

LT1258 --- Product Brief

12.5Gbps Dual-lane 2:1 Muxer and 1:2 Splitter with Equalization and De-Emphasis

Features

- Support 100Mbps to 12.5Gbps Data Rate
- Input Signal Detect and RX Detect Support
- 2x2 Analog Cross-Point Switch
- 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 LT1258 is a dual lane 2:1 multiplexer and 1:2 switch or splitter 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 transmitter features a programmable amplitude voltage levels to be selectable up to 1200 mVp-p and de-emphasis up to 12 dB.

The LT1258 can be configured to support PCIe, CAUI-10, SAS/SATA, 10G-KR, CPRI, USB3.x or other signaling protocols.

The LT1258 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

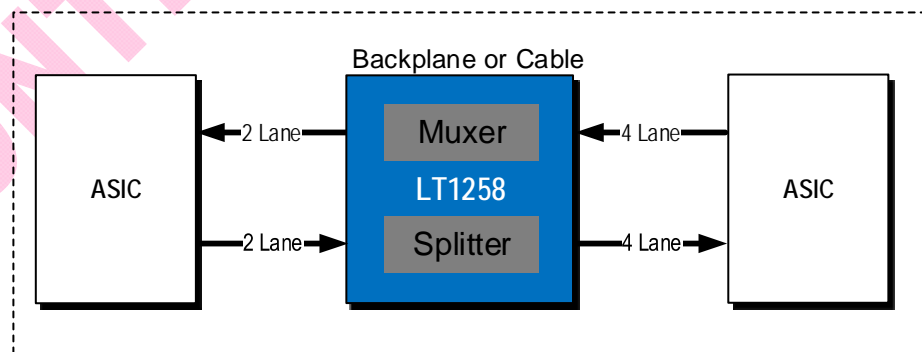


Figure 1. LT1258 Typical Application Diagram

Ordering Information

Table 1. Ordering Information

Part Number	Operating Temperature Range	Package	Packing Method
LT1258	-40°C to +85°C	QFN54 (10*5.5)	

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