

# ADV7610BBCZ-P-RL

Data Sheet

Video ICs Single input HDMI Receiver non HDCP key

Manufacturers <u>Analog Devices, Inc</u>

Package/Case CSPBGA-76

Product Type Audio & Video Products; HDMI/DVI Receivers

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for ADV7610BBCZ-P-RL or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The ADV7610 is a high quality, single input HDMI-capable receiver. It incorporates an HDMI-capable receiver that supports all mandatory 3D TV defined in HDMI specification. The ADV7610 supports formats up to UXGA 60 Hz at eight bits.

It integrates a CEC controller that supports the capability discovery and control (CDC) feature.

The ADV7610 has a 4-channel stereo audio output port for the audio data extracted from the HDMI stream. The HDMI receiver has an advanced mute controller that prevents audible extraneous noise in the audio output.

The following audio formats are accessible:

Four streams from the I2S serializer (eight channels)

A stream from the S/PDIF serializer (two uncompressed channels or N compressed channels, for example, AC3)

A DST stream

The HDMI port has dedicated 5 V detect and Hot Plug assert pins. The HDMI receiver also includes an integrated equalizer that ensures the robust operation of the interface with long cables.

The ADV7610 contains one main component processor (CP) that processes the video signals from the HDMI receiver. It provides features such as contrast, brightness, saturation adjustments, STDI detection block, free run, and synchronization alignment controls.

Fabricated in an advanced CMOS process, the ADV7610 is provided in a 6 mm  $\times$  6 mm, 76-ball CSP\_BGA, RoHS-compliant package and is specified over the  $-40^{\circ}$ C to  $+85^{\circ}$ C temperature range.

APPLICATIONS

Portable applications

Pico projectors

#### **Features**

High-Definition Multimedia Interface (HDMI®)All mandatory and additional 3D video formats supportedExtended colorimetry, including sYCC601, Adobe RGB, Adobe YCC 601, and xvYCC extended gamut colorCEC 1.4-compatible

HDMI receiver 165 MHz maximum transition-minimized differential signaling (TMDS) clock frequency 24-bit output pixel bus

Audio supportS/PDIF (IEC 60958-compatible) digital audioHDMI audio extraction supportAdvanced audio mute featureI2S, 4 streams for 8 channels

Interrupt controller with two interrupt outputsStandard identification (STDI) circuitHighly flexible 24-bit pixel output interface

Internal extended display identification data (EDID) RAMAny-to-any  $3\times 3$  color space conversion (CSC) matrix2-layer printed circuit board (PCB) design supported 76-ball,  $6~\text{mm}\times 6~\text{mm}$ , chip-scale package BGA

See data sheet for additional features

## **Application**

Four streams from the I

2

S serializer (eight channels)

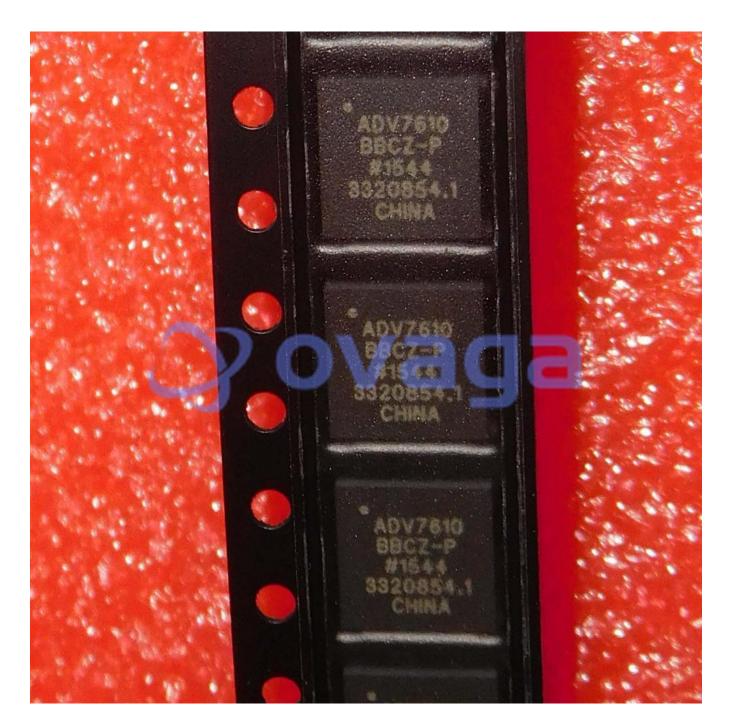
A stream from the S/PDIF serializer (two uncompressed channels or N compressed channels, for example, AC3)

A DST stream

Portable applications

Pico projectors

Digital video cameras



### **Related Products**



ADV7630KSVZ
Analog Devices, Inc
TQFP128



ADV7511KSTZ-P Analog Devices, Inc LQFP-100



ADV7511WBSWZ Analog Devices, Inc LQFP-100



ADV7842KBCZ-5 Analog Devices, Inc CSPBGA-256



ADV7180BSTZ

Analog Devices, Inc
LQFP-64



ADV7181BBSTZ

Analog Devices, Inc
LQFP64



ADV7180BCPZ
Analog Devices, Inc
QFN-40



ADV7403BSTZ-110
Analog Devices, Inc
LQFP-100