



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!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## PI3EQX501BQ

AECQ-100 Qualified 5.0Gbps, 1-Channel, USB3.0 ReDriver

### Description

Diodes Incorporated PI3EQX501BQ is a low power, high performance 5.0 Gbps signal ReDriver designed specifically for the USB 3.0 protocol. The device provides programmable equalization and De-Emphasis to optimize performance over a variety of physical mediums by reducing Inter-Symbol Interference.

PI3EQX501BQ supports one 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. The channels' input signal level determines whether the output is active.

The PI3EQX501BQ also includes a receiver detect function.

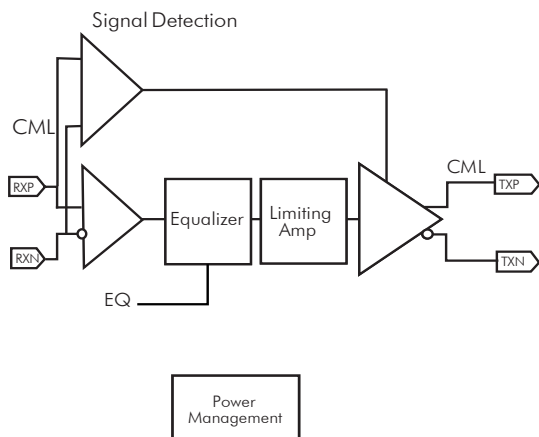
The receiver detection loop will be active again if the corresponding channel's signal detector is idle for longer than 7.3mS.

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.

### Features

- USB 3.0 compatible
- Full compliancy to USB 3.0 Super Speed standard
- One 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 function
- AECQ-100 Qualified
- Automatic Receiver Detect
- Low Power : 165mW
- Auto "Slumber" mode for adaptive power management
- Single Supply Voltage: 3.3V
- Packaging: 8-Pin TDFN 2 x 2 mm

### Application Diagram



### Application

