



New Product Announcement

PI3EQX1004E
PI3EQX1002E

10Gbps ReDriver Boosts Signal Quality of High-Speed USB Interfaces

The PI3EQX1004E and PI3EQX1002E are 2- and 1-port, respectively, linear ReDrivers compliant with USB 3.1 Gen 2 10Gbps. Both are backwards compatible with USB 3.1 Gen 1, 5Gbps.

The devices offer ultra-small and thin package types to reduce PCB size and total BOM cost.

They have adjustable linear equalization, output swing, and flat gain to optimize performance over a variety of physical media by reducing intersymbol interference.

With Diodes' intelligent patented technology, these devices extend PCB trace lengths while minimizing cost and power consumption.

They operate from a supply voltage of 3.3V.

The PI3EQX1004E is available in the UQFN-34, and the PI3EQX1002E is available in the TQFN-24.



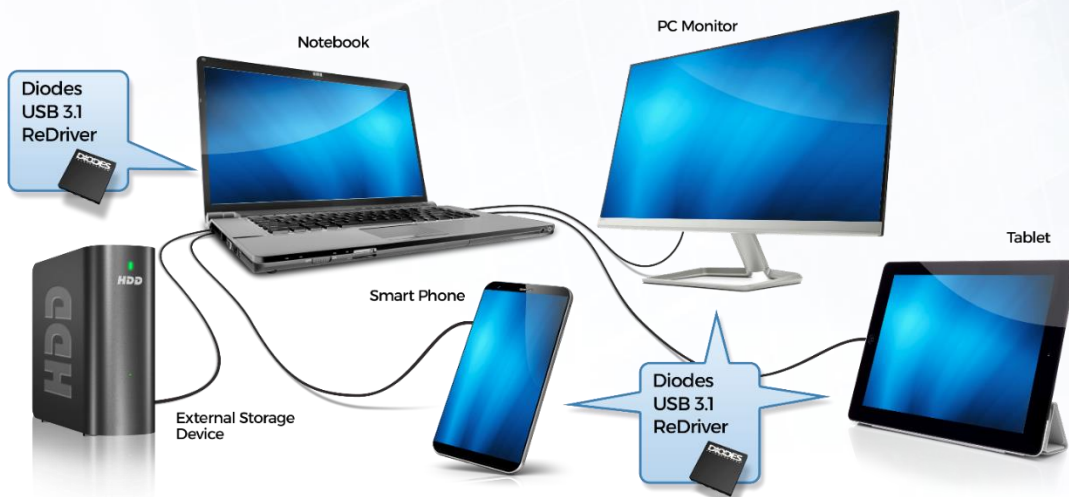
DIODES Advantage

- **10Gbps, 2-port and 1-port Linear ReDrivers**
Supports USB 3.1 Gen 2 and backward compatible to USB 3.1 Gen 1
- **Ultra Small and Thin Packages Reduce PCB Size and Cost**
PI3EQX1004E: UQFN-34L, 2.5mm x 4.5mm x 0.6mm
PI3EQX1002E: TQFN-24L, 2.5mm x 2.5mm x 0.75mm
- **Adjustable Linear Receiver Equalization, Output Swing, and Flat Gain**
Compensates signal loss of PCB trace length with different settings

Applications

- Laptop PC
- Tablet PC
- Desktop PC
- Gaming
- TV
- Workstation
- Server
- Embedded/Industrial PC

Application Usage



To find out more information:

<https://www.diodes.com/part/PI3EQX1004E>

<https://www.diodes.com/part/PI3EQX1002E>

USB 3.1 Gen 2, 10Gbps ReDriver Portfolio

Part Number	Description	Channels	Data Rate (Gbps)	Lanes/ Ports	Output Swing Max (mV)	Programming Interface	Packages
PI3EQX1002B1	USB 3.1 Gen 2 ReDriver	2	10	1/1	N/A	Pinstrap	TQFN (ZL30) 2.5mm x 4.5mm
PI3EQX1002E	USB 3.1 Gen 2 ReDriver, Ultra-small package type	2	10	1/1	1000	Pinstrap	TQFN (ZR24) 2.5mm x 2.5mm
PI3EQX1004B1	USB 3.1 Gen 2 ReDriver	4	10	2/2	1000	Pinstrap	TQFN (ZH42) 3.5mm x 9.0mm
PI3EQX1004E	USB 3.1 Gen 2 ReDriver, Ultra-small package type	4	10	2/2	1000	Pinstrap	UQFN (ZTF34) 2.5mm x 4.5mm

Ordering Information

Ordering Code	Packaging Code	Package Description	Quantity per Reel	Reel Size
PI3EQX1004EZTFEX	ZTF34	34-contact UQFN (2.5mm x 4.5mm x 0.75mm)	3500	13"
PI3EQX1002EZREX	ZR24	24-contact TQFN (2.5mm x 2.5mm x 0.55mm)	3500	7"