imall

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





PI2EQX6812 6.5Gbps 2-Lane (4-channel)SAS2/SATA/XAUI ReDriver[™] with Equalization & De-emphasis

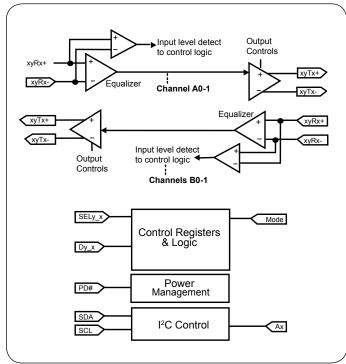
Pericom Semiconductor's PI2EQX6812 is a low power, SAS2, 2-lane (4 differential channels) SATA, XAUI signal ReDriver[™]. The device provides programmable equalization, amplification, and de-emphasis by either pin strapping option or I²C Control, to optimize performance over a variety of physical mediums by reducing Inter-symbol interference.

PI2EQX6812 supports four 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 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 PI2EQX6812 also provides power management Stand-by mode operated by a Power Down pin, or through I²C register. When the input is idle, the device goes to power saving slumber mode

Block Diagram



Features

- Up to 6.5Gbps SAS2/SATA/XAUI ReDriver™
- Supporting 4 differential channels or 2 lane
- Independent channel configuration
- Pin strap and I²C configuration controls (3.3V Tolerant)
- Adjustable receiver equalization
- Adjustable transmitter amplitude and de-emphasis
- Adjustable input threshold level
- 50-Ohm input/output termination
- Mux/Demux and loop-back features
- OOB fully supported
- Single supply voltage, $1.2V \pm 0.05V$
- Active current per channel -95mA (typical)
- Power down standby mode
- Standby current -1mA (typical)
- Automatic slumber mode power savings
- Slumber current per channel -10mA (typical)
- Packaging (Pb-free & Green):
- 42-contact TQFN (9mm x3.5mm)

Applications

• Data Center Server, Blade server, Storage System

