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
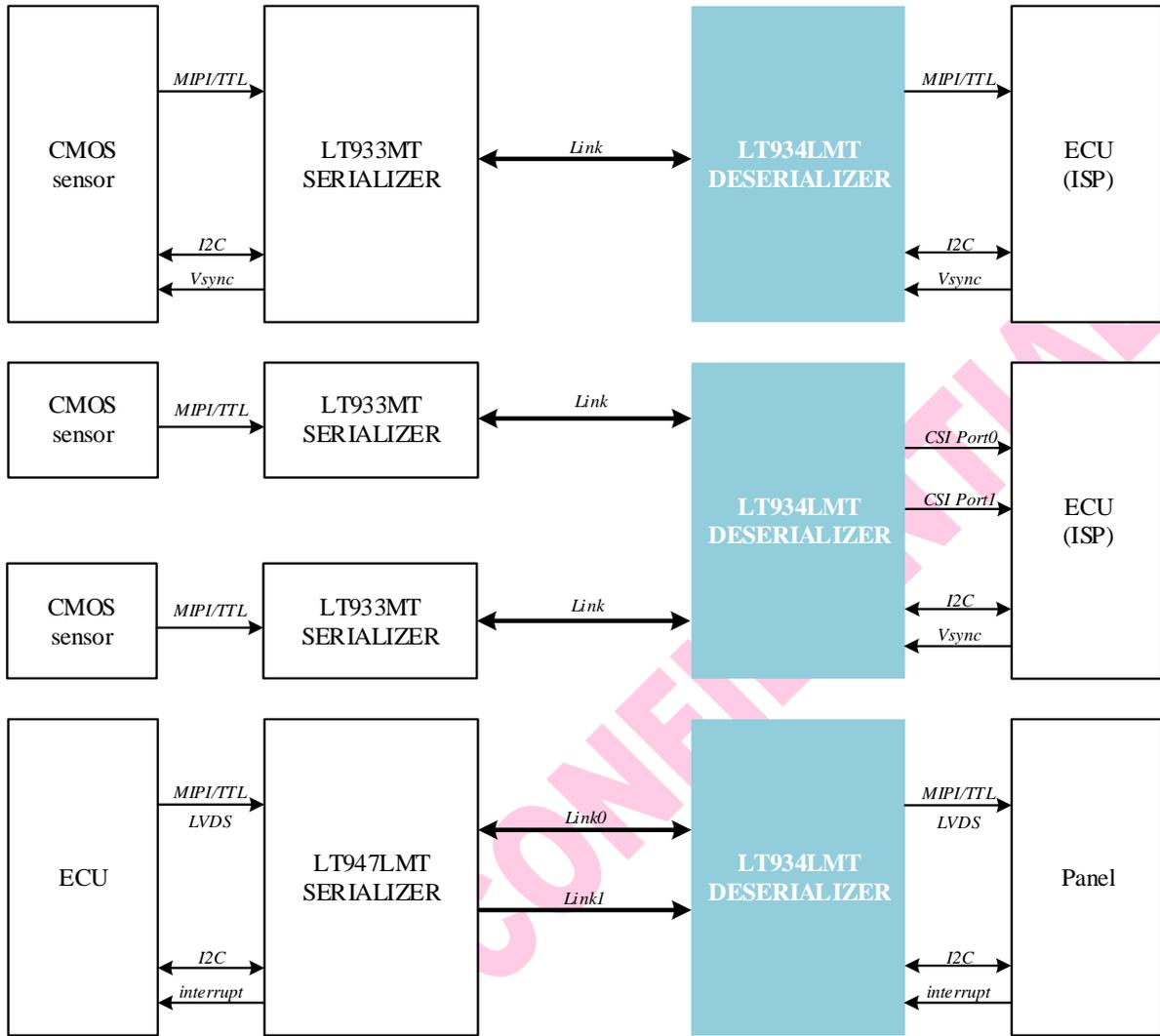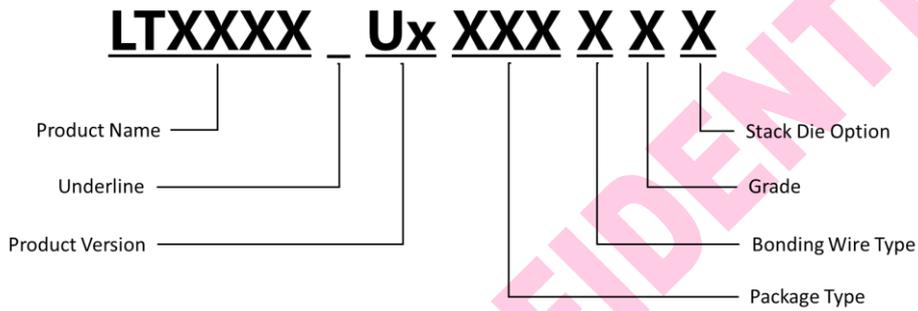 - Display System
- LVDS/MIPI/TTL Extender

Figure 3.1 Application Diagrams

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	A	−40°C to +105°C	N	Tray	TBD
LT934LMT06	LT934LMT06_U1Q07CAN	Preview	QFN64 (7.5*7.5)Saw	Cu	A	−40°C to +105°C	N	Tray	TBD
LT934LMT08	LT934LMT08_U1Q07CAN	Preview	QFN64 (7.5*7.5)Saw	Cu	A	−40°C to +105°C	N	Tray	TBD

Note: No spaces in the P/N name.

Figure 4.1   Part Number Naming Rules

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