LT8511EX --- Product Brief

HDMI /DP to VGA/PbPr Converter

Features

- On-chip HDMI and dual-mode DP receiver with Equalizer, supports 4Kx2K, 1920x1200 and 1080p 8/10/12bit deep color, up to 3.4GHz data ratio.
- On chip receiver core which is compliant with HDMI1.4 specification.
- On chip HDCP engine which is compliant with HDCP1.4 spec.
- HDCP key stored in MCU for BOM cost reduction.
- Supports analog video output (VGA or YPbPr) up to 4Kx2K, 1920x1200, and 1080p with three on chip DAC.
- On-chip audio decoder which supports 2-channel IIS and SPDIF audio outputs.
- Support audio soft mute.
- On chip YCC422 to YCC444 conversion.
- On chip YCC to RGB and RGB to YCC conversion in ITU-R BT.601 and 709 color space.
- Support separate sync output and SOG/SOY.
- Flexible interrupt registers with interrupt pin.
- Link on and Valid DE detection.
- Offered in 64-pin QFN package, and operates over -40°C to +85°C temperature range.

Description

LT8511EX is a low cost high performance single port HDMI and dual-mode Displayport receiver which is compliant with HDMI 1.4. The RX can receive 4Kx2K(1080p 8/10/12bit deep color, up to 3.4GHz data ratio) input. Besides it supports analog video-output(VGA or YPbPr) up to 4Kx2K, 1920x1200, and 1080p with three high resolution DACs. The chip integrates dual-mode receiver front end with equalizer, HDMI core and HDCP engine in a single chip.

Applications

- Mobile Phone
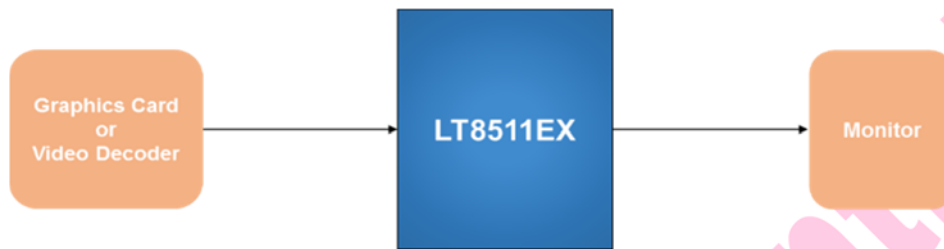- Tablet/Pad
- Ultra book

- Home Game Console
- PC/Graphic Card

Figure 1.   Application Diagram

Ordering Information

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

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