# MIPI/DSI Receiver
# with HDMI Transmitter

**Data Sheet**

# ADV7535

## FEATURES

**General**
Low power MIPI/DSI receiver
Low power HDMI/DVI transmitter ideal for portable applications
CEC controller and expanded message buffer (3 messages) reduces system overhead
Compatible with DVI v.1.0
Embedded HDCP keys to support HDCP 1.3
1.8 V and 3.3 V supplies for ultralow operating power
Audio inputs accept logic levels from 1.8 V to 3.3 V
**MIPI/DSI receiver**
2-, 3-, or 4-lane DSI receiver
Supports up to 891 Mbps per lane
Compatible with D-PHY V.0.90 and DSI V.1.02
Supports inputs of 24-bit RGB 4:4:4
**HDMI (TMDS) video out**
148.5 MHz maximum TMDS output clock frequency supports video resolutions up to 1080p at 60 Hz
Programmable 2-way color space converter
Output supports
36-, 30-, or 24-bit RGB 4:4:4
36-, 30-, or 24-bit YCbCr 4:4:4
Automatic input video format timing detection (CEA-861E)
**Digital audio**
Supports standard S/PDIF for stereo LPCM or compressed audio up to 192 kHz
2-channel uncompressed LPCM I²S audio up to 192 kHz
No audio master clock needed for supporting S/PDIF and I²S
**Special features for easy system design**
On-chip MPU with I²C master to perform EDID reading and HDCP operations
5 V tolerant I²C and HPD inputs/outputs (I/Os), no extra device needed

## APPLICATIONS

Mobile devices
Cellular handsets
Digital video cameras
Digital still cameras
Personal media players
Gaming

## GENERAL DESCRIPTION

The ADV7535 provides a MIPI® display serial interface (MIPI/DSI) input receiver and a High-Definition Multimedia Interface (HDMI®) transmitter output. The DSI receiver input supports DSI video mode operation only, and specifically, only supports nonburst mode with sync pulses. The DSI receiver provides up to four lanes of MIPI/DSI data, each running up to 891 Mbps. The HDMI transmitter supports video resolutions up to a maximum TMDS clock frequency of 148.5 MHz. The ADV7535 also provides an audio input port, which supports the insertion of audio into the HDMI stream.

Fabricated in an advanced CMOS process, the ADV7535 is available in a space saving, 49-ball, WLCSP surface-mount package. This package is RoHS-compliant and specified to operate from −10°C to +85°C.

*For more information about the ADV7535, including the complete data sheet, contact your local Analog Devices, Inc., sales office at www.analog.com/sales.*

# NOTES

ANALOG DEVICES

www.analog.com

# X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for* Video ICs *category:*

*Click to view products by* Analog Devices *manufacturer:*

Other Similar products are found below :

M21328G-12  ISL79985ARZ-T  TW2964-LA2-CR  TW9903-FB  TW9919-PE1-GR  PI3HDX511DZLEX  M23428G-33  PI7VD9008ABHFDE  ADV7186BBCZ-TL  ADV7186BBCZ-T-RL  ADV8003KBCZ-7C  PI3VDP411LSAZBEX  PI3VDP411LSTZBEX  M23145G-14  PI3VDP411LSRZBEX  PI3HDX511EZLSEX  BH76912GU-E2  CM5100-01CP  TVP5160PNP  TVP5151PBSR  BA7603F-E2  BH76361FV-E2  ADV7391WBCPZ-RL  MU82645DES S LM6B  BH76106HFV-TR  BH76206HFV-TR  ADV7179WBCPZ  ADV7611BSWZ-P-RL  ADV7180KCP32Z  ADV7180WBCP32Z  ADV7280KCPZ  ADV7280WBCPZ-M  ADV7281WBCPZ-MA  ADV7283WBCPZ  ADV7283BCPZ  ADV7282WBCPZ-M  ADV7280KCPZ-M  ADV7280WBCPZ  ADV7180KCP32Z-RL  ADV7282AWBCPZ  ADV7182AWBCPZ  AD723ARUZ  ADV7611BSWZ  ADV7181DWBCPZ-RL  ADV7173KSTZ-REEL  ADV7180WBST48Z-RL  ADA4411-3ARQZ  ADA4411-3ARQZ-R7  ADA4417-3ARMZ  ADA4417-3ARMZ-R7