

PI3PCIE3412

3.3V, PCI Express® 3.0, 8.0Gbps, 2-Lane (4-Channel), 2:1 Mux/DeMux Switch

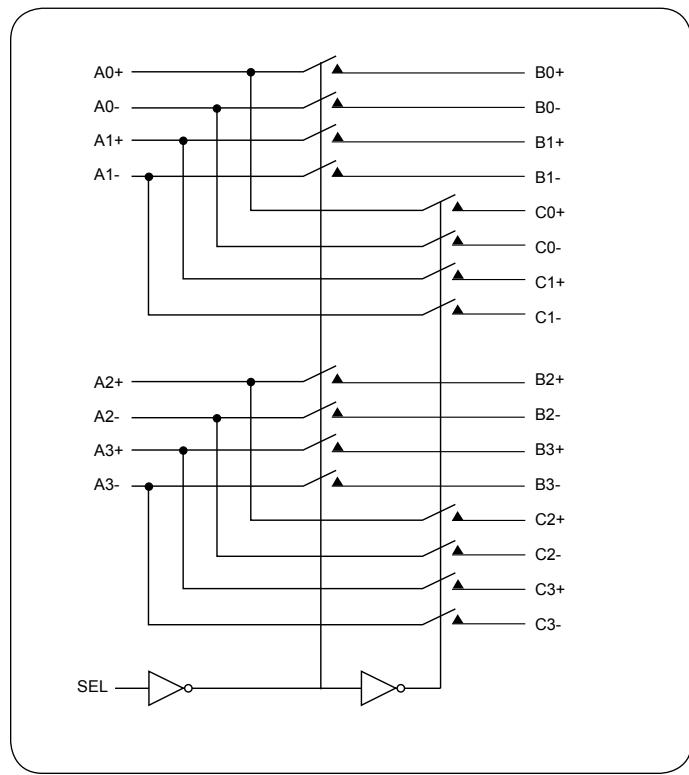
Pericom Semiconductor's PI3PCIE3412 is an 8 to 4 differential channel multiplexer/demultiplexer switch. This solution can switch 2 full PCI Express® 3.0 lanes to one of two locations. Using a unique design technique, Pericom has been able to minimize the impedance of the switch such that the attenuation observed through the switch is minimal. The unique design technique also offers a layout targeted for PCI Express signals, which minimizes the channel to channel skew as well as channel to channel crosstalk as required by the PCI Express specification.

Application

Routing of PCI Express® 3.0, signals with low signal attenuation.

- ❑ High-end PC/Gaming/Server
- ❑ Workstation

Block Diagram



Features

- 4 Differential Channel, 2:1 Mux/DeMux
- PCI Express® 3.0 Performance, 8.0Gbps
- Flow-through pinout
- Bi-directional operation
- Low Bit-to-Bit Skew, 10ps max
- Low channel-to-channel skew, 20ps max
- Low Crosstalk: -35dB@4 GHz
- Low Off Isolation: -21dB@4 GHz (8.0Gbps)
- Low insertion loss: -1.3dB@4 GHz (8.0Gbps)
- -3dB Bandwidth: 8.7GHz
- Supply Voltage 3.3V
- Packaging (Pb-free & Green):
 - 42-contact, TQFN (ZH42)

Utilization of PI3PCIE3412 in PC Gaming Application

