

# LT8619C --- Product Brief

## HD-DVI to TTL/LVDS Converter

### 1. Features

- **HD-DVI/Dual-mode DP Input Interface**
  - Compliance with DVI V1.0 and HD-DVI V1.4
  - Support up to 1.65Gbps for DVI
  - Support up to 3.4Gbps for HD-DVI
  - Support resolution up to 4Kx2K@30Hz for HD-DVI
  - Support 8/10/12 bit per component (bpc)
  - Support HDCP1.4 decryption
  - Support On-chip EDID
  - Receiver side equalization up to 25 dB
- **LVDS Output Interface**
  - Compatible with VESA and JEIDA standard
  - 1~2 configurable port
  - Support port swap
  - Support maximum data rate 1.05Gbps/lane
  - Resolution up to 4Kx2K@30Hz
  - Supports 6-bit, 8-bit output
- **TTL Output Interface**
  - Support up to 24-bit RGB or BT656/BT1120 output
  - Support both SDR and DDR output
  - Support up to 150MHz DDR or 300MHz SDR clock output
  - Support both 1.8V and 3.3V output voltage level

- **Video and Audio Processing**

- Programmable color space conversion (YUV422/YUV444/RGB)
- Advanced dithering logic for 6-bit color depth output
- Optional SPDIF output and 8-channel I2S output

- **Miscellaneous**

- Support 100KHz I2C slave
- External 25MHz Crystal
- Temperature Range: -40°C to +85°C
- Packaged in QFN76 9mm x 9mm

### 2. General Description

The Lontium's LT8619C is a high performance HD-DVI/Dual-mode DP receiver chip, compliant with the HD-DVI 1.4 specification. The TTL output can support RGB, BT656, BT1120 and the output resolution can support up to 4Kx2K@30Hz.

For easy implement of a multi-media system, LT8619C supports 8-channel high quality I2S audio or SPDIF audio output.

### 3. Applications

- Car Entertainment
- Pico Projector
- Smart Projector

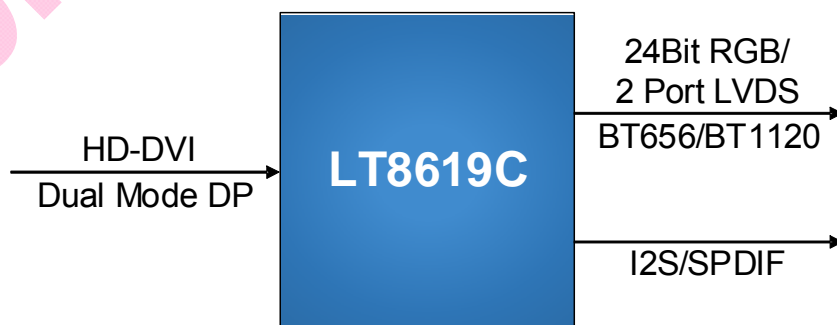


Figure 3.1 Application Diagram

## 4. Ordering Information

Table 4.1 Ordering Information

Part Number	Product Status	Operating Temperature Range	Package	Packing Method	MPQ
LT8619C	MP	-40°C to +85°C	QFN76(9*9)	Tray	2600pcs
LT8619C-AU	MP	-40°C to +85°C	QFN76(9*9)	Tray	2600pcs

**Note:** The suffix -AU denotes that it is an automotive grade device which is qualified by AEC-Q100 grade 3 testing.

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