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

PI3EQX8908A1

2.5Gbps/5.0Gbps/8.0Gbps 8-channel PCI Express ReDriver™ with Linear Equalization

Description

Pericom Semiconductor's PI3EQX8908A1 is a PCIe, 8 differential channels ReDriver™. The device provides programmable linear equalization, output swing and gain, by either pin strapping option or I2C Control, to optimize performance over a variety of physical mediums by reducing Inter-symbol interference.

The PI3EQX8908A1 supports eight 100-Ohm Differential CML data I/O's and extends the signals across other distant data pathways on the user's platform.
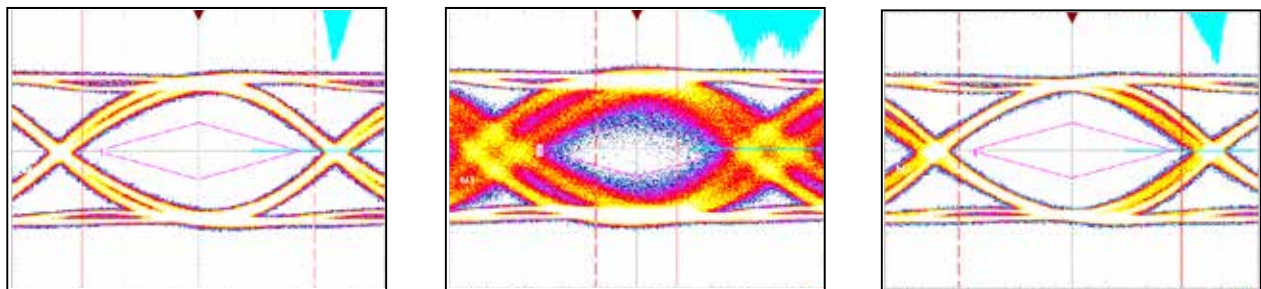
The programmable settings can be applied easily via pins or software (I2C).

The PI3EQX8908A1 offers fully Linear Transfer function to fully comply with all PCIe 3 Link Training signals.

Features

→ 2.5/5.0/8.0Gbps serial link with linear equalizer

→ Support PCIe Gen 1/2/3 protocol

→ Supporting 8 differential channels

→ Independent channel configuration of receiver equalization, output swing and flat gain

→ Per Channel Activity Detector with selectable input termination between 50Ω to VDD and 200KΩ to VDD

→ Per Channel Output Termination Detector on power up with selectable output termination between 50Ω to VDD and High impedance

→ Very linear transfer function

→ Fully compliant to PCISIG Link Training

→ Single-ended mode receiver detection for PCIe

→ Input Threshold detection

→ Pin strap and I2C slave selectable device programming

→ 4-bit selectable address bit for I^2C

→ Supply Voltage: 3.3V±0.3V

→ Industrial Temperature Range: -40°C to 85°C

Eye Diagram

Before Channel Loss

Before ReDriver

After ReDriver

Host
TX +
RX +

Channel Loss
Long input trace, cable, or connectors
Long output trace, cable, or connectors

Pericom ReDriver
Equalizer, De-emphasis, Swing, and Amplifier Gain

Output trace
Input trace

Device
End Point
+ RX
+ TX