

LT9721 --- Product Brief

HDMI to eDP

1. Features

- **HDMI1.4 Receiver**
 - Support maximum 3.4Gbps input data rate
 - Support 3D Video Data Stream as specified in HDMI1.4
 - Support HDCP1.4 and DDC Slave for EDID
 - Support Resolution up to 4Kx2K@30Hz for RGB
 - Support Hot-Plug Detect
 - No HEAC and CEC Support
- **eDP1.4 Transmitter**
 - Compliant to VESA eDP1.4 Standard
 - Support 4 Lanes with 1.62Gbps (RBR), 2.7Gbps (HBR) Data Rate
 - Support 18/24-bit RGB
 - Support Hot-Plug Detect
 - Support Backlight Control for Screen Application
 - Optional SSC 0.5% Down-Spreading Output
 - Configurable Output Swing Internal Rterm Calibration with Less than 5% Error
- **Miscellaneous**
 - 1.8V/3.3V Dual Supply Power
 - External 25MHz Crystal Reference Clock
 - Temperature Range: -40°C to +85°C
 - Packaged in 7.5mm x 7.5mm QFN64

2. General Description

The Lontium LT9721 is HDMI to eDP converter.

For MIPI DSI® input, LT9721 features a single-port MIPI DSI receiver with 1 clock lane and 4 data lanes operating at maximum 1.5Gbps per data lane and a maximum input bandwidth of 6Gbps.

For HDMI input, LT9721 features a HDMI1.4 receiver with 1 clock lane and 3 data lanes operating at maximum 3.4Gbps per data lane and a maximum input bandwidth of 10.2Gbps, allowing resolution up to 4Kx2K@30Hz for RGB format. The converter also integrates a DDC controller and supports HDCP1.4. The converter decodes the input 18/24-bit RGB packets and converts the formatted video data stream to a 4-lane eDP1.4 compliant output, supporting RBR(1.62Gbps) and HBR(2.7Gbps) link speeds. The build-in optional SSC function reduces EMI effect on EMI-concerned system application.

The LT9721 is fabricated in advanced CMOS process and implemented in 7.5mm x 7.5mm QFN64 package. This package is RoHS compliant and specified to operate from -40°C to +85°C.

3. Applications

- Notebook
- Advertising machine
- Cash register

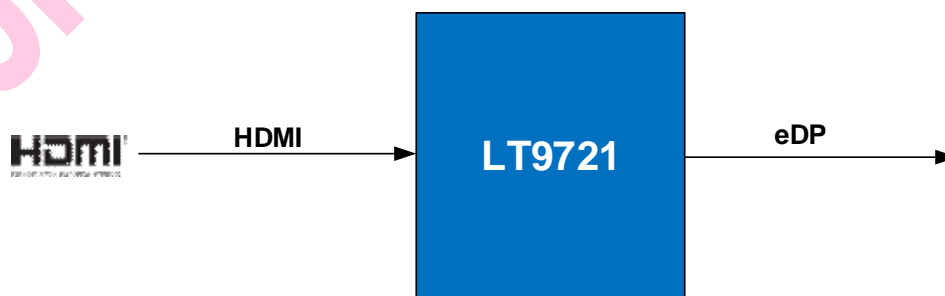


Figure 3.1 Application Diagram

4. Ordering Information

Table 4.1 Ordering Information

Part Number	Operating Temperature Range	Package	Packing Method	MPQ
LT9721	-40°C to +85°C	QFN64 (7.5*7.5)	Tray	2600pcs

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