



LT933MT --- Product Brief

Automotive Serializer Series

1. Features

- **MIPI CSI Receiver**
 - Compliant with D-PHY1.2 & CSI-2 1.3
 - 1 clock lane and 1/2/4 configurable data lanes; 1.5Gbps per data lane
- **TTL Receiver**
 - 15-lane SDR/DDR Sampling Support
 - Max Pixel Clock 37.125MHz
- **Automotive Display Port Transmitter**
 - Bidirectional transmission with maximum 4.32Gbps forward data channel and max 3.7Mbps back control channel
 - Transmit video, I2C data on the forward data channel with scrambling, DC balance and FEC
 - Receive reference clock, I2C data and frame sync from back control channel with DC balance and ECC
 - maximum 15m transmission distance
- **Miscellaneous**
 - DeSSC for receiver and SSC for transmitter
 - Camera Synchronization
 - Temperature and Voltage sensing

- Integrated 100KHz, 400KHz, 1MHz I2C master
- 1.8V power for core and 1.8/3.3V power for IO
- POC/POE
- AEC-Q100 Grade 2
- Compatible with LT934LMT, LT934M

2. General Description

The LT933MT serializer is a part of Lontium's long distance video transmission family for Advanced Driver Assistance Systems(ADAS), designed to provide a solution for MIPI and TTL sensor data transmission with a maximum 15m coax(POC) or STP cable. The chip delivers a 4.32Gbps forward data channel and 3.7 Mbps back control channel and supports power over the cable. Together with a companion deserializer, LT933MT is able to synchronize the camera sensor with the whole system.

3. Applications

- Advanced Driver Assistance Systems(ADAS)
 - Surround View System
 - Front and Rear Image Sensor
- MIPI-CSI/TTL Extender

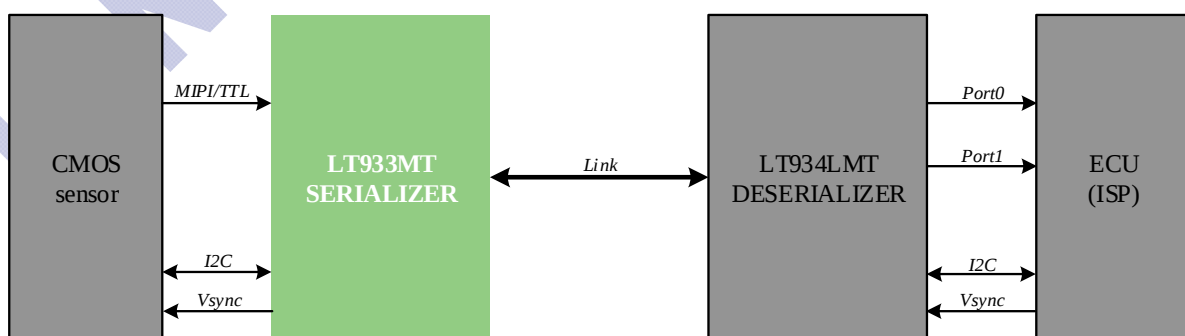


Figure 3.1 Application Diagram

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