

# PI3EQX10904

## 10Gbps 4-Channel 10GE, ReDriver™ with Linear Equalization

### Description

Pericom Semiconductor's PI3EQX10904 is a 10Gigabit Ethernet, 4 differential channels ReDriver™. The device provides programmable linear equalization, output swing and flat gain, by either pin strapping option or I<sup>2</sup>C Control, to optimize performance over a variety of physical mediums by reducing Inter-symbol interference.

PI3EQX10904 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 integrated equalization circuitry provides flexibility with signal integrity of the signal before the ReDriver, whereas the integrated circuitry provides flexibility with signal integrity of the signal after the ReDriver.

### Features

- 1 to 11.3Gbps serial link with linear equalizer
- Ideal for 10Gb and 40Gb Ethernet applications,
- 10Gb fiber channel, and 10G-KR support, up to 11.3Gbps data rates
- Support 10GE 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<sub>CC</sub> and 200KΩ to V<sub>CC</sub>
- Per Channel Output Termination Detector on power up with selectable output termination between 50Ω to V<sub>CC</sub> and High impedance
- Fully compliant to KR link training
- Very linear transfer function
- Input Threshold detection
- Pin strap and I<sup>2</sup>C master/slave selectable device programming
- 4-bit selectable address bit for I<sup>2</sup>C
- 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

### Eye Diagram

