

LT6211GX --- Product Brief

HDMI2.1 to Quad-port LVDS with Audio

Features

● HDMI2.1 Receiver

- Compliant with the HDMI 2.1 specification
- Support FRL mode with 3, 6 or 8Gbps Data Rate
- Support HDCP 1.4/2.2/2.3
- Support HDR
- Support FEC
- Support SCDC
- Support 8k@30Hz, 8k@60Hz with DSC

● Single/Dual/Quad-Port LVDS Transmitter

- Compatible with VESA and JEIDA standard
- 1/2/4 configurable ports
- 1 clock lane and 3/4/5 configurable data lanes per port
- 1.2Gbps per data lane
- Programmable transmitter swing
- Support lane swap and polarity inversion
- Support RGB/YUV 6/8/10-bit Video Format
- 3D support: direct 3D output, 2-way 2D L/R output

● Miscellaneous

- 3.3V/1.1V Supply Power
- VESA DSC v1.2a (v1.1 compatible)
- Zoom scaling up and down

- CSC: RGB <-> YUV444 <-> YUV422<-> YUV420
- Support SPDIF and 8-channel IIS audio output
- Support 100KHz and 400KHz I2C slave
- Integrated Microprocessor
- Embedded EDID shadow.
- Temperature Range: -40°C ~ +85°C
- ESD 4kV HBM

Description

The LT6211GX is a high performance HDMI2.1 to LVDS chip for AR/VR/Display application.

For LVDS output, LT6211GX can be configured as single, dual or quad-port LVDS with 1 high-speed clock lane, and 3~5 high-speed data lanes operating at maximum 1.2Gbps/lane, which can support a total bandwidth of up to 24Gbps.

LT6211GX internally integrates an 8-bit OCM and SPI flash memory (stacked die) to run program. Online software upgrade is also supported for LT6211GX.

LT6211GX is fabricated in advanced CMOS process and implemented in 8mmx8mm BGA169 package. This package is RoHS compliant and specified to operate from -40°C to +85°C.

Applications

- AR
- VR
- Display

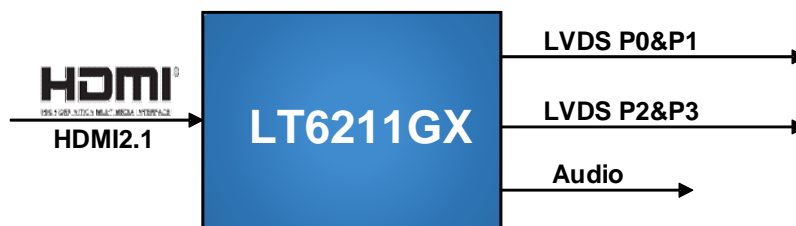


Figure1. Application Diagram

Ordering Information

| Part Number | Operating Temperature Range | Package | Packing Method |
|-------------|-----------------------------|--------------|----------------|
| LT6211GX | -40°C to+85°C | BGA169 (8*8) | Tray |

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