

LT934LMT --- Product Brief

Automotive Deserializer

1. Features

LVDS Transmitter

- Compliant with VESA, JEIDA
- 1/2 configurable port with 1 clock lane and 4 data lanes per each port
- Configurable sync code detected
- data rate up to 1.2Gbps

• MIPI DSI/CSI Transmitter

- 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; 2.5Gbps per data lane

TTL Transmitter

- 20-lane SDR/DDR Sampling Support
- Max Pixel Clock 74.25MHz

Automotive Display Port Receiver

- 1/2 configurable link
- Bidirectional transmission with maximum 8.1Gbps/lane forward data channel and maximum 29.7Mbps back control 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 5m transmission distance for 8.1Gbps, and maximum 15m transmission distance for lower speed, depending on the attenuation of cable
- Typical resolution 4K 24bit 30Hz with 1 lane, 4K

RGB888 60Hz with 2 lanes

Miscellaneous

- SSC for transmitter
- Interrupt I/O
- Camera Synchronization
- Temperature and Voltage sensing
- Integrated 100KHz,400KHz, 1MHz I2C master and slave
- 8-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

2. General Description

The LT934LMT deserializer 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 coaxial (POC) or STP cable. The chip delivers a maximum 8.1Gbps/lane forward data channel and back control channel and supports power over each cable.

3. Applications

- Advanced Driver Assistance Systems (ADAS)
 - Front and Rear Image Sensor
 - Display System
- LVDS/MIPI/TTL Extender



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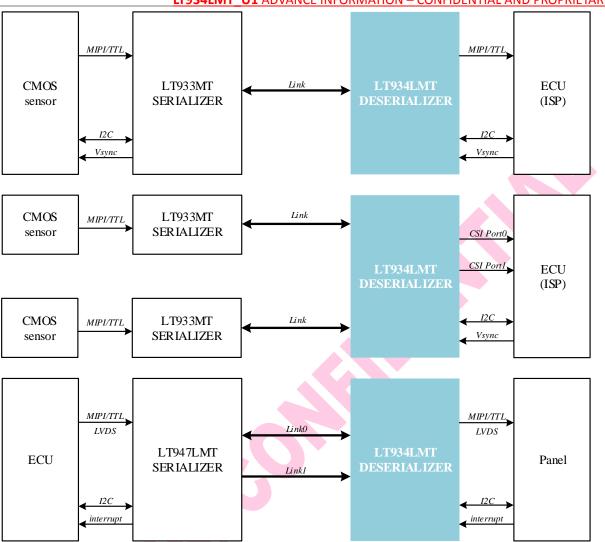


Figure 3.1 Application Diagrams



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4. Ordering Information

Table 4.1 Ordering Information

Product Name	Part Number	Product Status	Package	Bonding Wire	Grade	Operating Temperature Range	Stack Die Option	Packing Method	MPQ
LT934LMT04	LT934LMT04_U1Q07CAN	Preview	QFN64 (7.5*7.5)Saw	Cu	А	-40°C to +105°C	N	Tray	TBD
LT934LMT06	LT934LMT06_U1Q07CAN	Preview	QFN64 (7.5*7.5)Saw	Cu	А	-40°C to +105°C	N	Tray	TBD
LT934LMT08	LT934LMT08_U1Q07CAN	Preview	QFN64 (7.5*7.5)Saw	Cu	А	-40°C to +105°C	N	Tray	TBD

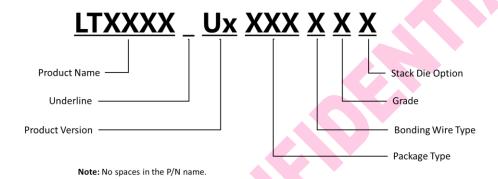


Figure 4.1 Part Number Naming Rules



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