

# GEMINI-2™

2 CHANNEL HD MPEG-2 DECODER CARD  
WITH CROSS-CHANNEL SYNCHRONIZATION

## FEATURES

- High quality HD MPEG-2 playback
- Component (PbPrY), RGBHV, and Composite video outputs per channel
- Decodes all 18 ATSC formats up to 1920 x 1080p
- High quality up/down conversion between formats
- Windows 2000 / XP / Vista drivers with full SDK and sample code
- 5.1 digital audio (S/PDIF) and stereo audio outputs
- Frame accurate cross-channel synchronization

## BENEFITS

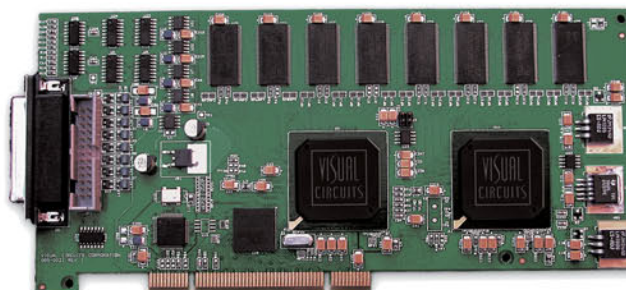
- Delivers high-quality MPEG-2 video
- Reduces cost per channel in multi-channel systems
- Offers greater flexibility and control than "consumer" video cards
- Provides ability to operate multiple boards out of a single server
- Integrates high-quality video and graphics
- Allows simultaneous HD and SD output of the same video in perfect synchronization

The Gemini-2 PCI decoder card provides high quality High Definition and Standard Definition MPEG-2 decoding for professional digital media applications. Whether you need to deliver HD video for digital signage, museum and exhibition displays, or virtual ride simulators, Gemini-2's outstanding image quality and powerful feature set delivers you an affordable and flexible HD solution.

Gemini-2 supports two independent channels of MPEG-2 video in HD or SD formats, with built-in 32-bit graphics support for on screen display. It can layer high quality graphics over your video with transparency, in any standard ATSC resolution. You can choose from standard stereo output or 5.1 digital (AC-3) sound, perfect for high-impact HD exhibits. And with built-in scaling, you can up-convert SD content to HD resolutions, or down-convert HD to SD displays.

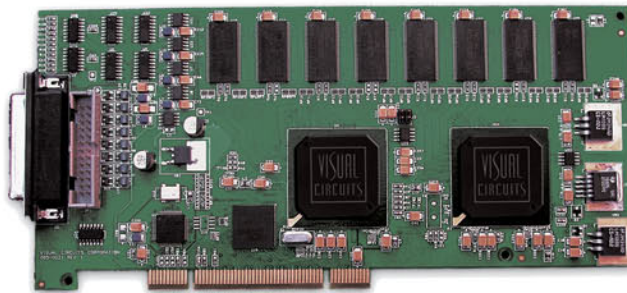
Gemini-2 features frame accurate cross-channel synchronization, allowing you to keep multiple channels of video locked together, making it ideal for simulated 3D theaters or virtual ride simulators. Or you can combine cross-channel sync and real-time up or down conversion to deliver the same video in HD on one channel, and SD on another, in perfect time with one another. And with the ability to install multiple Gemini-2 cards into a single server, you can deliver several channels of HD and SD video content from a single source, either independently or in sync.

Gemini-2 offers an affordable and powerful HD solution to meet the needs of the most demanding creative video applications.



# Gemini-2 Specifications

DIGITAL VIDEO DECODING	MPEG-1, MPEG-2, unencrypted DVD (.vob) files Decodes Main Profile at Main Level and Main Profile at High Level MPEG-2 streams (ISO/IEC 13818-1) Decodes transport, program and elementary streams Simultaneous HD and down converted NTSC or PAL output Decodes all 18 ATSC formats up to 1920 x 1080p Data Rate up to 45 Mbps 16:9, 4:3 and 5:4 aspect ratios 4:2:2 and 4:2:0 decoding
VIDEO FORMAT CONVERSION	Advanced up-scaling provides HD resolution (up to 1920 x 1080) from SD MPEG-2 files 4-tap horizontal and vertical filters HD (ITU 709) TO SD (ITU 601) bi-directional color format conversion Adaptive de-interlacing Flicker filtering
VIDEO OUTPUT FORMAT	NTSC, PAL; 1920 x 1080i at 59.94 or 60 fields/sec; 1920 x 1080p at 60 frames/sec; 1280 x 720p at 59.94 and 60 frames/sec; 720 x 576p at 50 frames/sec (PAL); 720 x 576 at 50 fields/sec (PAL); variable aspect ratios
VIDEO OUTPUTS	2 composite video outputs per channel (total of 4); RGBHV; Component (PbPrY); 25-pin D-sub connector for A/V breakout
ADVANCED VIDEO PROCESSING	32-bit OSD; 256-level transparency; 32-bit high-resolution (up to 1920 x 1080); independent scalers for video and overlays
AUDIO PROCESSING	High-quality audio and video synchronization; 5.1 digital audio (external AC-3 decoder required); two-channel analog audio output per channel; MPEG-1 layers I, II and III; 12-bit video DACs for accurate, low-noise performance
AUDIO OUTPUTS	S/PDIF digital audio output (IEC 60958); stereo analog
SOFTWARE	Complete C programming library with sample source code and function calls
SYSTEM REQUIREMENTS	Windows 2000, XP, Vista, Server 2000/2003; 600 Mhz processor; (1 Ghz or higher recommended); 256 MB RAM (512 MB or more recommended); Ultra ATA/66 hard drive (SATA 150 recommended, multiple channels and higher bit rates may require SATA 300 and possibly striped RAID)
HARDWARE PROFILE	Three-quarters (3/4) size PCI card; PCI v2.1 interface; Universal PCI connector (5v or 3.3v, 32 bit or 64 bit slot)



OOH Video Ltd

604-606-1846

1-866-606-1846 (toll free in North America)

[sales@oohvideo.com](mailto:sales@oohvideo.com)

[support@oohvideo.com](mailto:support@oohvideo.com)

[www.oohvideo.com](http://www.oohvideo.com)

