

# PI3EQX32908

## 32Gbps 8-Channel ReDriver with Linear Equalization

### Features

- 2.5 to 32 Gbps Serial Link with Linear Equalizer
- Supports PCIe® 5.0, SAS4/ UPI and CXL Protocols
- Supports 8 Differential Channels
- Independent Channel Configuration of Receiver Equalization, Output Swing and Flat Gain
- Transparent to Link Training, Idle, and OOB
- I<sup>2</sup>C Selectable Device Programming
- 3-bit 4-level Selectable Address Bit for I<sup>2</sup>C
- Supply Voltage: 3.3V±0.3V
- Industrial Temperature Range: -40°C to 85°C
- Totally Lead-Free & Fully RoHS Compliant (Notes 1 & 2)
- Halogen and Antimony Free. "Green" Device (Note 3)
- For automotive applications requiring specific change control (i.e. parts qualified to AEC-Q100/101/104/200, PPAP capable, and manufactured in IATF 16949 certified facilities), please [contact us](#) or your local Diodes representative. <https://www.diodes.com/quality/product-definitions/>
- Packaging (Pb-free & Green):
  - 62-contact, W-QFN3590-62 (ZR)

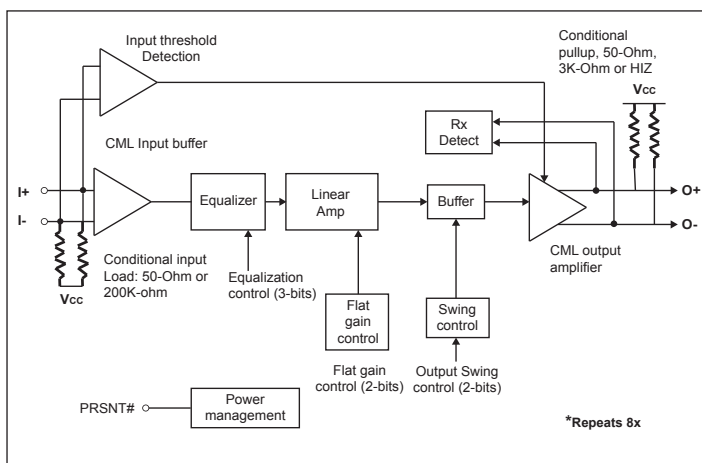
### Description

The DIODES™ PI3EQX32908 is a multi-data rate, 8-differential channel ReDriver™. The device provides programmable linear equalization, output swing and flat gain, through I<sup>2</sup>C control interface, and is optimized for performance over a variety of physical media with reduced Inter-Symbol Interference. The PI3EQX32908 supports eight 100Ω differential CML data I/O's and extends signals across data pathways on the user's platform. The integrated equalization circuitry provides flexibility with signal integrity of the signal before the ReDriver, while 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
PI3EQX32908ZRIEX	ZR	62-Contact (W-QFN3590-62)

#### 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. I = Industrial
5. E = Pb-free and Green
6. X suffix = Tape/Reel

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