

LT8912 --- Product Brief

Single - Channel MIPI® DSI Bridge to LVDS/HDMI

Features

- **One-Channel MIPI® DSI Receiver**
 - Compliant with D-PHY1.1 and DSI1.02
 - 1 clock lane and 1~4 configurable data lanes
 - 80Mb/s~1.5Gb/s per data lane
 - Data lane swappable and polarity swappable
 - Internal Rterm calibration w/ less than 5% error
 - 2-bit programmable equalization
 - Only Non-Burst Mode supported
- **One-Channel LVDS Transmitter**
 - 1 clock lane and 4 data lanes
 - Maximum 1.0Gb/s per data lane
 - Reduced output swing for low EMI
- **HDMI Transmitter**
 - Support HDMI1.4 standard
 - Up to 60Hz 1080p 8-bit HDMI output
 - 7-bit automatic or manual output swing calibration
 - 3-bit programmable de-emphasis
 - Support Hot-Plug Detect
 - No DDC and HDCP support for LT8912
- **Miscellaneous**
 - Support scaler function for MIPI to LVDS bridge
 - Single 1.8V supply power
 - Temperature range: -40°C to +85°C
 - Packaged in both 12x12mm LQFP80 and 7.5mm x 7.5mm QFN64

Description

The Lontium LT8912 MIPI® DSI to LVDS and HDMI bridge features a single-channel MIPI® D-PHY receiver front-end configuration with 4 data lanes per channel operating at 1.5Gbps per data lane and a maximum input bandwidth of 6Gbps.

The LT8912 is fabricated in advanced CMOS process and implemented in both 12mm x 12mm LQFP at 0.5mm pitch package and 7.5mm x 7.5mm QFN at 0.4mm pitch package. These packages are RoHS compliant and specified to operate from -40°C to +85°C.

Applications

- Mobile systems
- Digital still cameras
- Cellular Handsets
- Personal Media players
- Digital video cameras
- Gaming

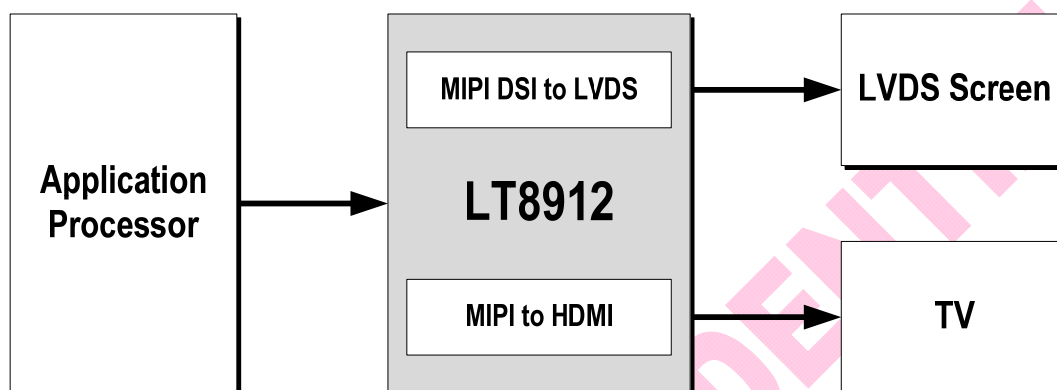


Figure 1. Application Diagram

Ordering Information

Part Number	Operating Temperature Range	Package	Packing Method
LT8912	-40° C to +85° C	12mm x 12mm LQFP80	Tape and Reel

Part Number	Operating Temperature Range	Package	Packing Method
LT8912B	-40° C to +85° C	7.5mm x 7.5mm QFN64	Tape and Reel

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