



# 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 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 I<sup>2</sup>S 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

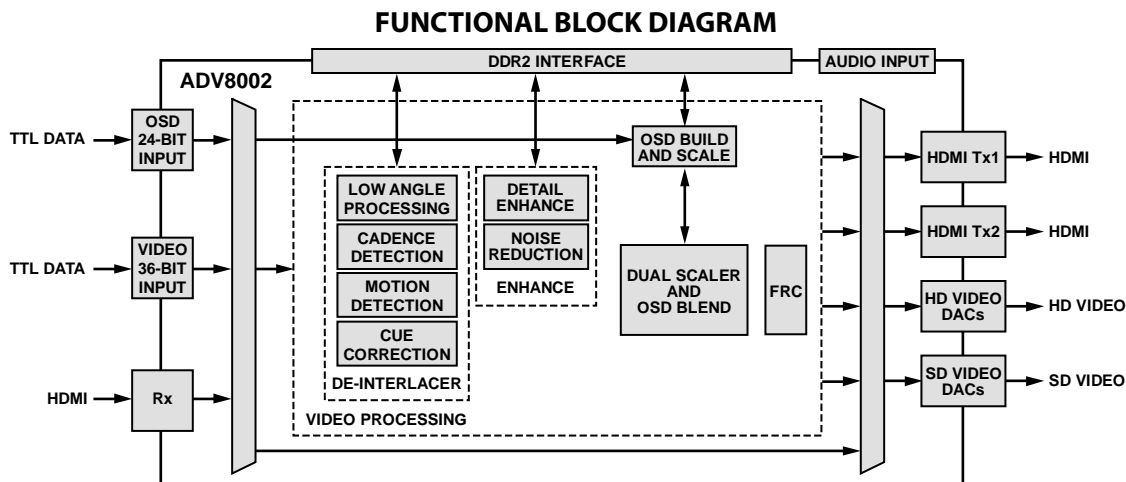


Figure 1.

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

**Xpressview**

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### Rev. SpA

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## NOTES

I<sup>2</sup>C refers to a communications protocol originally developed by Philips Semiconductors (now NXP Semiconductors).  
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