

# LT6911C --- Product Brief

## HD-DVI1.4/DP++ to Dual-port MIPI DSI/CSI/LVDS with Audio

### 1. Features

#### ● HD-DVI1.4 Receiver

- Compliant with the HD-DVI 1.4 specification with TMDS data rates up to 3.4Gbps per channel
- Support HDCP 1.4
- Adaptive receiver Equalization for PCB, cable and connector losses

#### ● Dual-mode Display Port Receiver

- Compliant with DisplayPort Dual-mode spec 1.1 (DP++) with 4K30Hz HD-DVI support
- Adaptive receiver equalization to compensate PCB and/or connector losses
- Integrated 50Ω termination resistors for AC coupled differential inputs
- Low Intra-pair and Inter-pair skews
- Support DisplayPort all 4 levels of output

#### ● Single/Dual-Port MIPI® DSI/CSI Transmitter

- Compliant with DCS1.02, D-PHY1.2& DSI1.02 & CSI-2 1.0
- 1 Clock Lane, and 1~4 Configurable Data Lanes per port
- 1/2 configurable port
- 80Mbps~1.5Gbps per data lane
- Maximum 64pixels overlap for each half
- Both non-burst and burst video mode supported
- Support RGB666, Loosely RGB666, RGB888, RGB565, 16-bit YCbCr4:2:2,20-bit YCbCr4:2:2,24-bit YCbCr 4:2:2, 12-bit YCbCr4:2:0Video Format
- Video stream copy mode for each port
- Side-by-side 3D support

#### ● Single/Dual-Port LVDS Transmitter

- Compatible with VESA and JEIDA standard

- 1/2 Configurable Port

- 1 clock lane and 4 configurable data lanes per port
- Support Maximum Data Rate 1.2Gbps/lane
- Output Color Depth supports 6-bit and 8-bit
- Video stream copy mode for each port
- Side-by-side 3D support

#### ● Miscellaneous

- 3.3V/1.2V Supply Power
- Internal CSC support conversions between YCbCr 4:4:4 and RGB, and between YCbCr 4:2:2 and YCbCr 4:4:4
- Support SPDIF and 2-channel IIS audio output
- Support 100KHz I2C slave
- Integrated Microprocessor
- Temperature Range: -40°C ~ +85°C
- ESD ±2kV HBM

### 2. General Description

The LT6911C is a high performance HD-DVI1.4/DP++ to MIPI®DSI/CSI/LVDS chip for VR/Smart phone/Display application.

For MIPI®DSI/CSI output, LT6911C features configurable single-port or dual-port MIPI®DSI/CSI with 1 high-speed clock lane and 1~4 high-speed data lanes operating at maximum 1.5Gbps/lane, which can support a total bandwidth of up to 12Gbps. LT6911C supports burst mode DSI video data transferring, also supports flexible video data mapping path. For LVDS output, LT6911C can be configured as single-port or dual-port. For 2D video stream, the same video stream can be mapped to two separated panels, for 3D video format, left side data can be sent to one panel, and right side data can be sent to another panel.

### 3. Applications

- Mobile system
- Display
- VR

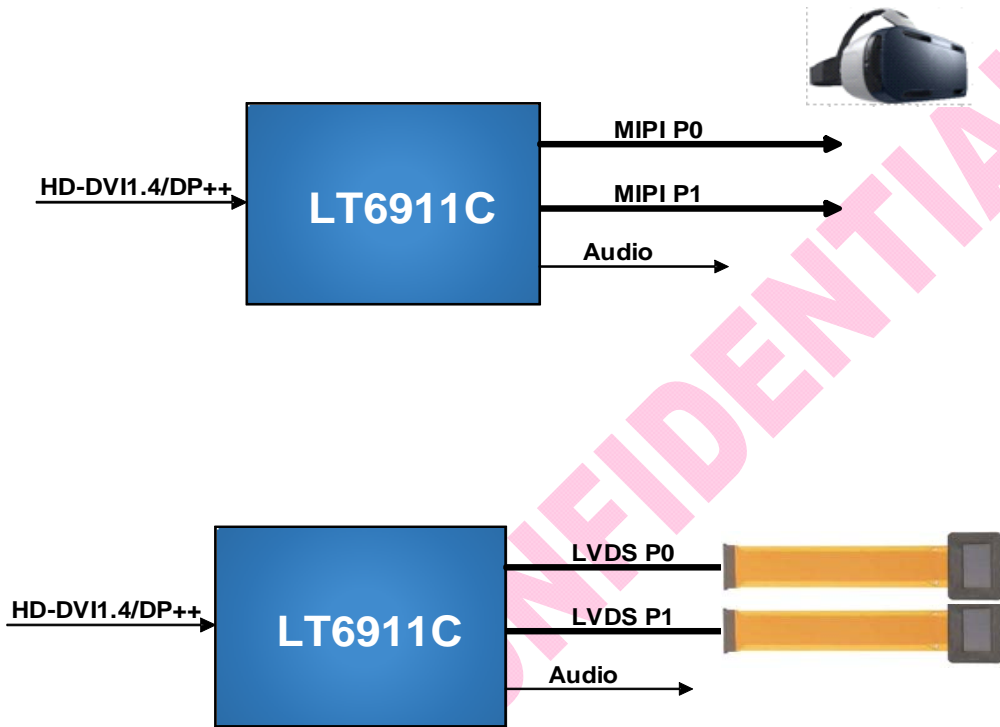


Figure3.1 Application Diagrams

### 4. Ordering Information

Table 4.1 Ordering Information

Part Number	Operating Temperature Range	Package	Packing Method	MPQ
LT6911C	-40°C to+85°C	QFN64 (7.5*7.5)	Tray	2600pcs

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