

# 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
  - Support 4k@60Hz
- **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.

HDCEP RX as the upstream of HDCEP repeater, can cooperate with HDCEP TX of other chips to realize the repeater function.

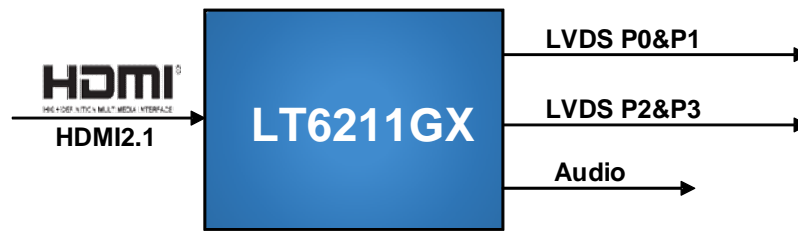
For LVDS output, LT6211GX can be configured as single, dual or quad-port LVDS with 1 high-speed clock lane, and 3~5 high-speed data lanes operating at maximum 1.2Gbps/lane, which can support a total bandwidth of up to 24Gbps.

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 9mmx9mm 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 (9*9)	Tray

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