

LT948D --- Product Brief

Automotive Deserializer Series

1. Features

- **eDP Transmitter**
 - Compliant with Embedded DisplayPort version 1.2
 - 1/2/4 configurable lane with 1.62Gbps, 2.7Gbps, 5.4Gbps for each lane
 - Aux channel
 - Support ASSR
- **Automotive Display Port Receiver**
 - 1/2 configurable link
 - Bidirectional transmission with maximum 5.4Gbps forward data channel and maximum 3.7Mbps back control channel on link0, and link1 is only forward data 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 10m transmission distance for 5.4Gbps and 15m for 4.32Gbps
- **Miscellaneous**
 - SSC for transmitter
 - Interrupt Input

- Temperature and Voltage sensing
- Integrated 100KHz,400KHz, 1MHz I2C master and slave
- 2-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
- Compatible with LT947LMT

2. General Description

The LT948D deserializer is a part of Lontium’s long distance video transmission family for Advanced Driver Assistance Systems(ADAS), designed to provide a solution for eDP 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 the cable.

3. Applications

- Advanced Driver Assistance Systems(ADAS)
 - Display System

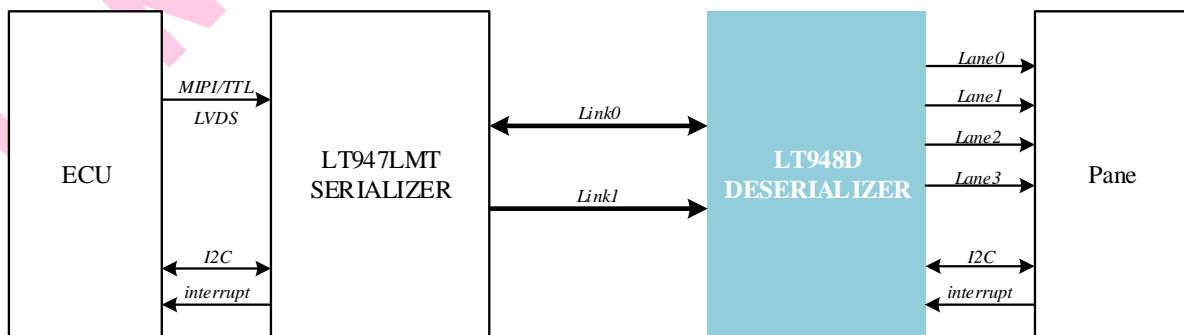
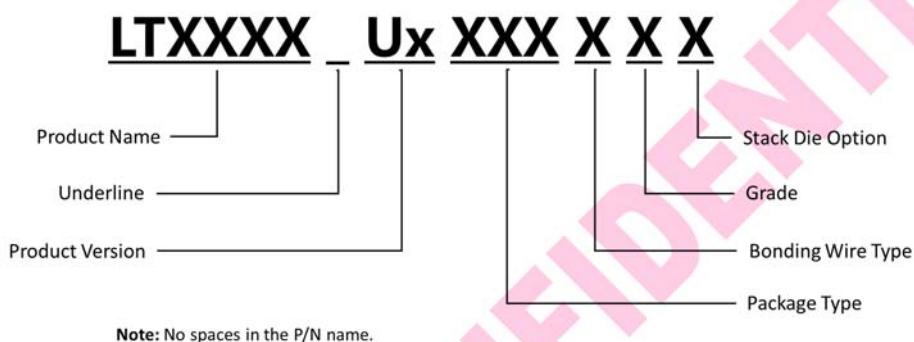


Figure 3.1 Application Diagram

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
LT948D	LT948D_U1Q10ABN	Preview	QFN48 (6*6)Saw	Au	Automotive Grade 2	-40°C to +105°C	N	Tray


Figure 4.1 Part Number Naming Rules

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