

## **Revolutionary HDMI Soundcard Unlocks Premium High Definition Multimedia**

### **ASUS Xonar HDAV1.3 – The Essential Home Theater PC Card**

**Fremont, California; June 3<sup>rd</sup>, 2008** - ASUS, a leading name in high quality computer components and solutions, announces the world's first HDMI 1.3a compliant audio/video enhancement combo card – the Xonar HDAV1.3. Capable of outputting uncompressed multichannel high definition audio from Blu-ray movies, the Xonar HDAV1.3 also enhances video with an onboard Splendid HD processor – providing the ultimate multimedia enjoyment.



#### **Uncompromised HD Digital Audio & Video with Support for Blu-ray and HDMI 1.3**

The Xonar HDAV1.3 features Protected Audio Playback Systems (PAPS) and full Advanced Access Content System (AACCS) certification. Without both certifications, typical PCs must down-sample Blu-ray audio to DVD quality (48K/16bit). By closely working with ArcSoft's Total Media Theater, ASUS' Xonar HDAV1.3 is capable of decoding Blu-ray movies and takes full advantage of lossless digital audio formats such as Dolby® TrueHD and DTS-HD Master Audio™ for professional, high-fidelity sounds at 24bit, 96-192Khz. The PCI Express based Xonar HDAV1.3 is designed from the ground up for next generation home theater PCs (HTPC); and is equipped with the proprietary AV200 audio processor and HDMI1.3a certified Splendid HD video processor – making it capable of delivering the highest quality 7.1 channel 192K linear pulse code modulation (LPCM) audio and high definition video through the HDMI port.

**State-of-the-art Analog Audio with 120dB Signal-to Noise Ratio\***

The ASUS Xonar HDAV1.3 also reigns in analog audio quality thanks to a HyperGrounding circuit design. With HyperGrounding, Xonar sound cards further reduce EMI noise inside modern PCs, providing clean 120 dB SNR and peerless 0.0004% low distortion – reaching the pinnacle of audio quality on most PC platforms. Unlike generic audio cards in the market that provide the highest SNR to only the front stereo outputs, the Xonar HDAV1.3 delivers 120 dB quality audio for all 7.1 channels.

### **Splendid HD Video Processor Presents True HD video for HTPCs**

The Splendid HD Video Processor increases color performance and enhances edges for a more brilliant, crisper high definition image – without impacting the CPU load. Splendid HD not only recovers clarity when viewing lower-resolution content, but also reduces flicker for a more natural, brilliant viewing experience.

### **High Performance Components & Swappable Operational Amplifiers**

At the heart of the Xonar is an ASUS AV200 codec chip, which routes and interprets high quality signals to premium audio components. These high quality materials include oversampling digital to analog converters (Burr-Brown PCM1796, 123 dB SNR), National Semiconductor LM4562 operational amplifiers (opamp), and an analog-to-digital (Cirrus Logic CS5381, 120 dB SNR) converter. The Xonar HDAV1.3 is the first in the Xonar family to utilize opamp sockets to allow simple, solder-less modifications for user-customized sound.

### **DS3D GX2.0 for Rich Gaming Audio**

The Xonar HDAV1.3 also comes with the renowned DS3D GX 2.0, which revives EAX 5.0 and 3D gaming audio in Vista. DS3D GX 2.0 automatically enables the latest EAX and DirectSound HW after installation, with no additional driver patches, game modifications, or OpenAL required. DS3D GX2.0 also extends MMOG EAX to online chat, allowing you to place your voice into the game's environment.



## HDAV1.3 Deluxe - Premium Multi-channel Analog

In addition to the Xonar HDAV1.3's features, the Xonar HDAV1.3 Deluxe packs the HDAV H6 surround channel expansion card. The HDAV H6 offers 120dB SNR\*, ultra-low 0.0004% distortion, and swappable opamps on each channel.

\*Tested with Audio Precision

### Specifications

Model Name	Xonar HDAV1.3 Audio/Video Enhancement Card	Xonar HDAV1.3 Deluxe 7.1 Audio/Video Enhancement Card
<b>Processor and Interface</b>		
Audio Processor	ASUS AV200 (Max. 192KHz/24bit)	
Video Processor	ASUS Splendid HD Video Processor	
24-bit DAC	TI Burr-Brown PCM1796 (123dB SNR)	
24-bit ADC	Cirrus-Logic CS5381 (120dB SNR)	
Output Audio OPAs	Swappable DIP-typed NS LM4562 (THD+N~0.00003%)	
Bus Compatibility	-PCI Express X1	
HDMI	-HDMI 1.3a	
<b>Video Specification</b>		
Video Resolution	-DTV Resolution: up to 1080p -PC Resolution: up to UXGA	
Color Depth and Range	-up to 48-bit/per pixel color depths (RGB or YcbCr) -broader xvYCC color space standard	
Splendid HD Modes	-Photo, Video, Gaming (Gaming mode requires ASUS graphics card)	
<b>Audio Sample Rate and Resolution</b>		
HDMI 1.3 Playback Format	-7.1 channel LPCM 192KHz/24bit -Dolby TrueHD, Dolby Digital Plus, and DTS-HD Master Audio pass-through upgradeable by TotalMedia player	
Analog Playback & Recording	192KHz/24bit	
S/PDIF Digital Input & Output	192KHz/24bit	
<b>Analog Audio Performance</b>		
SNR (A-Weighted):	Output: 120 dB Input: 118dB	
THD+N at 1KHz:	Output: 0.0004% (-108dB) Input: 0.0003% (-110dB)	
<b>I/O Ports</b>		
HDMI Ports	HDMI-Out Type A *1 HDMI-In Type A *1	
Analog Output Jack:	RCA jack *2 (Front L/R)	RCA jack *8 (Front L/R and all other 6 surround channels)
Analog Input Jack:	mini jack *1 (Line-In/Mic-In shared)	
Front-Panel Header	HD Audio and AC97	
AUX In	Aux-In 4-pin header	
Digital S/PDIF	Input: Coaxial/TOSLINK combo output: Coaxial/TOSLINK combo	
<b>Driver Features</b>		
Dolby	Dolby® Digital Live, Dolby® Headphone, Dolby® Virtual Speaker, Dolby® Pro-Logic IIx	

DTS	DTS® Connect (DTS Interactive, DTS Neo:PC )	
DS3D GX 2.0	-Latest EAX and DirectSound 3D hardware for Windows Vista & XP. -VocalFX for online gaming or chatting	
More	SmartVolume, Acoustic Echo Cancellation, Karaoke Functions, FlexBass	
ASIO 2.0	44.1K/48K/96K/192KHz @ 16/24bit	
Package Bundles		
Software	TotalMedia Theatre: 7.1-ch Blu-ray disc/HD-DVD/DVD movie player supports HD video/audio decoding ASUS Gamer OSD: On-screen-display utility for gaming RightMark Audio Analyzer: Easy but powerful software intended for testing the quality of audio equipments	
Accessories	-DVI-to-HDMI cable -HDMI cable -Stereo RCA to 3.5mm cable -S/PDIF TOSLINK optical adaptor	-H6 Extension Board cable (for connecting HDAV card and extension board) -DVI-to-HDMI cable -HDMI cable -3 x Stereo RCA to 3.5mm cable -S/PDIF TOSLINK optical adaptor

### About ASUS

ASUS is a leading company in the new digital era. With a global staff of more than 8000 and a world-class R&D design team, the turnover for 2007 was 6.9 billion U.S. Dollars. ASUS has been ranked in Business Week InfoTech 100 for 10 consecutive years, and has been ranked No.1 by the Wall Street Journal Asia for best quality products in Taiwan.