



**Product news**

## **MIPI PHY Switch from Diodes Incorporated Offers Fast Switching between High Speed and Low Power across Five Lanes**

**Plano, Texas – October 10, 2019** Diodes Incorporated (Nasdaq: DIOD) today announced the [PI3WVR648GEAEX](#) five-lane MIPI 2:1 switch, capable of switching physical layers that comply with either C-PHY or D-PHY serial interfaces, as defined by the industry standard specification for image sensors and cameras in smartphones and displays in mobile applications.

As smartphone and portable device manufacturers integrate to camera modules with higher resolution and speed, it is becoming more necessary to support high-speed (HS) MIPI. However, supporting low-power (LP) MIPI is equally important in battery-powered applications. The PI3WVR648GEAEX supports both HS and LP MIPI, allowing connected modules to switch between both standards without incurring delays or signal degradation.

The PI3WVR648GEAEX offers fast switching among its five lanes, arranged as 10 channels in a single-pole, double-throw configuration. The 2:1 multiplexing allows rapid switching between HS and LP MIPI physical interfaces. A typical use is to connect two MIPI-compliant devices to a single module with a C-PHY or D-PHY interface, such as a multi-camera smartphone.

With support for four data lanes with one clock lane in D-PHY or three data lanes in C-PHY, the PI3WVR648GEAEX can sustain data rates of up to 4.5Gbps (D-PHY) and 3.5Gsps (C-PHY) with a total bandwidth of 6.0GHz, low crosstalk of -28dB at 2.25GHz, and off-isolation of -23dB at 2.25GHz.

The PI3WVR648GEAEX can switch both HS and LP PHY specifications with a maximum propagation delay of just 0.25ns. It operates at a supply voltage of between 1.5V and 5V, with a switch-on resistance of 5Ω for HS and LP MIPI signals.

The PI3WVR648GEAEX is available in a 36-pin WLCSP.

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, UK; and Neuhaus, Germany. Diodes' wafer fabrication facilities are located in Manchester and Greenock, UK, and 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](mailto:diodes-fin@diodes.com).

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### **Company Contact:**

Diodes Incorporated  
Emily Yang  
VP, Worldwide Sales and Marketing  
P: 972-987-3900  
E: [pressinquiries@diodes.com](mailto:pressinquiries@diodes.com)

### **Investor Relations Contact:**

Shelton Group  
Leanne K. Sievers  
EVP, Investor Relations  
P: 949-224-3874  
E: [lsievers@sheltongroup.com](mailto:lsievers@sheltongroup.com)