



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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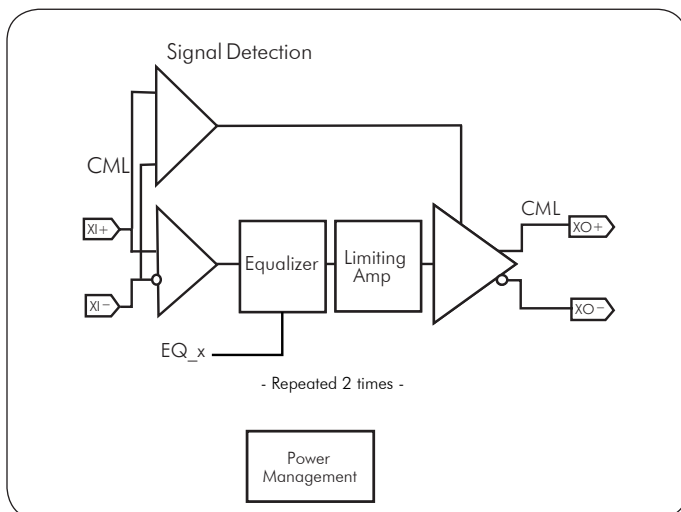


## PI3EQX7741

### 5.0Gbps, 1-port, (2-Channel) USB 3.0 ReDriver™

Pericom Semiconductor's PI3EQX7741 is a low power, high performance 5.0 Gbps signal ReDriver™ designed specifically for the USB 3.0 protocol. The device provides programmable equalization, De-Emphasis, and input threshold controls to optimize performance over a variety of physical mediums by reducing Inter-Symbol Interference. PI3EQX7741 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. When the channels are enabled  $EN\_x\# = 0$  and operating, that channels' input signal level (on  $xI+/-$ ) determines whether the output is active. If the input signal level of the channel falls below the active threshold level ( $V_{th-}$ ) then the outputs are driven to the common mode voltage. In addition to signal conditioning, when  $EN\_x\# = 1$ , the device enters a low power standby mode. The PI3EQX7741 also includes a fully programmable receiver detect function. When the RxDet pin is pulled high, automatic receiver detection will be active. The receiver detection loop will be active again if the corresponding channel's signal detector is idle for longer than 25mS. The channel will then move to Unplug Mode if load not detected, or it will return to Low Power Mode (Slumber Mode) due to inactivity.

### Block Diagram



### Features

- USB 3.0 compatible
- Two 5.0Gbps differential signal pairs
- Adjustable Receiver Equalization
- 100Ω Differential CML I/O's
- Pin Configured Output Emphasis Control
- Input signal level detect and squelch for each channel
- Automatic Receiver Detect with digital enable/disable
- Low Power : ~328mW
- Auto "Slumber" mode for adaptive power management
- Stand-by Mode – Power Down State
- Single Supply Voltage: 3.3V
- Packaging: 20-Contact TQFN (4x4mm)

Figure 1

