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

Data Sheet

ADV8002

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 noise 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

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Rev. SpA

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NOTES

I²C refers to a communications protocol originally developed by Philips Semiconductors (now NXP Semiconductors). HDMI, the HDMI Logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

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