

# 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 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 1/2/3/4 configurable data lanes for each port; 2.5Gbps per data lane
- **TTL Transmitter**
  - 20-lane SDR/DDR Sampling Support
  - Max Pixel Clock 74.25MHz
- **ADP Receiver**
  - 1/2 configurable link
  - Bidirectional transmission with 8.1/6.48/4.32/2.16 Gbps/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 6.48/4.32/ 2.16 Gpbs, depending on the attenuation of cable

- Typical resolution 4K YVU422 30Hz with 1 lane, 4K YVU422 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
  - 1.2V power for core and 1.8V/3.3V power for IO
  - POC/POE

### 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

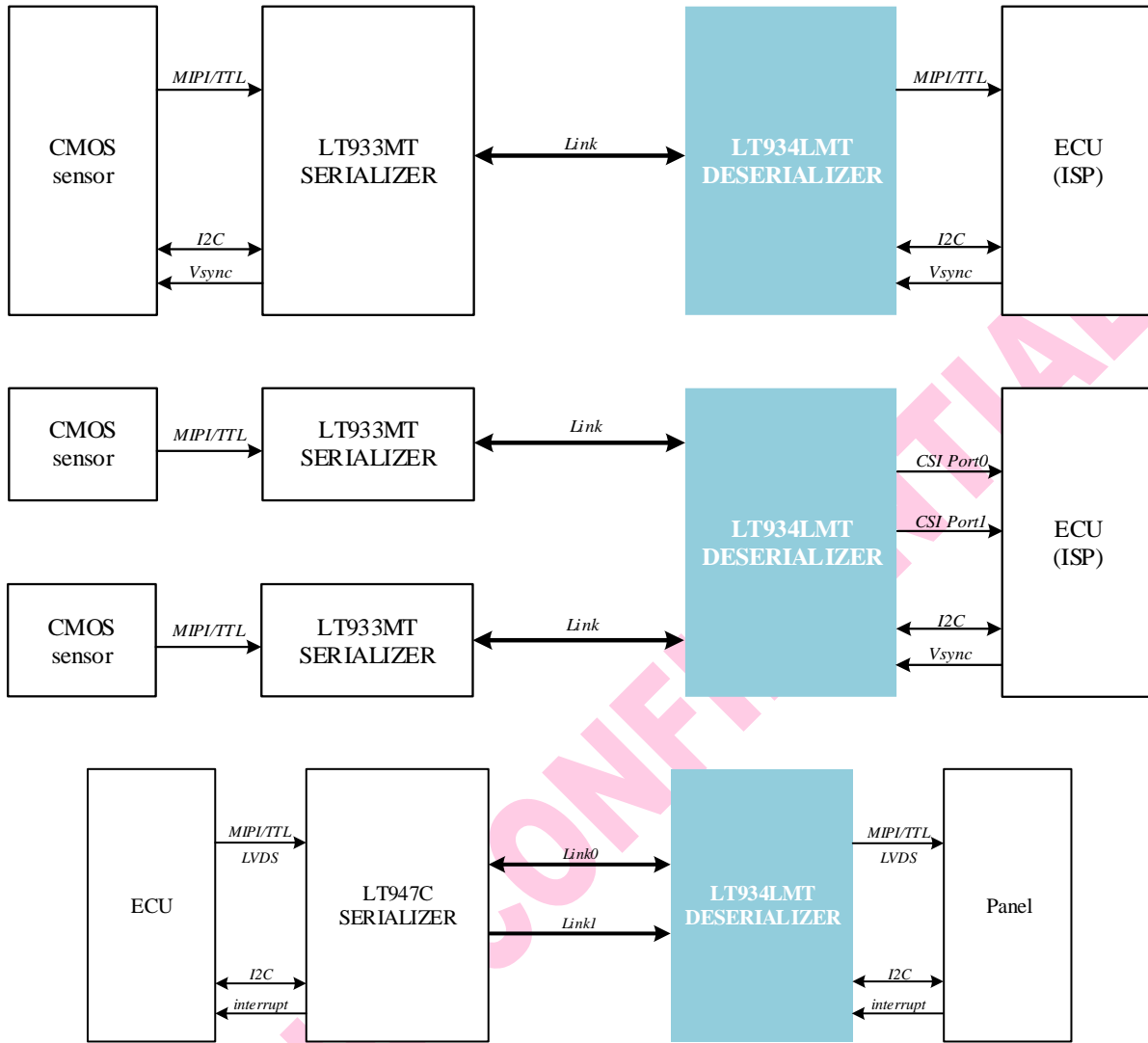


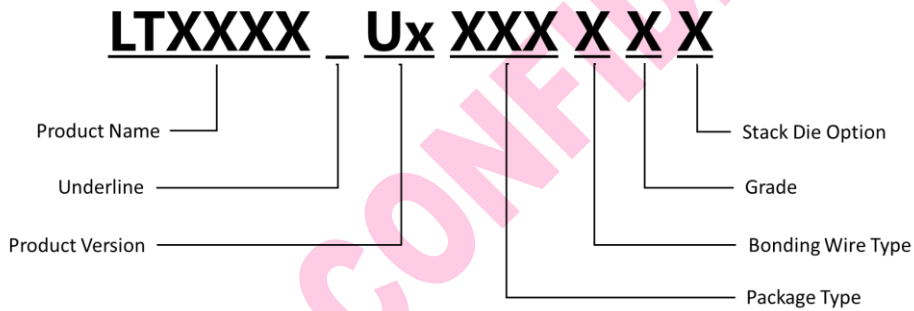
Figure 3.1 Application Diagrams

## 4. Ordering Information

**Table 4.1 Ordering Information**

Product Name	Part Number	Product Status	Package	MSL	Bonding Wire	Grade	Operating Temperature Range	Stack Die Option	Packing Method	MPQ
LT934LMT04	LT934LMT04_U2Q07CAN	MP	QFN64 (7.5*7.5)Saw	3	Cu	A	-40°C to +105°C	N	Tray	2600pcs
LT934LMT06	LT934LMT06_U2Q07CAN	MP	QFN64 (7.5*7.5)Saw	3	Cu	A	-40°C to +105°C	N	Tray	2600pcs
LT934LMT08	LT934LMT08_U2Q07CAN	MP	QFN64 (7.5*7.5)Saw	3	Cu	A	-40°C to +105°C	N	Tray	2600pcs
LT934LMT04	LT934LMT04_U2Q07CEN	MP	QFN64 (7.5*7.5)Saw	3	Cu	E	-40°C to +85°C	N	Tray	2600pcs
LT934LMT06	LT934LMT06_U2Q07CEN	MP	QFN64 (7.5*7.5)Saw	3	Cu	E	-40°C to +85°C	N	Tray	2600pcs
LT934LMT08	LT934LMT08_U2Q07CEN	MP	QFN64 (7.5*7.5)Saw	3	Cu	E	-40°C to +85°C	N	Tray	2600pcs

**Note:** LT934LMT04\_U2Q07CAN, LT934LMT06\_U2Q07CAN, LT934LMT08\_U2Q07CAN are automotive grade devices which are qualified by AEC-Q100 Grade 2 testing.



**Note:** No spaces in the P/N name.

**Figure 4.1 Part Number Naming Rules**

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