

PI3EQX16904GL

16Gbps 4-Channel ReDriver with Linear Equalization

Features

- 2.5 to 16 Gbps serial link with linear equalizer
- Supports SAS3/ IB FDR/ PCIe4/ FC16, and XAUI protocols
- Supporting 4 differential channels
- Independent channel configuration of receiver equalization, output swing and flat gain
- Rate and Coding Agnostic
- Transparent to link training, Idle
- Pin strap and I2C selectable device programming
- 3-bit selectable address bit for I2C
- Supply Voltage: 3.3V±0.3V
- Industrial Temperature Range: -40oC to 85oC
- Pin strap value latched into I2C register
- Totally Lead-Free & Fully RoHS Compliant (Notes 1 & 2)
- Halogen and Antimony Free. "Green" Device (Note 3)
- Packaging (Pb-free & Green):
 - 42-contact TQFN (9mm x3.5mm)

Description

Diodes' PI3EQX16904GL is a multi-data rate, 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.

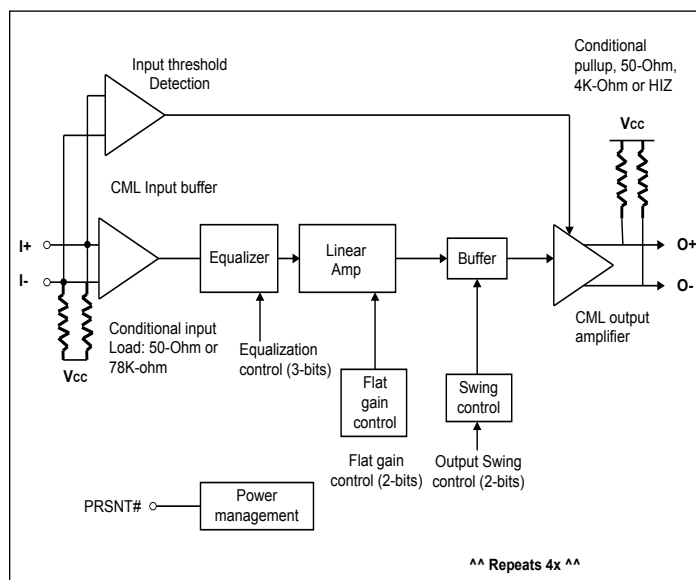
PI3EQX16904GL supports four 100-Ohm Differential CML data I/O's and extends the signals across other distant data pathways on the user's platform.

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.

Applications

- Networking
- Enterprise
- Server
- Storage

Block Diagram



Ordering Information

Part Number	Package	Description
PI3EQX16904GLZHEX	ZH	42-Contact, Thin Fine Pitch Quad Flat No-Lead (TQFN)

Notes:

1. No purposely added lead. Fully EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant.
2. See <https://www.diodes.com/quality/lead-free/> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
4. E = Pb-free and Green
5. X suffix = Tape/Reel