



New Product Announcement

PI3EQX1064

10Gbps, 2-Port ReDriver™ Boosts Signal Quality of High-Speed USB Interfaces for USB Type-A® Ports

The PI3EQX1064 is a low-power, 2-port linear ReDriver, compliant with USB 3.2 Gen 2x1 10Gbps, and backward compatible with USB 3.2 Gen 1, 5Gbps.

The device supports modern standby mode with less than 5mW to save power consumption in the system.

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

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

The PI3EQX1064 is available in an ultra-small and thin U-QFN2143-32 (ZTFA32) package type, occupying only 2.1mm x 4.3mm and reducing PCB size and the total bill of materials (BOM) cost.



The DIODES Advantage

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

- **USB 3.2 Gen 2x1, Dual-Ports, Linear ReDriver**
Supports 10Gbps data rates in USB Type-A ports
- **Supports Modern Standby Mode**
Enables system designers to meet latest requirements
- **Ultra-Small and Thin U-QFN2143-32 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 inter-symbol interference

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Applications

USB 3.2 and USB-A ports in:

- Laptops/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	Package
			Gbps		mV		
PI3EQX1064	USB 3.2 Gen 2x1 ReDriver with Ultra-Small Package	4	10	2/2	1000	Pinstrap	U-QFN2143-32 (ZTFA32)
PI3EQX1014	USB 3.2 Gen 2x1 ReDriver with Ultra-Small Package	4	10	2/2	1000	Pinstrap	U-QFN2545-34 (ZTF34)
PI3EQX1002E2	USB 3.2 Gen 2x1 ReDriver with Ultra-Small Package	2	10	1/1	1000	Pinstrap	W-QFN2525-24 (ZR24)

Ordering Information

Orderable Part Number	Compliance (Only Automotive Supports PPAP)	Package	Moisture Sensitivity	Packing	
				Quantity	Carrier
PI3EQX1064ZTFAEX	Standard	U-QFN2143-32 (ZTFA32)	MSL-1	3,500	13" Tape & Reel