



Product news

USB Type-C Linear Mux/DeMux ReDriver with Integrated USB-C Detector from Diodes Incorporated Restores Signal Integrity and Reduces Latency

Plano, Texas – March 31, 2020 – Diodes Incorporated (Nasdaq: DIOD) today announced the [PI3EQX10612/PI3EQX10312](#) 2-port 10Gbps linear ReDriver™ devices with integrated USB-C® detection for equipment implementing a USB Type-C® interface. Offering 1:2/2:1 mux/demux functionality, the ReDrivers can be used to extend the reach of USB signals running across rigid or flexible PCBs in gaming consoles, laptops, desktop computers, tablets, and other consumer applications.

As the speed of serial buses, such as USB, continues to increase, overcoming signal integrity issues and transmission losses requires the use of ReDrivers and retimers/repeaters. While retimers generally terminate a signal before retransmitting it, which can introduce significant latency, the PI3EQX10612/PI3EQX10312 ReDrivers are designed to amplify the signal while operating at the same speed as the bus. The increased drive this provides can allow the serial bus to travel over significantly longer PCB traces without any loss of signal. Every dB of channel loss compensation provided equates to a measurable increase in PCB track length.

The PI3EQX10612/PI3EQX10312 are fully compliant with the USB 3.2 Gen 2 and Gen 1 Super Speed standards. They provide adjustable linear equalization, output swing, and flat gain to reduce intersymbol interference with an automatic slumber mode that enables adaptive power management. The ReDrivers employ pre-emphasis at the transmission point to help compensate for channel losses, delivering high reliability and low bit error rate at the receiver. Control is achieved using an I2C interface or pin control. The PI3EQX10312 offers additional features including plug-in detection for USB-C connector and Vconn to power active cables.

Further information is available at www.diodes.com

USB Type-C® and USB-C® are registered trademarks of USB Implementers Forum.

ReDriver™ is a trademark of Diodes Incorporated.

About Diodes Incorporated

Diodes Incorporated (Nasdaq: DIOD), a Standard and Poor's SmallCap 600 and Russell 3000 Index company, delivers high-quality semiconductor products to the world's leading companies in the consumer electronics, computing, communications, industrial, and automotive markets. We leverage our expanded product portfolio of discrete, analog, and mixed-signal products and leading-edge packaging technology to meet customers' needs. Our broad range of application-specific solutions and solutions-focused sales, coupled with worldwide operations of 25 sites, including engineering, testing, manufacturing, and customer service, enables us to be a premier provider for high-volume, high-growth markets. For more information visit www.Diodes.com.

#

Company Contact:

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

Investor Relations Contact:

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