

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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## PI3EQX4951ST

## 3.3V, 1-port, SATA2 i/m ReDriver™ with Analog/Digital Configuration

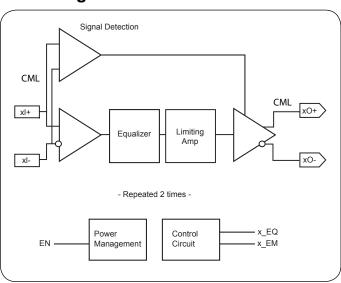
Pericom Semiconductor's PI3EQX4951ST is a low power, signal ReDriver  $^{\text{TM}}$ . The device provides programmable equalization, to optimize performance over a variety of physical mediums by reducing Inter-Symbol Interference. PI3EQX4951ST supports two  $100\Omega$  Differential CML data I/O's between 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.

In addition to signal conditioning, when  ${\sf EN}=0$ , the device enters a low power standby mode.

### **Block Diagram**



#### **Features**

- SATA2 i/m; external SATA2
- Two 3.0Gbps differential signal pairs
- Independent Digital Output Emphasis Control
- 100Ω Differential CML I/O's
- Input signal level detect and squelch for each channel
- OOB Support
- Enhanced Mode Features:
  - Adjustable Receiver Equalization
  - Independent Analog Output Emphasis Control
- High impedance I/O termination in standby mode
- Low Power Operation: 300mW typical
- Auto-Slumber Mode: 33mW typical
- Power down Stand-by Mode: 0.1mW
- Supply Voltage: 3.3V ±10%
- Packaging: 20-TQFN (4x4mm)

#### Application of PI3EQX4951ST in NB PC application

