Chipsmall

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

PI2EQX6811
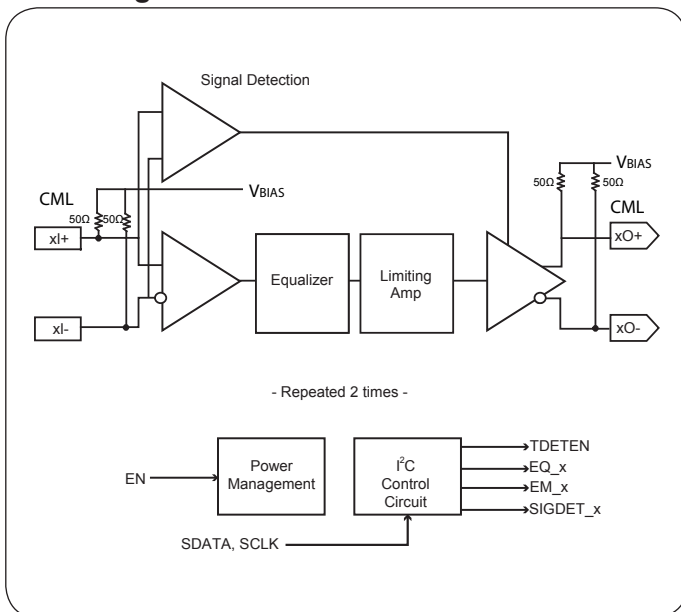## 1.5V, 1-port, SATA Gen 3i SAS2 ReDriver™ with I²C Control

Pericom's PI2EQX6811 is a low power, signal SATA Gen 3i, SAS2 6Gbps ReDriver™. The device provides pin strap or I²C programmable equalization and output emphasis, to optimize performance over a variety of physical mediums by reducing Inter-Symbol Interference. PI2EQX6811 supports two 100Ω Differential CML data I/O's between the Protocol ASIC to a switch fabric, across a backplane, 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=1) 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 (Vth-) then the outputs are driven to the common mode voltage.

Termination Detect when enabled provides indication when the load is connected ie HDD or Host. This can be used as control to go into power saving mode by the device. In addition to signal conditioning, when EN = 0, the device enters a low power standby mode.

Features

- Supports SATA Gen 3i, SAS2.
- Two 6Gbps differential signal pairs
- 100Ω Differential CML I/O's
- Input signal level detect and squelch for each channel
- OOB Support
- Automatic HDD Rate detection for output swing/emphasis setting
- Termination detect indication through I²C
- Power saving mode
- I²C Control
- Adjustable Receiver Equalization (0 to 18dB)
- Adjustable Output Pre-emphasis (0-6dB) and Swing (1200mV)Control
- High impedance I/O termination in standby mode
- Low Power Operation: 102mW@ 600mV output
- Auto-Slumber Mode: 22.5mW typical
- HDD unplugged: 1.5mW
- Power down Stand-by Mode: 15μW
- Supply Voltage: 1.5V ± 5%
- Industrial temperature range: -40°C to 85°C
- Packaging: 20-TQFN (4x4mm)

Block Diagram

Applications

- Data Center Server, Blade server, Storage System Desktop PC, Notebook

SATA3.0/SAS2.0 6Gbps 1-Port ReDriver in Storage Array Application