



## 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:**
  - PC
  - Industrial PC
  - Mini-PC
  - Docking Station
  - Gaming & POS
  - Notebook
  - Desktop
  - Tablet
  - All-In-One PC
  - Phones

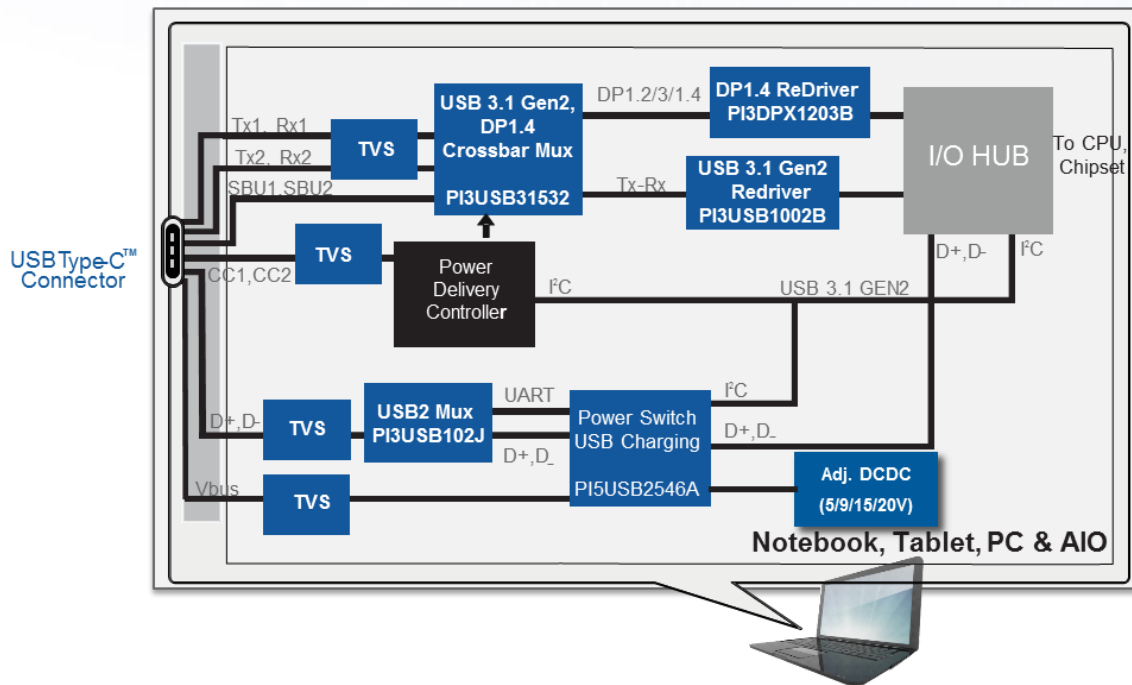
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# New Product Announcement

## 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
PI3USB31532ZLE	ZL	40-Contact 3x6mm (TQFN)
PI3USB31532ZLEX	ZL	40-Contact 3x6mm (TQFN) Tape & Reel