LT86101UXE --- Product Brief

HD-DVI2.0/DVI Repeater

1. Features

- HD-DVI 1.4/2.0 specifications compliant
- Support 4Kx2K extended resolution formats up to 6.0Gbps data rate
- Supports 8/10/12bit deep color
- Supports 4K2K video up to 60Hz frame rate
- Supports all video format which is compliant with HD-DVI2.0/1.4 specification
- Adaptive equalization and de-emphasis to compensate long cable losses
- Unlimited cascading for more output ports or signal repeating
- Jitter cleaning PLL for better performance
- No external crystal is needed

2. General Description

The Lontium LT86101UXE HD-DVI2.0/DVI Repeater features a high speed repeater compliant with HD-DVI2.0/1.4 specification, max 6Gbps high speed data rate, adaptive equalization RX input and pre-emphasized TX output to support long cable application, no XTAL on board to save BOM cost.

LT86101UXE HD-DVI2.0/DVI Repeater automatically detect the cable loss, and adaptively optimize the equalization setting. The CDR cleans the input data jitter, make it suitable for long cable and cascade application. It support RX termination resistor calibration to further improve signal integrity. Also, several devices can be cascaded to extend cable reach without degrading signal fidelity. The transmitter supports configurable transmit de-emphasis so that the output can be optimized for driving additional lengths of cables or FR4 traces.

This package is QFN64 7.5mmx7.5mm. It operates from −40°C to +85°C.

3. Applications

- Multiple display/TV support
- DVI/HD-DVI cable-extender modules
- Cable assemblies
- TMDS cable equalizer

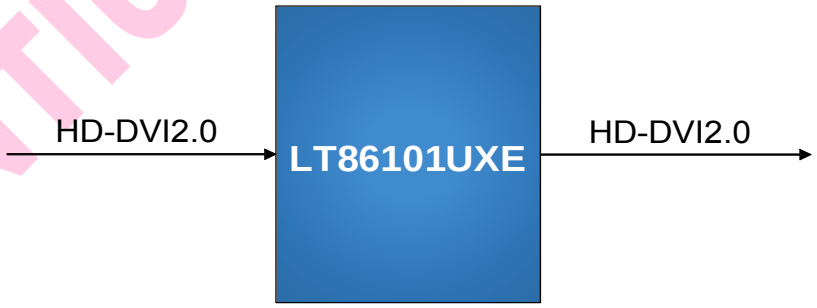

Figure 3.1 Application Diagram

4. Ordering Information

Table 4.1 Ordering Information

Part Number	Product Status	Operating Temperature Range	Package	Packing Method	MPQ
LT86101UXE_U5	MP	-40°C to +85°C	QFN64 (7.5*7.5)	Tray	2600pcs
MP: Mass Production.					

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