

PI3USB304

3.3V USB 3.0 SuperSpeed Dual 2:1 Mux/DeMux Switch with Enable

Pericom Semiconductor's PI3USB304 is a dual USB 3.0 2:1 switch. It can switch transmit and receive differential signals for two 5 Gbps SuperSpeed USB 3.0 lanes.

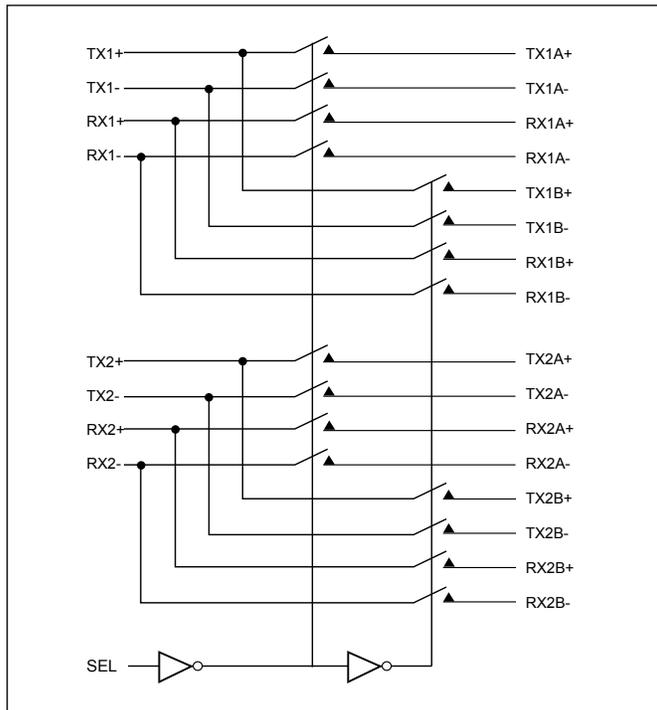
Using advanced high-speed transmission gate technology, PI3USB304 is bidirectional and offers both excellent signal integrity and very low power.

-3 dB bandwidth is 8.2 GHz. Insertion loss is extremely low, only 1 dB at 2.5 GHz. All other ac parameters – return loss, crosstalk, off isolation – lead the industry in performance. Power dissipation is very small -- 0.5 mW typical (0.15 mA @ 3.3V)

Application

→ Routing USB 3.0 SuperSpeed signals.

Block Diagram



Features

- Dual 2:1 USB 3.0 Switch
- Bi-directional Operation
- 5 Gbps Performance
- Very high -3 dB bandwidth: 8.2 GHz
- Low Insertion Loss: -1dB @ 2.5 GHz
- Excellent Return Loss: -29 dB @ 2.5 GHz
- Low Crosstalk: -37 dB @ 2.5 GHz
- Low Off Isolation: -25 dB @ 2.5 GHz
- Low Bit-to-Bit Skew, 10 ps max
- Low Channel-to-Channel Skew, 20 ps max
- Supply Voltage 3.3V
- Low power dissipation: 0.5 mW typ.
- Packaging (Pb-free & Green):
 - 42-contact, TQFN (ZH42)

Application Diagram

