The PI3USB31534 is the worldwide first 6:4 differential channel bi-directional crossbar switch solution for switching USB3.1 Gen1/Gen2 and HDMI 2.0 signals through USB-C™ connector. It multiplexes either 1 lane of USB3.1 Gen1/Gen2 or 4 channels HDMI to the USB-C connector.

In addition, HEAC+/HEAC- channels are also multiplexed to the Type-C connector. PI3USB31534 offers excellent signal integrity for high-speed signals and low power dissipation. Insertion loss is -2.2dB and return loss is -15dB at 10Gb/s speed of USB3.1 Gen2.

The Diodes Advantage

Optimization/Integration solution for HDMI-Over-USB-C

- **High Performance for HDMI 2.0 and USB3.1 Gen2**
  -3dB bandwidth: 7Ghz; Insertion Loss: -2.2dB@10Gb/s

- **Compact/Advance Package for Perfect Spacing**
  2.5mm x 4.5mm UQFN

- **Single chip solution for HDMI-Over-Type-C**
  Cover all sideband signal of HDMI

- **Ultra-Low Power consumption**
  350uA for IDD and 10uA for IDDQ

Applications

- Digital Camera
- Smart Phone
- PC/Notebook

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

<table>
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<tr>
<th>Part Number</th>
<th>Configuration</th>
<th>Insertion Loss@10Gb/s</th>
<th>Crosstalk@10Gb/s</th>
<th>Package</th>
<th>Temperature Range</th>
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<tbody>
<tr>
<td>PI3USB31534ZTF</td>
<td>6:4</td>
<td>-2.2dB</td>
<td>-38dB</td>
<td>34-UQFN (2.5 x 4.5mm)</td>
<td>-40°C to 85°C</td>
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Ordering Information

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<td>U-QFN2545-34</td>
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