LT948D --- Product Brief

Automotive Deserializer Series

1. Features

- **eDP Transmitter**
  - Compliant with Embedded DisplayPort version 1.2
  - 1/2/4 configurable lane with 1.62Gbps, 2.7Gbps, 5.4Gbps for each lane
  - Aux channel
  - Support ASSR
- **Automotive Display Port Receiver**
  - 1/2 configurable link
  - Bidirectional transmission with maximum 5.4Gbps forward data channel and maximum 3.7Mbps back control channel on link0, and link1 is only forward data channel
  - Receive video, I2C data and audio from the forward data channel with scrambling, DC balance and FEC
  - Carry reference clock, I2C data, interrupt and frame sync on back control channel with DC balance and ECC
  - Maximum 10m transmission distance for 5.4Gbps and 15m for 4.32Gbps
- **Miscellaneous**
  - SSC for transmitter
  - Interrupt Input
  - Temperature and Voltage sensing
  - Integrated 100KHz,400KHz, 1MHz I2C master and slave
  - 2-channel I2S master
  - External 27MHz oscillator
  - 1.8V, 1.2V power for core and 1.8/3.3V power for IO
  - POC/POE
  - AEC-Q100 Grade 2
  - Compatible with LT947LMT

2. General Description

The LT948D deserializer is a part of Lontium's long distance video transmission family for Advanced Driver Assistance Systems(ADAS), designed to provide a solution for eDP video transmission with a maximum 10m coax POC or STP cable. The chip delivers a 5.4Gbps forward data channel and back control channel and supports power the cable.

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