

LT8511EX --- Product Brief

HD-DVI/Dual-mode DP to VGA/PbPr Converter

1. Features

- HD-DVI and dual-mode DP receiver equipped with equalizer, supports 4Kx2K@30Hz, 1920x1200@60Hz and 1080P@60Hz 8/10/12bit deep color, up to 3.4GHz data rate
- Receiver compliant with HD-DVI1.4 and DVI1.0
- HDCP engine compliant with HDCP1.4
- Supports analog video output (VGA or YPbPr) up to 4Kx2K@30Hz, 1920x1200@60Hz and 1080P@60Hz with three DACs
- On-chip audio decoder supports 2-channel IIS and SPDIF audio output
- Supports audio software mute
- YCbCr422 to YCbCr444 conversion
- YCbCr444 to RGB and RGB to YCbCr444 conversion in ITU-R BT601 and BT709 color space
- Supports separate sync output or SOG/SOY
- Flexible interrupt registers with interrupt pin

- Link on and valid DE detection

2. General Description

LT8511EX is a low cost, high performance, single port HD-DVI and dual-mode Displayport receiver which is compliant with HD-DVI 1.4. The RX can receive 4Kx2K@30Hz (up to 3.4Gbps data rate) input. Besides, it supports analog video output (VGA or YPbPr) up to 4Kx2K@30Hz, 1920x1200@60Hz and 1080P@60Hz with three high resolution DACs. The chip integrates dual-mode receiver front end with equalizer, HD-DVI core and HDCP engine are in a single chip.

3. Applications

- Mobile Phone
- Tablet/Pad
- Ultra book
- Home Game Console
- PC/Graphic Card



Figure 3.1 Application Diagrams

4. Ordering Information

Table 4.1 Ordering Information

Part Number	Operating Temperature Range	Package	Packing Method	MPQ
LT8511EX	-40°C to +85°C	QFN64(9*9)	Tape and Reel	2600pcs

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