

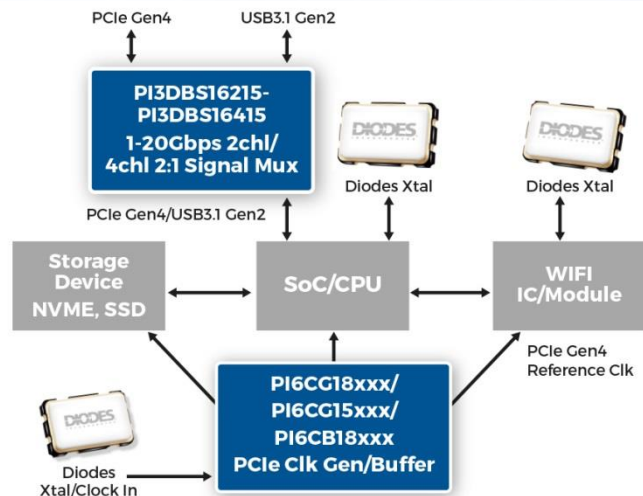
High-Speed 1 to 20Gbps Signal Mux Supports PCIe 4 and Thunderbolt 3

The PI3DBS16215 and PI3DBS16415 are parts of a family of very high-performance passive signal Mux/Demux. This family can switch multiple serial protocols up to data rate of 20Gbps.

Using a unique design technology, Diodes is able to minimize the impedance of the switch, such that attenuation observed through the switch is minimal.

The unique technology also offers a layout targeted for USB 3.1 Gen 2, 10GE, PCIe Gen4, Thunderbolt™ 3 and SAS 3.0, which minimizes the channel-to-channel skew, as well as channel-to-channel crosstalk as required by high speed signal.

Thunderbolt is a trademark of Intel Corporation.



DIODES Advantage

High-Frequency Performance with Flexible Options

- **2-Channel, 4-Channel, 2-to-1 and 4-to-1 Mux**
Offers flexibility in terms of number of channels and routing
- **Very High -3dB Bandwidth of 13Ghz**
Enables data rates of up to 20Gbps
- **Low Insertion Loss: - 1.3dB@16Gbps**
Minimal attenuation of the signal
- **Very Small Profile Package: 3x6mm for 2-to-1 Mux**
Enables use in tight space constrained mobile applications.

Applications

- Server/Storage
- Embedded
- PC/Notebook
- Networking Routers and Switches



New Product Announcement

PI3DBS16215
PI3DBS16415

Product Portfolio

Part Number	Configuration	# of Diff Channel	Voltage Supply	Package	Temperature Range
PI3DBS16215ZBB	1:2; flow-back pinout	2	3.3	20-TQFN (2.5 x 4.5mm)	-40 to +85°C
PI3DBS16415ZH	1:2; flow-back pinout	4		42-TQFN (3.5 x 9mm)	
PI3DBS16415ZLC	1:2; flow-back pinout	4		40-TQFN (3 x 6mm)	

Ordering Information

MPN	Packaging	MOQ
PI3DBS16215ZLEX	20-TQFN	3,500
PI3DBS16415ZHEX	42-TQFN	3,500
PI3DBS16415ZLCEX	40-TQFN	3,500

Further Information

PI3DBS16215: <https://www.diodes.com/part/PI3DBS16215>

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