

**PRODUCT BRIEF**

**SIGNAL INTEGRITY SOLUTIONS**

**PI2EQX632E**

**1.8V 5.0Gbps, 2-port, USB 3.0 Mux/DeMux ReDriver**

**Description**

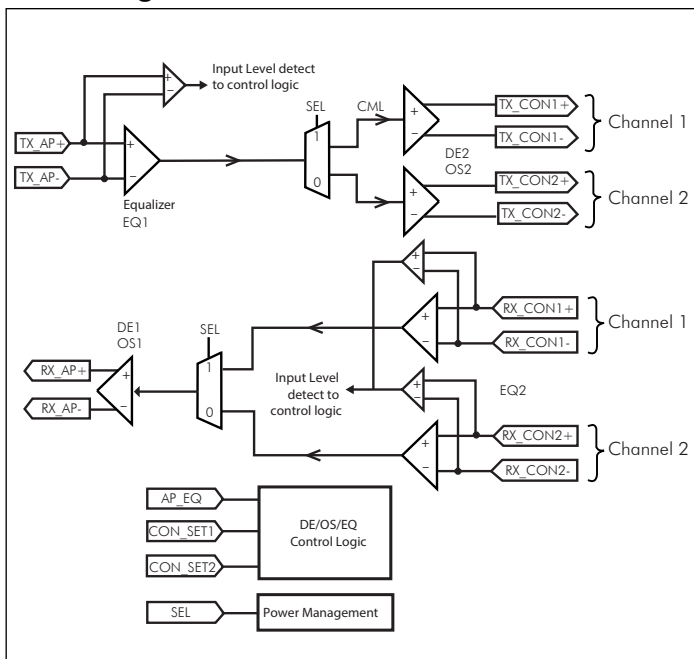
Pericom Semiconductor's PI2EQX632E is a low power, high performance 5.0 Gbps 2-Port USB3.0 Mux / DeMux ReDriver™ designed specifically for the USB 3.0 protocol.

The device provides programmable equalization, swing and De-Emphasis to optimize performance over a variety of physical mediums by reducing Inter-Symbol Interference.

PI2EQX632E supports two 100Ω Differential CML data I/O's between the Protocol ASIC to a switch fabric, over cable, or to extend the signals across other distant data pathways on the user's platform.

The integrated equalization circuitry provides flexibility with signal integrity of the signal before the ReDriver. A low-level input signal detection and output squelch function is provided for each channel. Each channel operates fully independently. The channels' input signal level (on xl+/-) determines whether the output is active. The PI2EQX632E also includes an adaptive power management feature to maximize battery life for power sensitive consumer devices.

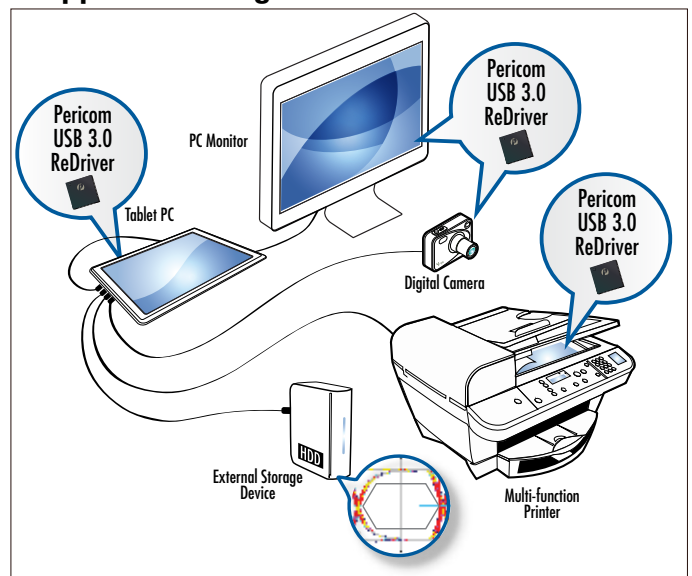
**Block Diagram**



**Features**

- USB 3.0 compatible
- Full Compliance to USB3.0 Super Speed Standard
- 1 to 2 DeMux from host TX to device RX
- 2 to 1 Mux from device TX to Host RX
- Pin Adjustable Receiver Equalization
- Pin Adjustable output swing
- Pin Adjustable Output Emphasis
- 100Ω Differential CML I/O's
- Input signal level detect and squelch for each channel
- Automatic Receiver Detect
- Low Power
- Single Supply Voltage: 1.8V

**Application Diagram**



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