

Multimedia Converter LVDS to HDMI 1080Pixels 64-Pin QFN EP



Images are for reference only

[Inquiry](#)

Manufacturer:	ITE Tech. Inc
Package/Case:	QFN64
Product Type:	Discrete Semiconductor Modules
Lifecycle:	Unconfirmed

General Description

The IT6263 is a high-performance single-chip De-SSC LVDS to HDMI converter. Combined with LVDS receiver and HDMI 1.4a Transmitter, the IT6263 supports LVDS input and HDMI 1.4 output by conversion function. The build-in LVDS receiver can support single-link and dual-link LVDS inputs, and the build-in HDMI transmitter is fully compliant with HDMI 1.4a/3D, HDCP 1.2 and backward compatible with DVI 1.0 specification. With high speed LVDS RX, the IT6263 can support resolution up to 1080P and UXGA and 10-bit deep colors. The IT6263 also supports all the HDMI 1.4a 3D mandatory formats which are compliant with HDMI 1.4a 3D Specification In order to reduce the EMI noise on legacy system application, the traditional LVDS source will transmit differential signals with spread spectrum, but this spread spectrum does not be allowed for HDMI protocol. The IT6263 also build-in unique De-SSC (De-Spread Spectrum) function , it can help customers easily to adopt the IT6263 on the EMI-concerned platform, with SSC has been generated from LVDS source processors. The IT6263 also encodes and transmits up to 8 channels of I2S digital audio, with sampling rate up to 192kHz and sample size up to 24 bits. In addition, an S/PDIF input port takes in compressed audio of up to 192kHz frame rate. The newly supported High-Bit Rate (HBR) audio by HDMI Specifications v1.3 is provided by the IT6263 in two interfaces: with the four I2S input ports or the S/PDIF input port. With both interfaces the highest possible HBR frame rate is supported at up to 768kHz. Each IT6263 chip comes preprogrammed with an unique HDCP key, in compliance with the HDCP 1.2 standard so as to provide secure transmission of high-definition content. Users of the IT6263 need not purchase any HDCP keys or ROMs. The single chip IT6263 provides high performance, cost effective, LVDS2HDMI conversion function, and it can be applied to IP TV STBs and Scaler Boxes which need small size video outputs.

PRODUCT INFORMATION FEATURES DOWNLOAD

PART NO PACKAGE TYPE DESCRIPTION FLASH SUPPORT IT6263FN 64-QFN 9mm x 9mm Single Chip De-SSC LVDS to HDMI Converter LVDS RX

- Support LVDS Input modes: Single Link, Dual Link
- Support input clock rate up to 150MHz
- Support input color depth up to 10bit
- Support De-SSC (De-Spread Spectrum)
- Support Data Mapping: Open LDI, JEIDA, VESA HDMI TX
- HDMI 1.4a transmitter
- Compatible with HDMI 1.3, HDCP1.2 and DVI 1.0 specifications
- Support deep color depth up to 12bit
- Support link speeds of up to 2.25Gbps (link clock rate of 225MHz)
- Supporting the primary 3D formats which are compliant with HDMI 1.4a/3D Specification
- Supporting 3D video up to 1080P@50/59.95/60Hz, 1080P@23.98/24/29.97/30Hz, 1080i@50/59.94/60/Hz, 720P@50/59.94/60Hz
- Supporting formats: Framing Packing, Side-by-Side (half), Top-and-Bottom
- Support Gammat Metadata packet
- Digital audio input interface supporting
- up to four I2S interface supporting 8-channel audio, with sample rates of 32~192 kHz and sample sizes of 16~24 bits
- S/PDIF interface supporting PCM, Dolby Digital, DTS digital audio at up to 192kHz frame rate
- Support for high-bit-rate (HBR) audio such as DTS-HD and Dolby TrueHD through the four I2S interface or the S/PDIF interface, with frame rates as high as 768kHz
- Compatible with IEC 60958 and IEC 61937
- Audio down-sampling of 2X and 4X
- Software programmable, auto-calibrated TMDS source terminations provide for optimal source
- Software programmable HDMI output current level
- MCLK input is optional for audio operation. Users could opt to implement audio input interface with or without MCLK
- Integrated pre-programmed HDCP keys
- Purely hardware HDCP engine increasing the robustness and security of HDCP operation
- Monitor detection through Hot Plug Detection and Receiver Termination Detection
- Embedded full-function pattern generator
- Intelligent, programmable power management Combined
- Support up to Full-HD/1080P and UXGA(1600x1200) display format
- Support deep color depth up to 10bit
- 64-pin QFN (9mm x

9mm) package • RoHS Compliant (100% Green available) NO RELEASE DATE TITLE DOWNLOAD

Key Features

LVDS RX

HDMI TX

Combined

Recommended For You
