LT947LMT --- Product Brief

Automotive Serializer Series

1. Features

LVDS Receiver

- Compatible with VESA, JEIDA and sony sub-lvds standard
- 1/2 configurable port with 1 clock lane and 4 data lanes per each port for VESA and JEIDA standard
- 1 clock lane and configurable 4/8/10 data lanes for sony sub-lvds standard
- Configurable sync code detected
- Clock frequency up to 288MHz and data rate up to 1.2Gbps

MIPI DSI/CSI Receiver

- Compliant with D-PHY1.2 & DSI 1.3 & CSI-2 1.3
- 1/2 configurable port
- 1 clock lane and 1/2/4 configurable data lanes for each port;1.5Gbps per data lane

TTL Receiver

- 15-lane SDR/DDR Sampling Support
- Max Pixel Clock 37.125MHz

Automotive Display Port Transmitter

- 1/2 configurable link
- Bidirectional transmission with maximum 5.4Gbps forward data channel and max 3.7Mbps back control channel on link0, and link1 is only forward data channel
- Transmit video, I2C data and audio on the forward data channel with scrambling, DC balance and FEC
- Carry I2C data and interrupt from back control channel with DC balance and ECC
- Maximum 10m transmission distance for 5.4Gbps and 15m for 4.32Gbps

Miscellaneous

- DeSSC for receiver and SSC for transmitter
- Interrupt output
- Temperature and Voltage sensing
- Integrated 100KHz,400KHz, 1MHz I2C slave
- 2-channel I2S slave
- 1.8V power for core and 1.8/3.3V power for IO
- POC/POE
- AEC-Q100 Grade 2
- Compatible with LT934LMT, LT948D

2. General Description

The LT947LMT serializer is a part of Lontium's long distance video transmission family for Advanced Driver Assistance Systems(ADAS), designed to provide a solution for LVDS, MIPI and TTL 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 over each cable.

3. Applications

- Automotive Display Application
- LVDS/MIPI/TTL Extender

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