



New Product Announcement

PI3USB3200

Type-C USB 3.1 Gen 2/USB 2.0 Switch

Diodes' PI3USB3200 is a 3-to-2 differential channel multiplexer/demultiplexer switch.

This solution can switch multiple signal types up to a data rate of 10Gbps. Using a unique design technique, Diodes is able to optimize the impedance and capacitance of the switch such that the attenuation observed through the switch is minimal. The wide input voltage range and protection features enable mixed analog signal design on USB legacy or USB Type-C™ connector.

The unique design technique also offers a layout targeted for USB 2.0 and USB 3.1 signals, which minimizes the channel-to-channel skew as well as channel-to-channel crosstalk, as required by high-speed signals.

USB Type-C is a trademark of USB Implementers Forum



The Diodes Advantage

Highest Bandwidth Type-C USB3.1 Gen2 (10Gbps)/USB2 MUX

- **Excellent Bandwidth: 7GHz**
Excellent signal fidelity for high data rate at 10Gbps signals
- **-2.4dB Insertion Loss at 10Gbps**
Results in lower channel loss thus better signal at the receiver
- **-10dB Return Loss at 10Gbps**
Better preservation of the original signal
- **-22dB Crosstalk at 10Gbps**
Reduced jitter with better signal integrity
- **50µA Active Supply Current**
Assists in usage of portable applications

Applications

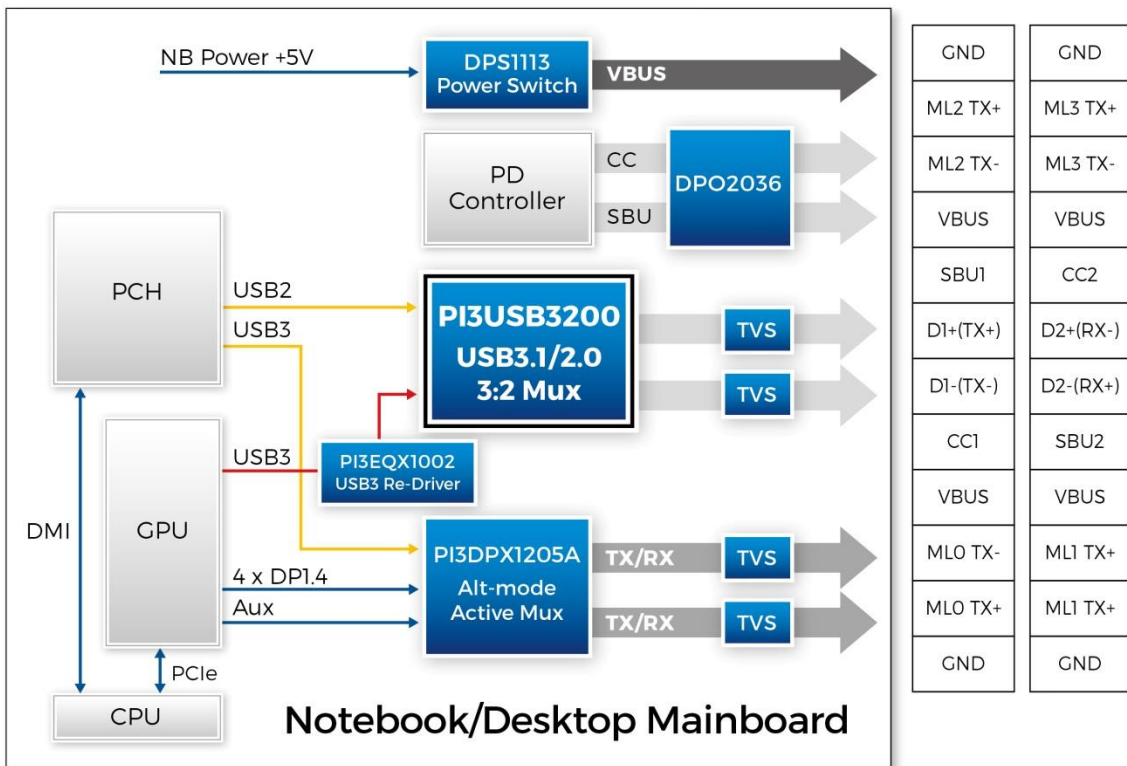
- Routing one lane USB 3.1 Gen2 and/or up to one channel of USB 2.0 over Type-C connector
- **Can be used in:**
 - Notebook
 - Desktop
 - Tablet
 - All-in-One PC
 - Monitors/Gaming
 - VR Headset



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Application Diagram in Notebook/Desktop



Product Portfolio

Part Number	Description	Packages
PI3USB3200	3:2 USB3.1 Gen2/USB2 Crossbar Switch	2.5mm × 2.5mm 24TQFN 2.5mm × 4.5mm 20TQFN

Ordering Information

Ordering Codes	Package Codes	Package Descriptions
PI3USB3200ZREX	ZR	24-Contact 2.5mm × 2.5mm (TQFN) Tape & Reel
PI3USB3200ZBBEX	ZBB	20-Contact 2.5mm × 4.5mm (TQFN) Tape & Reel

For more Information: [BizLink VirtualLink™ Products Simplify Next-Gen VR and Mixed-Reality Devices](#)