

LT1258EX --- Product Brief

12.5Gbps 8-Channel Retimer

Features

- Support 8Gbps, 9.8Gbps to 12.5Gbps and theirs 1/2, 1/4, 1/8 Data Rate
- Integrated CDR for Jitter clean
- Input Signal Detect and RX Detect Support
- 2x2 Cross-Point Swither
- Up to 4 forward channel and 4 backward channel woking simultaneously
- On chip EYE-Open Monitor and PRBS Generator
- Data Lane Polarity Swappable
- Up to 30dB Equalization at 6.25GHz
- Programmable De-emphasis up to 12dB
- Up to 1.2V output Swing
- Programmable Through Pin Selection, EEPROM or SMBus Interface
- Selectable 2.5-V or 3.3-V Supply Voltage

Description

The Lontium LT1258EX is an 8-channel with signal conditioning suitable for high-speed bus applications with data rates up to 12.5 Gbps. The continuous time linear equalizer (CTLE) of the receiver provides adjustable

boost to compensate up to 30dB insertion-loss at 6.25 GHz. The intergrted CDR reset the jitter budget and retime the jigh-speed serial data. The transmitter features a programmable amplitude voltage levels to be selectable up to 1200 mVp-p and de-emphasis up to 12 dB.

The LT1258EX integrated EYE-Open Monitor to detect the signal performace after equalization.

The LT1258EX can be configured to support PCIe, CAUI-10, SAS/SATA, 10G-KR, CPRI, USB3.x or other signaling protocols.

The LT1258EX is fabricated in advanced CMOS process and implemented in 10mm x 5.5mm QFN54 package. This package is RoHS compliant and specified to operate from -40°C to +85°C.

Applications

- 10G-KR
- CAUI-10
- SAS/SATA
- CPRI
- PCIe
- USB3.x

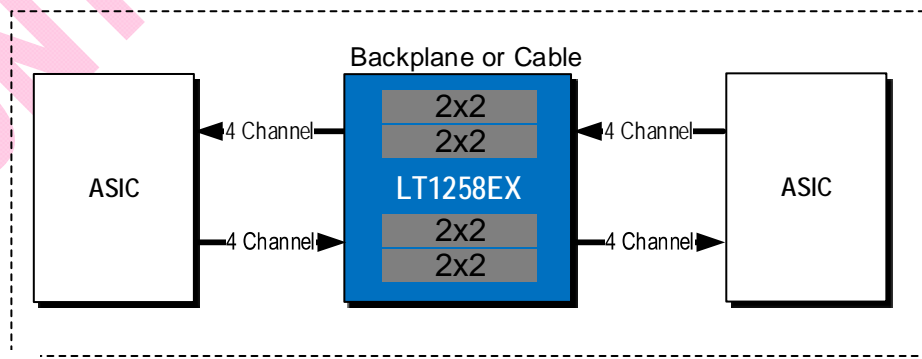


Figure 1. LT1258EX Typical Application Diagram

Ordering Information

Table 1. Ordering Information

Part Number	Operating Temperature Range	Package	Packing Method
LT1258EX	-40°C to +85°C	QFN54 (10*5.5)	

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