



New Product Announcement

PI3USB31532

USB Type-C 3.1 Gen2, DP 1.4 Crossbar Switch

The PI3USB31532 is a 10Gbps 6:4 differential channel bi-directional matrix switch solution for switching USB 3.1 Gen2 and/or DP 1.4 signals through USB Type-C™ connector.

It multiplexes either 1 lane of USB 3.1 Gen2, 1 lane of USB 3.1 Gen2 and 2 channels of DP1.4, or 4 channels of DP1.4 to the USB Type-C connector.

In addition, AUXHPD channels are also multiplexed to the Type-C connector.

The PI3USB31532 offers excellent signal integrity for high-speed signals and low power dissipation.



The Diodes Advantage

Highest Bandwidth USB Type-C 3.1 Gen2 (10Gbps)/DP 1.4 (8.1Gbps) Crossbar Switch

- **Excellent bandwidth: 8.3GHz -3dB Bandwidth**
Excellent signal fidelity for high data rate 10Gbps signals
- **Low Insertion Loss at 10Gbps**
Results in lower channel loss thus having better signal at the receiver
- **-15dB Return Loss at 10Gbps**
Better preservation of the original signal
- **-38dB Crosstalk at 10Gbps**
Reduced jitter with better signal integrity
- **0.35mA Active Supply Current**
Helps in usage in portable applications

Applications

- | | | |
|---|--|--|
| ▪ Routing 1 lane USB 3.1 Gen2 and/or up to 4 channels of Display Port 1.4 signals over Type-C connector | Can be used in: <ul style="list-style-type: none">▪ PC▪ Industrial PC▪ Mini-PC▪ Docking Station▪ Gaming & POS | <ul style="list-style-type: none">▪ Notebook▪ Desktop▪ Tablet▪ All-In-One PC▪ Phones |
|---|--|--|

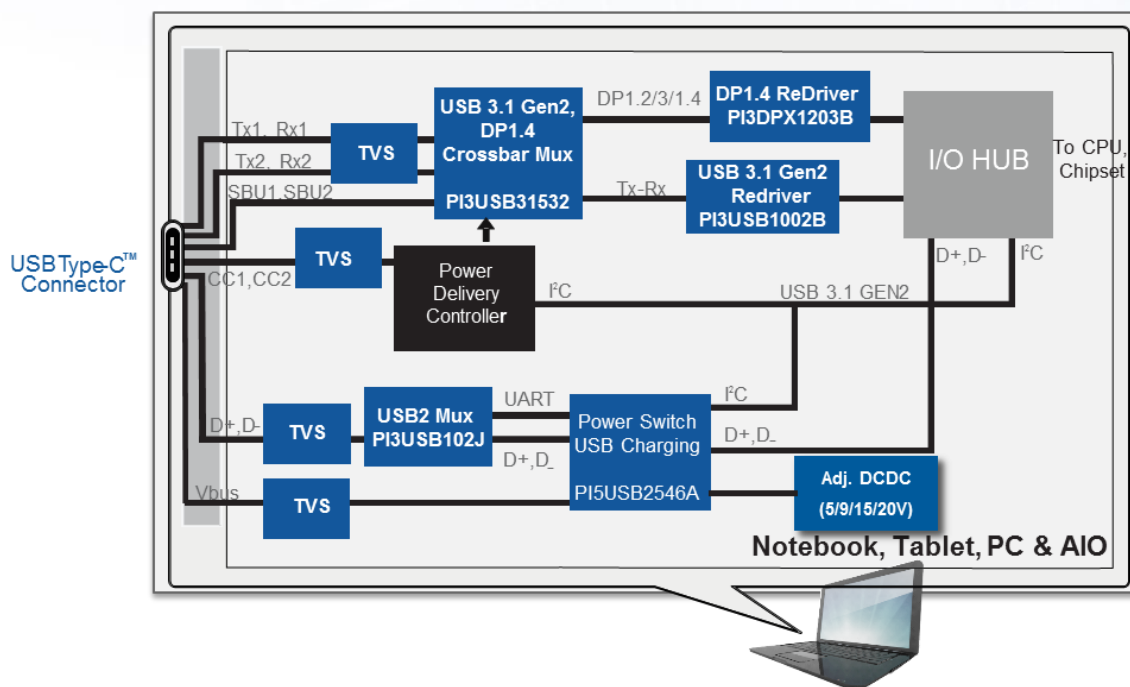
USB Type-C is a trademark of USB Implementers Forum.



New Product Announcement

PI3USB31532

Application Diagram in Notebook



Product Portfolio

Ordering Code	Description	Package
PI3USB31532	6:4 USB3.1 Gen2/DP1.4 Crossbar Switch	3x6mm 40TQFN

To find out more information: <https://www.diodes.com/part/PI3USB31532>

Ordering Information

Ordering Code	Packaging Code	Package Description
PI3USB31532ZLEX	ZL	40-Contact 3x6mm (TQFN)
PI3USB31532ZLCX	ZLC	40-Contact 3x6mm (TQFN) Tape & Reel