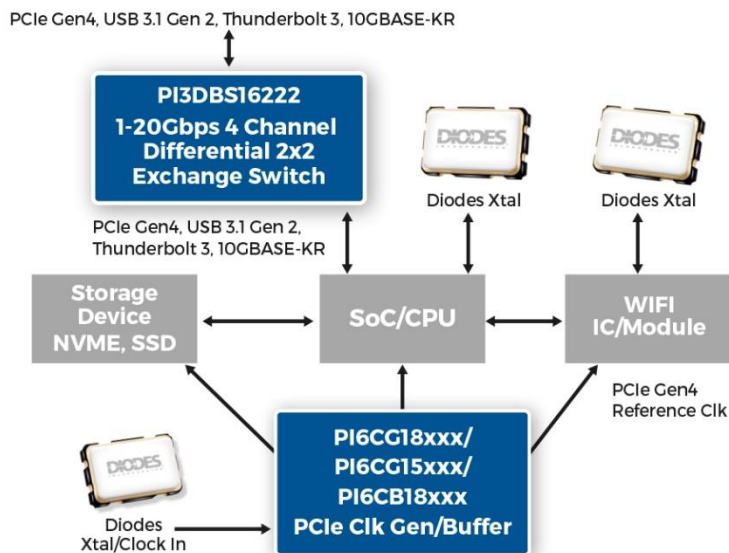


PCIe Gen 4, Thunderbolt 3, 4-Channel, Differential 2x2 Exchange Switch

The PI3DBS16222 is a 4-channel, differential, 2x2 exchange switch. The device is part of a family of very high-performance passive exchange switches. 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 Gen 4, 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 standards.



The Diodes Advantage

High Frequency Performance with Flexible Options

- **4-Channel 2x2 Exchange Switch**
Offers flexibility in terms of routing
- **Very High -3dB Bandwidth of 13Ghz**
Enables data rates of up to 20Gbps
- **Low Insertion Loss: - 1.5dB@16Gbps**
Minimal attenuation of the signal
- **Very Small Profile Package: 2mmx4mm**
Enables use in tight-space, constrained mobile applications

Applications

- Server/Storage (PCIe Gen 4)
- Embedded (USB 3.1 Gen 2)
- PC/Notebook (USB 3.1 Gen 2, Thunderbolt 3)
- Networking Routers and Switches (10GBASE-KR)



New Product Announcement

PI3DBS16222

Product Portfolio

Part Number	Configuration	# of Diff Channel	Voltage Supply	Package	Temperature Range
PI3DBS16222ZL	2:2; CrossBar Mux	2	3.3V	30-TQFN (2.5mm x 4.5mm)	-40°C to +85°C
PI3DBS16222XEA	2:2; CrossBar Mux	2		24-X1QFN (2mm x 4mm)	

Ordering Information

MPN	Packaging	MOQ
PI3DBS16222ZLEX	30-TQFN	3500
PI3DBS16222XEAEX	24-X1QFN	3500

Further Information

<https://www.diodes.com/part/PI3DBS16222>