

ANALOG Video Signal Processor with Bitmap OSD, DEVICES Dual HDMI Tx. and Video Encoder **Dual HDMI Tx, and Video Encoder**

ADV8002 Data Sheet

FEATURES

Video signal processor

Full 12-bit 4:4:4 YUV internal processing

Motion-adaptive de-interlacing with ultralow angle interpolation

Cadence detection for the recovery of original frames from film-based content

Two video scalers allow two different output resolutions simultaneously

Aspect ratio conversion/panorama scaling

Sharpness and detail enhancement

Noise reduction to reduce random, mosquito, and block

Frame rate converter

Picture-in-picture (PIP) support

On-screen display (OSD)

Internally generated bitmap-based OSD allowing overlay on one or more video outputs

Overlay on 3D video formats

Dedicated OSD scaler

Alpha blending of OSD data on video data

Option of external OSD

Easy to use software tool for developing OSDs

HDMI® transmitters

Dual HDMI transmitters enabling splitter capability

Content type bits

CEC 1.4 controller

Audio return channel (ARC) support

Supports standard S/PDIF for stereo LPCM compressed audio up to 192 kHz

6-channel uncompressed LPCM I2S audio up to 192 kHz

6-channel direct stream digital (DSD) audio inputs

6 NSV™ DAC video encoder

6 Noise Shaped Video (NSV®) 12-bit video DACs

Multiformat video output support

Composite (CVBS), S-Video (Y/C), and Component YPrPb (SD, ED, and HD)

Rovi® Rev. 7.1.L1 (SD) and Rev. 1.4 (ED) compliant

Simultaneous SD and ED/HD operation

APPLICATIONS

High-end A/V receivers Upconverting DVD players/recorders Blu-ray players/recorders

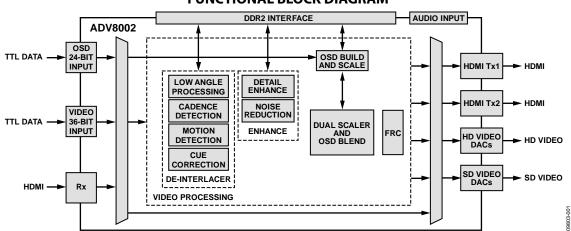
Set-top boxes

Video conferencing

Standalone video processors

HDMI splitters

FUNCTIONAL BLOCK DIAGRAM



For more information on the ADV8002, contact a local Analog Devices sales office.

Xpressview.

Rev. SpA

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NOTES

I²C refers to a communications protocol originally developed by Philips Semiconductors (now NXP Semiconductors).

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