, sales, warehouse, and logistics offices are located in Taipei; Hong Kong; Manchester; Shanghai; Shenzhen, China; Seongnam-si, South Korea; Munich, Germany; and Tokyo, Japan, with support offices throughout the world.

Recent news releases, annual reports and SEC filings are available at the Company's website: http://www.diodes.com. Written requests may be sent directly to the Company, or they may be e-mailed to: diodes-fin@diodes.com.

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