

# 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/lane 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
  - Typical resolution 2K rgb888 60Hz with 2 lanes
- **Miscellaneous**
  - SSC for transmitter
  - Interrupt Input

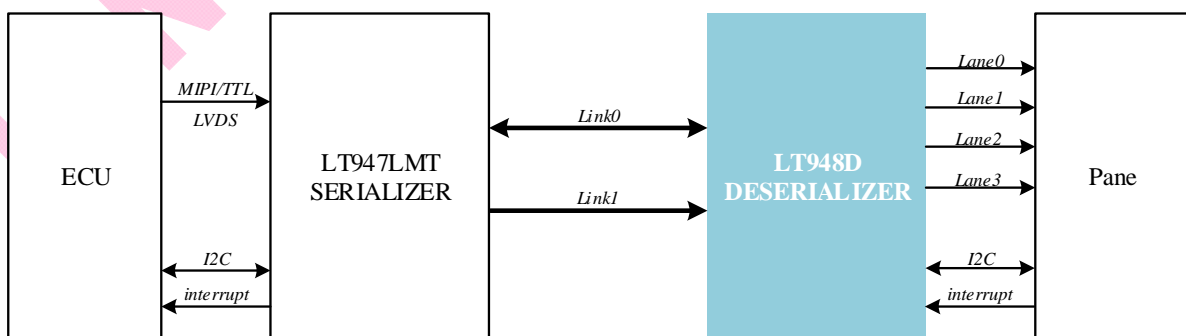
- Temperature and Voltage sensing
- Integrated 100KHz,400KHz, 1MHz I2C master and slave
- 2-channel I2S master
- External 27MHz oscillator
- 1.8V, 1.2V power for core and 1.8/3.3V power for IO
- POC/POE
- AEC-Q100 Grade 2
- Compatible with LT947LMT

### 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 /lane forward data channel and back control channel and supports power the cable.

### 3. Applications

- Advanced Driver Assistance Systems(ADAS)
  - Display System

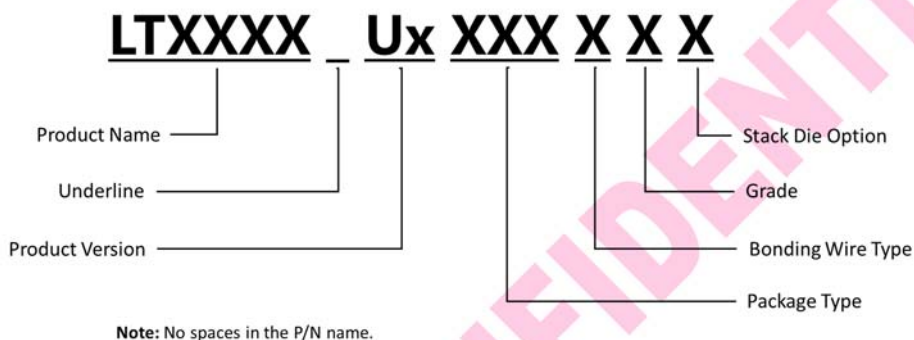


**Figure 3.1 Application Diagram**

## 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_U1Q10AAN	Preview	QFN48 (6*6)Saw	Au	A	-40°C to +105°C	N	Tray


**Figure 4.1 Part Number Naming Rules**

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