

PRODUCT BRIEF

SIGNAL INTEGRITY SOLUTIONS

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.

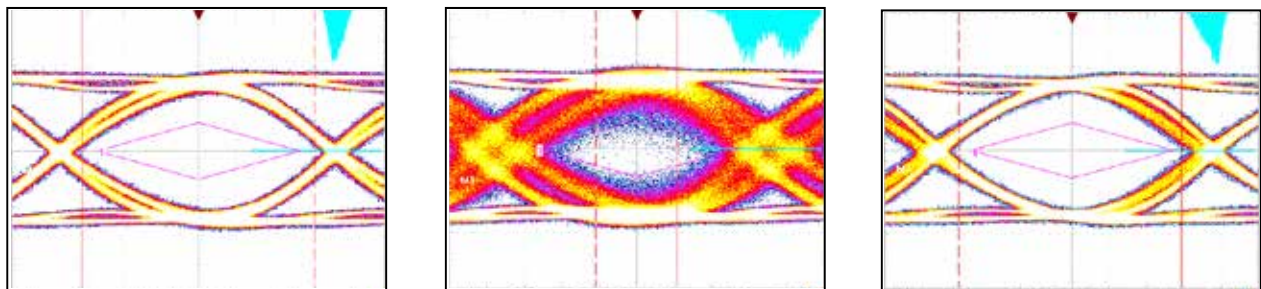
The programmable settings can be applied easily via pins or software (I2C).

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 I²C
- Supply Voltage: 3.3V±0.3V
- Industrial Temperature Range: -40°C to 85°C

Eye Diagram



Before Channel Loss

Before ReDriver

After ReDriver

