

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

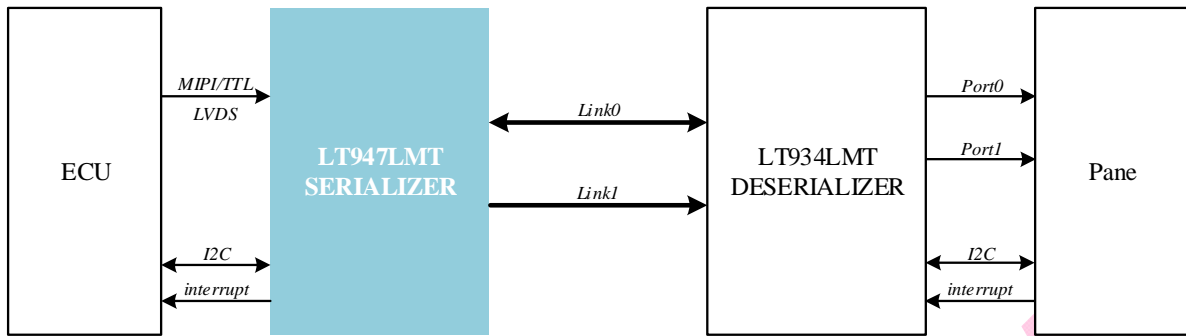
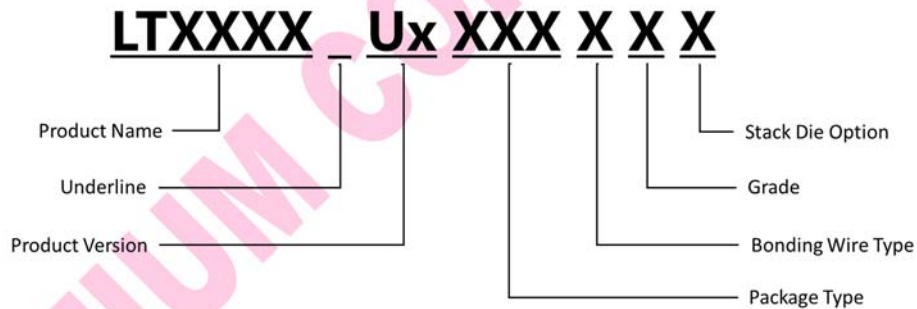


Figure 3.1 Application Diagram

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
LT947LMT	LT947LMT_U1Q10ABN	Preview	QFN48 (6*6)Saw	Au	Automotive Grade 2	-40°C to +105°C	N	Tray



Note: No spaces in the P/N name.

Figure 4.1 Part Number Naming Rules

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