# Lontium

# LT9611 --- Product Brief

2-Port MIPI to HD-DVI1.4 Converter

## 1. Features

#### Dual-Port MIPI® DSI/CSI Receiver

- Compliant with D-PHY1.2, DSI1.3/CSI-2 1.00
- 1~2 Configurable Port
- I Clock Lane and 1~4 Configurable Data Lanes
- 80Mb/s~2Gb/s per Data Lane
- Data Port, Data Lane and Polarity Swapping
- Internal Rterm Calibration with Less than 5% Error
- Programmable Equalization
- Burst Mode and Non-Burst Mode Supported
- Dual Port Odd-Even Mode and Left-Right Mode Supported
- Support up to 24-bit RGB and YUV Data Format

#### HD-DVI1.4 Transmitter

- Compliant with HD-DVI1.4 and HDCP1.4
- Resolution Up to 4K 30Hz
- Programmable output swing and pre-emphasis
- Integrated CES (Consumer Electronics Service) controller (no command parsing)
- 5V tolerance DDC/HPD I/Os

#### Miscellaneous

- 1.8V and 3.3V Power Supply
- Support 100KHz and 400KHz I2C Slave
- Support up to 8-CH I2S/SPDIF Audio Input
- Temperature Range: -40°C ~ +85°C

64-pin QFN 7.5\*7.5 package

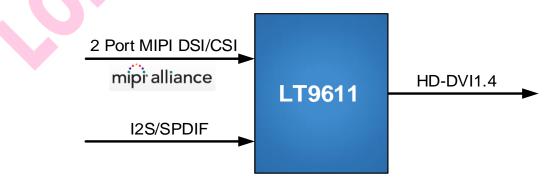
## 2. General Description

The LT9611 MIPI® DSI/CSI to HD-DVI1.4 Bridge features a dual-port MIPI® D-PHY receiver front-end configuration with 4 data lanes per port operating at 2Gbps per data lane and a maximum input bandwidth of 16Gbps.

The bridge provides a HD-DVI data output with optional SPDIF or 8-channel I2S serial audio input. Its high fidelity 8-channel I2S can transmit audio up to a 192 kHz sampling rate. The SPDIF can carry stereo LPCM audio or compressed audio, including Dolby® Digital and DTS®. The LT9611 is fabricated in advanced CMOS process and implemented in a small outline 7.5mmx7.5mm QFN64 package. This package is RoHS compliant and specified to operate from -40°C to +85°C.

### 3. Applications

- Mobile systems
- Cellular handsets
- Digital video cameras
- Digital still cameras
- Personal media players
- Gaming
- Camera systems



#### Figure 3.1 LT9611 Typical Application Diagram

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# 4. Ordering Information

Part Number	Product Version	Product Status	Operating Temperature Range	Package	Packing Method	MPQ
LT9611	U3	MP	-40°C to +85°C	QFN64 (7.5*7.5)	Tray	2600pcs
MP: Mass Production.						

### Table 4.1. Ordering Information



LT9611 ADVANCE INFORMATION – CONFIDENTIAL AND PROPRIETARY

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