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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/i 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: ī40°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 ī40°C to +85°C.

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