

PI3EQX8904

4-Channel PCIe 2.5/5/8Gbps ReDriver™ with Linear Equalization

Description

Pericom Semiconductor's PI3EQX8904 is a PCIe, 4 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.

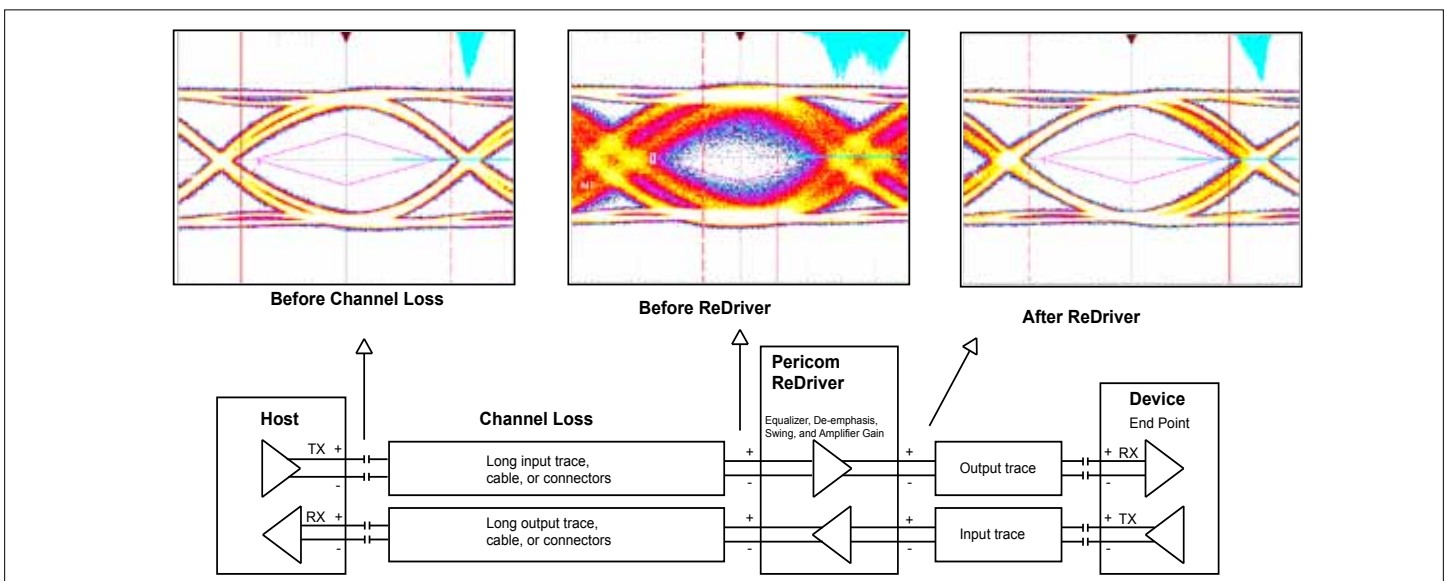
PI3EQX8904 supports four 100-Ohm Differential CML data I/O's and extends the signals across other distant data pathways on the user's platform.

The programmable settings can be applied easily via pins, software (I2C) or loaded via an external EEPROM. When operating in the EEPROM mode, the configuration information is automatically loaded on power up, which eliminates the need for an external microprocessor or software driver.

Applications

- Personal Media Players
- Mobile Phones
- Tablet

Eye Diagram



Features

- 2.5/5.0/8.0Gbps serial link with linear equalizer
- Support PCIe Gen 1/2/3 protocol
- Supporting 4 differential channels
- Independent channel configuration of receiver equalization, output swing and flat gain
- Per Channel Activity Detector with selectable input termination between 50Ω to V_{CC} and 200KΩ to V_{CC}
- Per Channel Output Termination Detector on power up with selectable output termination between 50Ω to V_{CC} and High impedance
- Very linear transfer function
- Fully compliant to PCI-SIG Link Training
- Single-ended mode receiver detection for PCIe
- Input Threshold detection
- Pin strap and I2C master/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
- Packaging (Pb-free & Green):
- 42-contact TQFN (9mm x3.5mm) - flowthrough pinout