



For immediate release

## ReDriver from Diodes Incorporated Boosts Signal Quality of High-Speed PCIe 4.0 Interfaces

**Plano, TX – April 18, 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 introduced a ReDriver for the server, storage, and networking market segment. The PI3EQX16904GL is a PCIe 4.0 compliant, 2.5Gbps to 16Gbps, four-differential channel, linear ReDriver. The device provides programmable linear equalization, output swing, and flat gain to optimize performance over a variety of physical media by reducing inter-symbol interference. It is the industry's first available ReDriver to support PCIe 4.0 while being backward-compatible with PCIe 3.0/2.0/1.0. Target applications for the device include storage and AI servers, workstations, 5G networking, CPU-to-network (PCIe NIC card) and CPU-to-storage (NVME) interconnects, and CPU-to-CPU interconnects within high-performance compute clusters.

The ReDriver, also known as a repeater IC, regenerates signals to boost the signal quality of high-speed interfaces. Faster signal frequencies leave designers with less signal margin with which to design reliable, high-performance systems. Using equalization, pre-emphasis, and other technologies, a single ReDriver can adjust and correct for known channel losses at the transmitter and restore signal integrity at the receiver. This enables reliable communications with low bit error rates (BER).

The PI3EQX16904GL supports four 100Ω differential current mode logic (CML) data I/Os and extends the signals across other distant data pathways on the user's platform. Linear ReDrivers are commonly used to achieve PCB trace extension while minimizing cost and power consumption. They can also deliver lower latency.

Requiring a supply voltage of 3.3V ±0.3V, the device is able to operate over an industrial temperature range of -40°C to +85°C.

The PI3EQX16904GL ReDriver is offered in a 42-contact TQFN (9mm x 3.5mm) package. Further information is available 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, 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 facilities are located in Manchester, Shanghai, China and Greenock, Scotland. 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](mailto:diodes-fin@diodes.com).

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