

# LT8619 --- Product Brief

## HDMI Dual-mode Receiver

### Features

- Direct interface to HDMI V1.4 receiver
- Multiple pixel formats: RGB 6/8/10/12 bit per component (bpc); YCbCr 422/444 8/10/12 bpc
- High input sensitivity, with differential input level down to 80mV
- Receiver side equalization up to 12 dB
- Auto Loss of Signal detection
- High jitter tolerance up to 0.6UI
- HDCP decryption
- On-chip EDID
- Support resolution up to 4Kx2K@30Hz
- RGB888/RGB666/RGB565 output
- Fully programmable zoom ratios
- Independent horizontal/vertical scaling
- Color space conversion
- Integrated microcontroller for system level management
- Support ISP/UART programming debug interface
- External I2C and SPI interface
- Support I2S/SPDIF audio output
- Extensive power management for power savings
- Support total 10 GPIOs
- Integrated nor-flash(option)

### Description

The LT8619 is Lontium's high performance HDMI receiver chip based on ClearEdge™ Technology, compliant with the HDMI 1.4(High Definition Multimedia Interface) specification. The RGB output ports can support RGB888/RGB666/RGB565 format and the output resolution can support up to 4Kx2K resolution. With programmable scalar, LT8619 can do scaling up and down within 1080P 60Hz resolution. LT8619 integrates MCU and it has 10 GPIOs. For easy implementation of a multi-media system, LT8619 supports 8-channel high quality I2S audio or SPDIF audio output. It integrates 4M bits nor-flash inside (option), and also you can use external nor-flash by SPI interface for compatibility.

## Applications

- Car Entertainment
- TV, Monitor
- Pico Projector
- Smart Projector

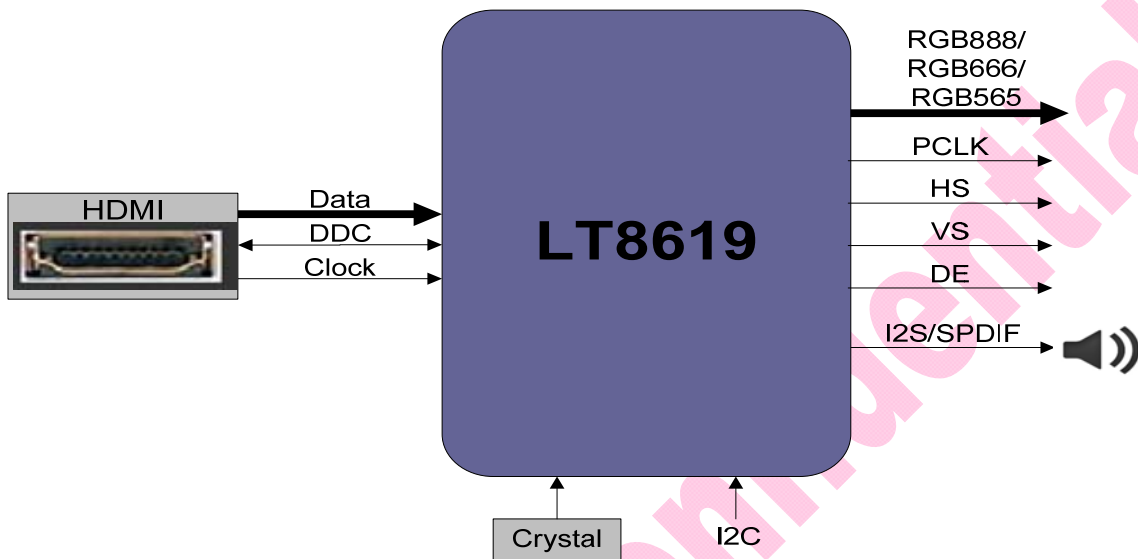


Figure 1. Application Diagram

## Ordering Information

| Part Number | Operating Temperature Range | Package | Packing Method |
|-------------|-----------------------------|---------|----------------|
| LT8619      | -40° C to +85° C            | TQFP100 | Tape and Reel  |

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