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 OSDD

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

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