

## PI3PCIE3412

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

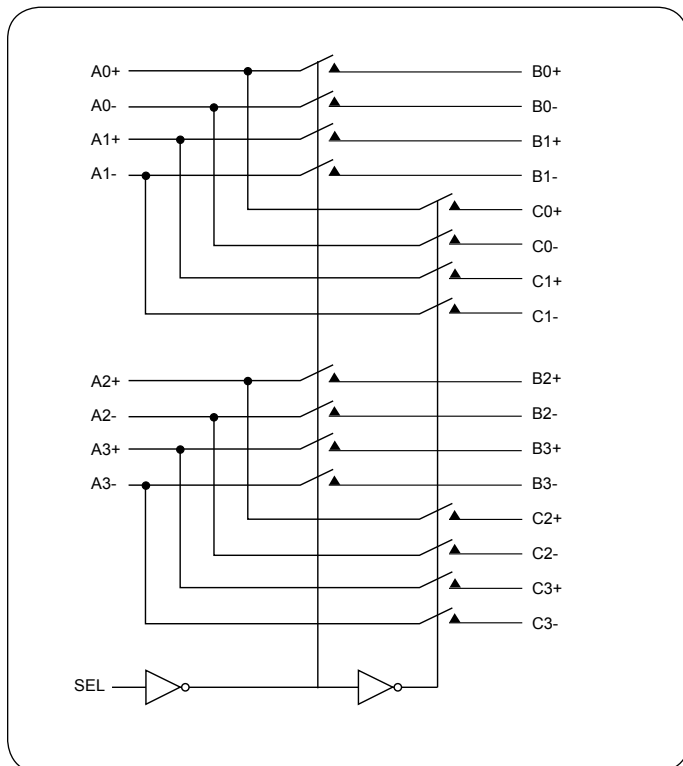
Pericom Semiconductor's PI3PCIE3412 is an 8 to 4 differential channel multiplexer/demultiplexer switch. This solution can switch 2 full PCI Express® 3.0 lanes to one of two locations. Using a unique design technique, Pericom has been able to minimize the impedance of the switch such that the attenuation 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

