

# PI3EQX1204-C

## 12.5Gbps 4-channel, SAS3 ReDriver™ with Linear Equalization

### Description

Pericom Semiconductor's PI3EQX1204-C is a SAS3, 4 differential channels ReDriver™. The device provides programmable linear equalization, output swing and flat gain, by either pin strapping option or I2C Control, to optimize performance over a variety of physical mediums by reducing Inter-symbol interference.

PI3EQX1204-C 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 linear amplifier/buffer circuitry provides flexibility with signal integrity of the signal after the ReDriver.

### Features

- 1-12.5Gbps serial link with linear equalizer
- Support SATA Gen1/Gen2/Gen3, SAS2/3, and XAUI protocol
- Supporting 4 differential channels
- Independent channel configuration of receiver equalization, output swing and flat gain
- Rate and Coding Agnostic
- Transparent to link training, OOB, Idle
- 260mW per channel power dissipation with 700 mVpp output swing
- Pin strap and I<sup>2</sup>C 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)

### Block Diagram

