



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



PI2EQX5984

5.0Gbps 4-Lane PCIe® 2.0 ReDriver™ with Equalization, Emphasis, & I²C Control

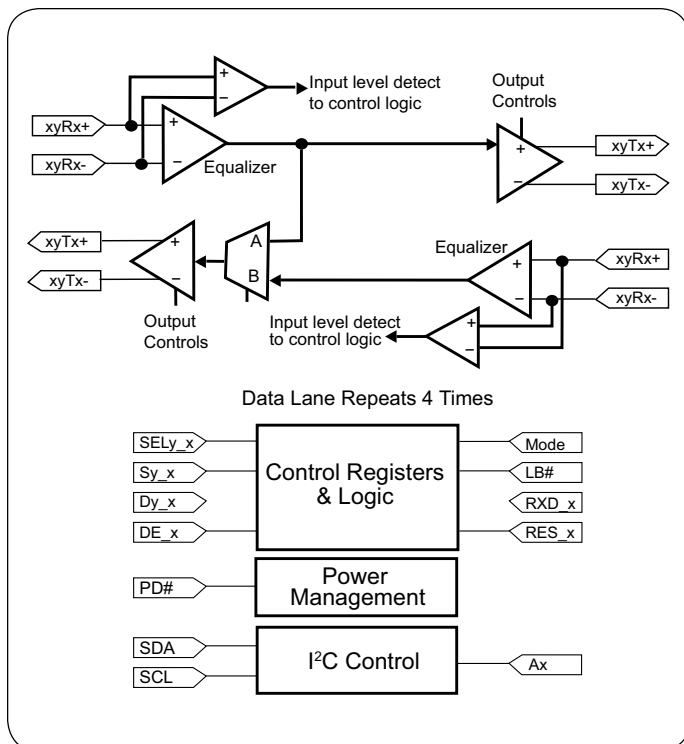
Pericom Semiconductor's PI2EQX5984 is a low power, PCIe® compliant signal ReDriver™. The device provides programmable equalization, amplification, and de-emphasis by using 8 select bits, to optimize performance over a variety of physical mediums by reducing Inter-symbol interference.

PI2EQX5984 supports eight 100-Ohm Differential CML data I/O's between the Protocol ASIC to a switch fabric, across a backplane, or extends the signals across other distant data pathways on the user's platform.

The integrated equalization circuitry provides flexibility with signal integrity of the PCI Express signal before the ReDriver™, whereas the integrated de-emphasis circuitry provides flexibility with signal integrity of the signal after the redriver.

In addition to providing signal re-conditioning, Pericom's PI2EQX5984 also provides power management Stand-by mode operated by a Bus Enable pin.

Block Diagram



Features

- Up to 5.0Gbps PCI Express® 2.0 Serial ReDriver
- Supporting 8 differential channels or 4 lanes of PCIe Interface
- I²C configuration controls (3.3V tolerant)
- Adjustable receiver equalization and transmitter de-emphasis and output levels
- Variable input an output termination
- 1:2 channel broadcast
- Channel loop-back/Mux and Demux Mode
- Electrical Idle fully supported
- Receiver detect and individual output control
- Fine adjustment of electrical idle threshold via I²C
- Single supply voltage, 1.2V ± 0.05V
- Power down modes
- Industrial Temp support, -40°C ~ +85°C
- Packaging: 72-contact TQFN, Pb-free & Green

Figure 1

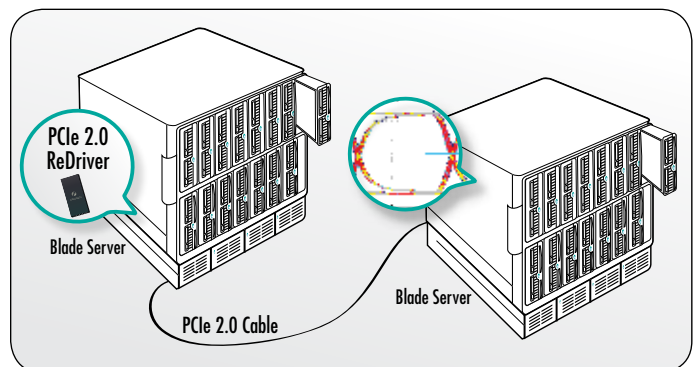


Figure 1

Redrivers with emphasis and equalization signal conditioning technology ensure the integrity of high-frequency PCIe signals by opening closed signal eyes to recover data and meet strict compliance testing requirements. Increased signal margin also supports longer drive lengths over even low-quality cables.