

LT947M --- Product Brief

MIPI to ADP Extender

1. Features

- **MIPI DSI/CSI Receiver**
 - Compliant with D-PHY1.2 & DSI 1.3 & CSI-2 1.3
 - 1 clock lane and 1/2/4 configurable data lanes, 2.5Gbps per data lane
- **Automotive Display Port Transmitter**
 - Bidirectional transmission with 8.1/6.48/4.32/2.16 Gbps forward data channel and max 29.7Mbps back control channel.
 - Transmit video, I2C data 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 5m transmission distance for 8.1Gbps, and maximum 15m transmission distance for 6.48/4.32/ 2.16 Gbps, depending on the attenuation of cable.
 - Typical resolution 4K YUV422 30Hz
- **Miscellaneous**
 - SSC for transmitter

- Interrupt output
- additional GPIOs
- Temperature and Voltage sensing
- Integrated 100KHz, 400KHz, 1MHz I2C slave
- 1.2V power for core and 1.8/3.3V power for IO
- POC

2. General Description

The LT947M serializer is a part of Lontium's long distance video transmission family for Advanced Driver Assistance Systems (ADAS), designed to provide a solution for MIPI transmission with a maximum 15m coax (POC) or STP cable. The chip delivers an 8.1Gbps forward data channel and back control channel and supports power over each cable.

3. Applications

- Automotive Display Application
- MIPI Extender

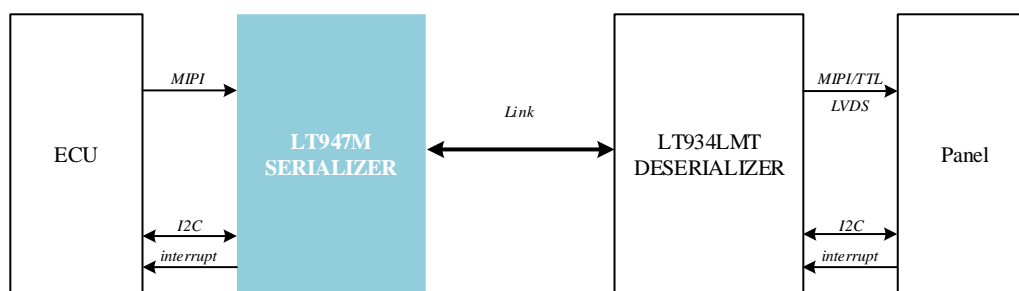
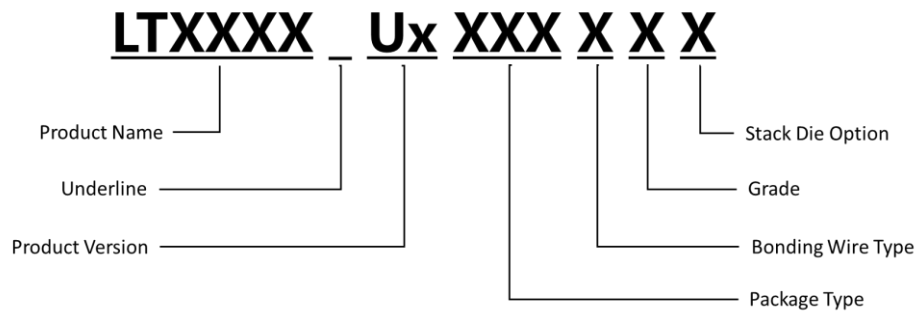


Figure 3.1 Application Diagram

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
LT947M	LT947M_U1Q11CEN	Preview	QFN40 (5*5)Saw	TBD	Cu	E	TBD	N	Tray	TBD



Note: No spaces in the P/N name.

Figure 4.1 Part Number Naming Rules

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