



New Product Announcement

PI3EQX1014

10Gbps, Two-Port ReDriver Boosts Signal Quality of High-Speed USB Interfaces for USB Type-A Ports

The PI3EQX1014 is a low-power, 10Gbps, two-port linear ReDriver™ that is compliant with USB 3.2 Gen 2x1, and backward compatible with USB 3.2 Gen 1 at 5Gbps.

The device is included in the Intel® Modern Standby Platform Component List (PCL).

Its adjustable linear equalization, output swing linearity, and flat gain optimizes performance over a variety of physical media by reducing intersymbol interference.

Diodes' intelligent, patented ReDriver technology enables longer PCB trace lengths while minimizing cost and power consumption.

The PI3EQX1014 is available in an ultra-small and thin U-QFN2545-34 package type, occupying only 2.5mm x 4.5mm and reducing PCB size and total bill of materials (BOM) cost.

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The DIODES Advantage

This USB 3.2 Gen 2x1, 10Gbps ReDriver supports modern standby mode for two-port USB Type-A data signals.

- **USB 3.2 Gen 2x1, Dual-Port, Linear ReDriver**
Supports 10Gbps data rates in USB Type-A ports
- **Modern Standby Mode**
Enables system designers to meet latest requirements
- **Ultra-Small and Thin U-QFN2545-34 Package**
Reduces PCB size and cost
- **Individual Channel Adjustment of Linear Equalization, Output Swing, and DC Flat Gain**
Compensates signal losses of PCB trace lengths, which reduces intersymbol interference

Applications

- Laptop/desktop PCs
- Smart handheld devices
- Workstations
- Servers

Typical Application



USB 3.2 Gen 2x1, 10Gbps ReDriver Portfolio

Part Number	Description	Channels	Data Rate	Lanes/Ports	Max Output Swing	Programming Interface	Packages
			Gbps		mV		
PI3EQX1014	USB 3.2 Gen 2x1 ReDriver Ultra-Small Package	4	10	2/2	1000	Pinstrap	U-QFN2545-34 (ZTF34)
PI3EQX1002E2	USB 3.2 Gen 2x1 ReDriver Ultra-Small Package	2	10	1/1	1000	Pinstrap	W-QFN2525-24 (ZR24)

Ordering Information

Orderable Part Number	Compliance (Only Automotive Supports PPAP)	Packaging Code	Package	Moisture Sensitivity	Packing	
					Quantity	Carrier
PI3EQX1014ZTFEX	Standard	ZTF34	U-QFN2545-34 (2.5mm x 4.5mm x 0.60 mm)	MSL-1	3,500	13" Tape & Reel