



Video Signal Processor with Bitmap OSD, 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 scalars 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

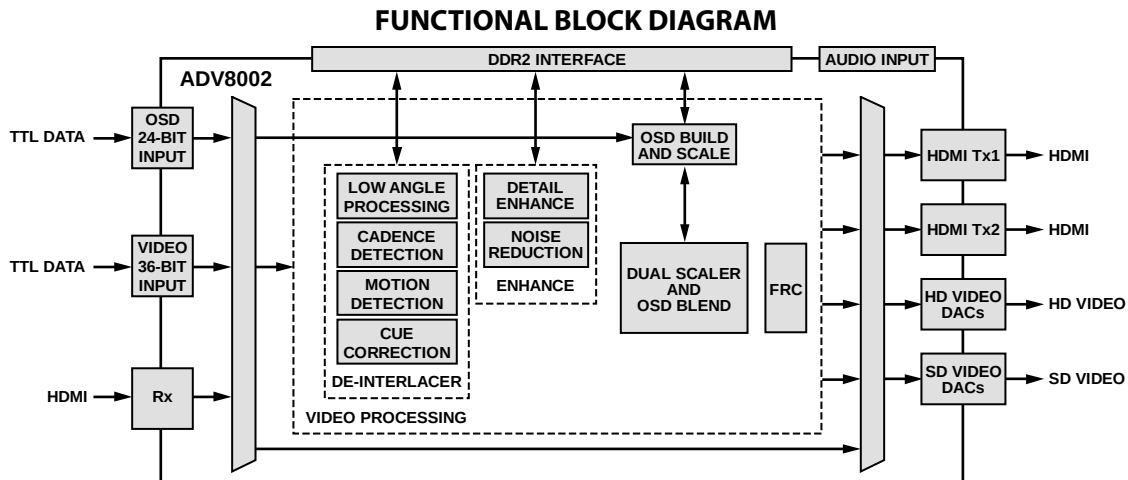


Figure 1.

For more information on the [ADV8002](#), contact a [local Analog Devices sales office](#).

Xpressview

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NOTES

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