

# LT86101X --- Product Brief

## HDMI1.4/2.0 Re-driver and DP++ to HDMI Level Shifter

### 1. Features

- Compliant to HDMI1.4b /2.0 Standard for Both Input and Output
- Support Dual-mode DisplayPort Standard for Input
- Support up to 6Gb/s Data Rates
- Integrate DDC Interception
- Programmable Input Equalization
- Programmable Output Swing and De-emphasis
- Support AC Coupled Interface Only
- Internal MCU and Flash for Online Firmware Upgrade
- Support External I2C Debug
- 1.8V/3.3V Power Supply
- Packaged in 5mmx5mm QFN40

### 2. General Description

LT86101X is a deeply-optimized HDMI re-driver and DP++ to HDMI level shifter IC that enhances TMDS signal quality by performing cable or board trace loss compensation. LT86101X can be configured to work under HDMI1.4b with

up to 3.4Gb/s data rate or HDMI2.0 standard with maximum 6Gb/s data rate to allow for the highest resolutions of 4Kx2K 60Hz or 1080P with higher refresh rates.

The input receiver of LT86101X implements a multi-level programmable linear equalizer that can support maximum 20dB loss compensation due to Inter-Symbol Interference (ISI). The output transmitter re-drives the received signal with multi-level programmable output swing and up to 6dB de-emphasis.

LT86101X is fabricated in advanced CMOS process and implemented in a small outline 5mmx5mm QFN40 package. This package is RoHS compliant and specified to operate from -40°C to +85°C.

### 3. Applications

- Digital TV and Blu-ray DVD Player
- Digital Projector and LCD Display
- PC, Notebook and All-in-Ones Computer
- Home Entertainment System
- HDMI Cable Extender

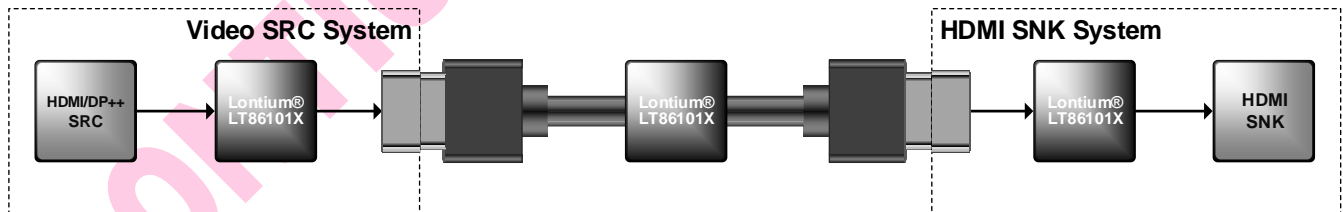


Figure 3.1 LT86101X Typical Application Diagram

### 4. Ordering Information

Table 4.1 Ordering Information

Part Number	Product Version	Product Status	Operating Temperature Range	Package	Packing Method	MPQ
LT86101X	U1	MP	-40°C to +85°C	QFN40 (5*5)	Tray	4900pcs

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