



New Product Announcement

PI3USB31534

USB3.1 Gen2/HDMI 2.0 over USB-C 6:4 MUX

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

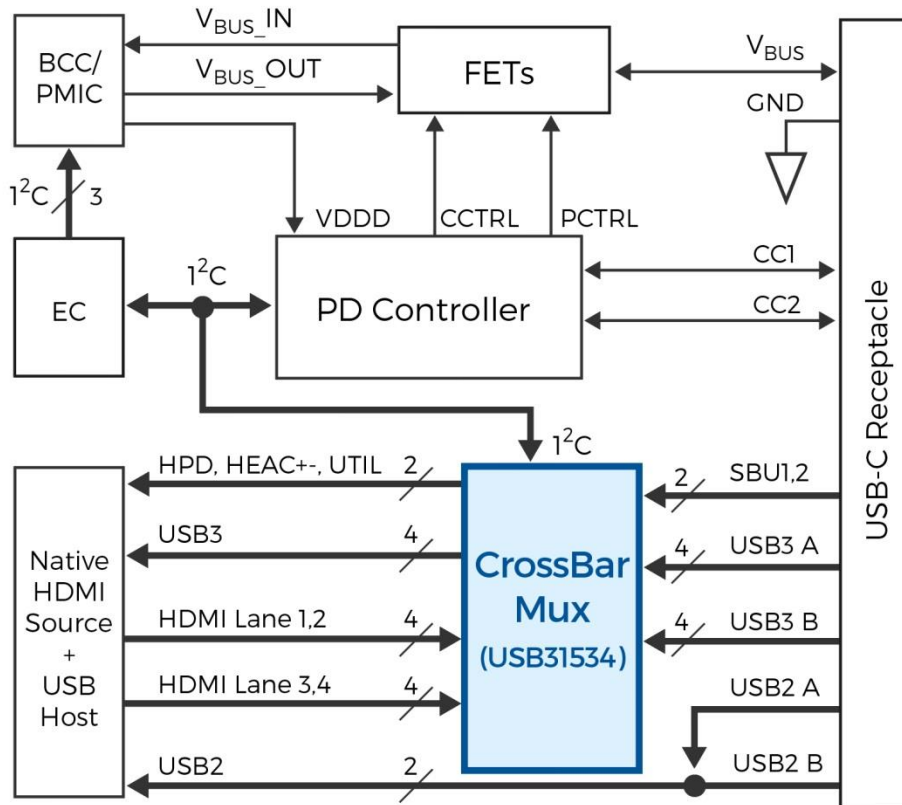
USB Type-C is a trademark of USB Implementers Forum.



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Block Diagram



Product Portfolio

Part Number	Configuration	Insertion Loss@10Gb/s	Crosstalk@ 10Gb/s	Package	Temperature Range
PI3USB31534ZTF	6:4	-2.2dB	-38dB	34-UQFN (2.5 x 4.5mm)	-40C to 85°C

Ordering Information

MPN	Packaging	MOQ
PI3USB31534ZTFEX	U-QFN2545-34	3,500