

# LT2911R --- Product Brief

## Dual-Port LVDS to MIPI Converter with Rotation

### Features

- **Dual-Port LVDS Receiver**
  - Compatible with VESA and JEIDA standard
  - 1~2 Configurable Port
  - Up to 1080P 60Hz
  - Data Port ,Data Lane and Polarity Swapping
  - Internal Rterm Calibration with Less than 5% Error
  - Programmable Equalization
  - Support input Dessc(30KHz±5%)
- **MIPI Transmitter**
  - Compliant with DCS1.02, D-PHY1.2 ,DSI1.2 and CSI-2 1.00
  - 1 Clock Lane and 1~4 Configurable Data Lanes
  - Two Port Simultaneous Display Supported
  - Up to 1.8Gb/s per Data Lane
  - Resolution Up to 1080P 60Hz
  - Data Lane and Polarity Swapping
  - Both Non-Burst and Burst Video Mode Supported
  - Support RGB666, Loosely RGB666, RGB888, RGB565, 16-bit YCbCr4:2:2, 24-bit YCbCr 4:2:2 Video Format
- **DDR3 Controller**
  - Compliant with DDR3 JESD79-3F
  - BandWidth up to 1866Mbps
  - Support X16 SDRAM Organization
  - Programmable CAS Latency
  - BL8 Supported Only
  - Programmable Output Driver Impedance
  - SR Supported
  - Byte and Lane Swappable
- **Miscellaneous**
  - 1.5V, 1.8V and 3.3V Power Supply
  - 90/270 Degree Video Rotation
  - Support 100KHz and 400KHz I2C Slave

- External 25MHz Crystal Reference Clock
- Temperature Range: -40°C ~ +85°C
- External DDR3 DRAM , Packaged in QFN128 14mm x 14mm

### Description

The Lontium LT2911R is a high performance Dual-Port LVDS to MIPIDSI/CSI-2 bridge chip with Video Rotation between AP and mobile display panel or camera.

The LT2911R can be configured as single-port or dual-port with optional De-SSC function. The bridge deserializes input LVDS data, decodes packets, rotates video, and converts the formatted video data stream to MIPI DSI/CSI-2 transmitter output.

For MIPI DSI/CSI-2 output, the LT2911R features a single port MIPI DSI or CSI-2 transmitter with 1 high-speed clock lane and 1~4 configurable high-speed data lanes operating at maximum 1.8Gb/s/lane, which can support a total bandwidth of up to 7.2Gb/s. LT2911R supports both Non-Burst and Burst DSI/CSI data transferring, as well as Command Mode through Lane-0. And also, the LT2911R can be configured as two port simultaneous display mode.

The LT2911R is fabricated in advanced CMOS process and implemented in 14mm x 14mm QFN128 package. This package is RoHS compliant and specified to operate from -40°C to +85°C.

### Applications

- Mobile systems
- Cellular handsets
- Digital video cameras
- Digital still cameras
- Tablet PC, Notebook PC
- Car Display and Camera System

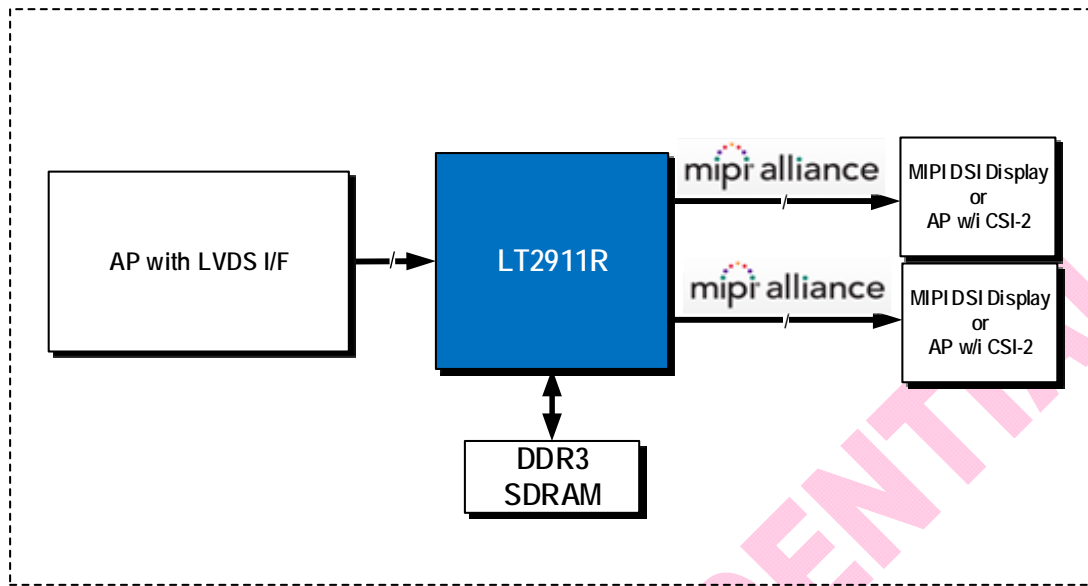


Figure 1. LT2911R/-D Typical Application Diagram

## Ordering Information

Table 1. Ordering Information

Part Number	Operating Temperature Range	Package	Packing Method
LT2911R	-40°C to +85°C	QFN128 (14*14)	

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