

# HARDWARE

## AUDIO INTERFACES

### Audio Format Converters

#### Alesis AI-3, \$499

The AI-3 provides eight analog inputs and outputs on balanced 1/4" TRS connectors. These jacks feed 24-bit, 128x oversampling A/D/A converters, offering a 96dB dynamic range. The digital signal can be routed through the ADAT optical digital interface into any device that's compatible with the ADAT optical format. The AI-3 also works in reverse, translating ADAT optical digital audio signals back to analog with 24-bit precision.

#### Alesis AI-4, \$499

There are many studio applications that require 24-bit ADAT optical to AES/EBU conversion (and vice-versa), which is why Alesis developed the AI-4 Digital Audio Interface. It converts eight channels of AES/EBU to ADAT optical format, as well as eight channels of ADAT optical to AES/EBU format. There's BNC word clock in, and separate clocking for each format conversion.

#### Aviom AN-16/i Input Module, \$900; \$1,000 for Euroblock version

The AN-16/i Input Module is a single rackspace unit that serves as the A/D input for the digital audio network. It converts 16 line level analog audio channels into uncompressed, full bandwidth, 24-bit digital data transmitted via Aviom's proprietary A-Net protocol. All inputs are balanced, and are available with either 1/4" TRS jacks or Euroblock connectors. Aviom AN-16/o Output Module, \$900; \$1,000 for Euroblock version

#### Aviom16/o-Y1 Yamaha Output Card, \$550

The Y1 Yamaha Output Card is a mini-YGDAI format card that fits into an expansion slot in the rear of Yamaha's digital consoles, including the 01V96, DM1000, 02R96, DM2000, PM5D and PM1D.

#### Behringer UltraMatch Pro SRC2496, \$249.99

The UltraMatch enables you to transfer digital audio signals between devices with different sample rates, formats, or interfaces, disable SCMS for 1:1 digital copies, and remove dropouts or jitter from digital media. Simultaneously operable outputs offer splitter functionality, and the 24-bit/96-kHz compatible SRC2496 now offers A/D and D/A conversion.

#### Cedar ADA, \$1,175

The Cedar ADA A/D and D/A converter is a stereo, 24-bit, 96kHz 1U rackmount unit that produces an AES/EBU or S/PDIF digital audio output from a balanced or unbalanced analog stereo audio input, and a stereo balanced or unbalanced output from an incoming AES/EBU or S/PDIF digital input signal.

#### Crane Song Hedd 192 A/D-D/A converter, \$3,620

HEDD-192 is short for Harmonically Enhanced Digital Device, a technological breakthrough that combines digital conversion and signal processing in one package. HEDD's solid foundation of analog circuitry insures an audiophile grade signal path. In between, the DSP algorithms extend the range of sonic options from absolutely pristine to a full spectrum palette of musically pleasing color options. HEDD can polish digital's potentially rough edges into a more pleasing analog form.

#### CreamWare A16 Ultra, \$999

One rack unit in size, featuring 16 I/O balanced analog TRS, switchable between -10dBV and +4dBu, two ADATs with S/Mux for eight channels at 24-bit/96kHz, two Z-links for 16 channels at 24-bit/96kHz and BNC word clock I/O. Sample rates: 32, 44.1, 48, 88.2 and 96kHz.

#### Euphonix 26-Channel Analog/Digital/MADI Converters, \$6,000

Euphonix manufactures a range of converters, each with high sound quality and fitted into a 2U rack mount unit. Each converter handles 26 channels and includes a pair of S/PDIF-2 channels. Four units are available; MADI to Analog, MADI to AES/EBU, AES/EBU to MADI and Analog to MADI.

#### Lynx Aurora 16 Sixteen Channel Mastering A/D D/A Converter, \$3,295

Sixteen channel analog-to-digital and digital-to-analog converter capable of sample rates up to 192kHz. Housed in a compact one rack space case, Aurora can be controlled from the front panel or remotely via computer, handheld Pocket PC, MIDI or the internal LSlot expansion port. When used with the Lynx AES16, extended control and routing options are available. All standard sample rates from 32kHz to 192kHz. Dual wire capable.

#### Lynx Aurora 8 Eight Channel Mastering A/D D/A Converter, \$2,195

Eight channel analog-to-digital and digital-to-analog converter capable of sample rates up to 192kHz. Housed in a compact one rack space case, Aurora can be controlled from the front panel or remotely via computer, handheld Pocket PC, MIDI or the internal LSlot expansion port. When used with the Lynx AES16, extended control and routing options are available. All standard sample rates from 32kHz to 192kHz. Dual wire capable.

#### M-Audio SuperDAC 2496, \$299.95

The SuperDAC 2496 is a full 24-bit, 96kHz digital-to-analog format converter with balanced XLR and unbalanced 1/4" analog outputs, and full support for optical (TOSlink) S/PDIF, coaxial S/PDIF and AES/EBU digital formats.

#### M-Audio CO 2, \$79.95

The CO 2 is digital format converter that converts optical S/PDIF to coax S/PDIF, and vice-versa. May also be used as a repeater for long cable runs.

#### M-Audio CO 3, \$249.95

AES/EBU to coaxial S/PDIF or TOSlink with SCMS and jitter correction.

#### M-Audio Flying Cow \$399

The Flying Cow is a 24-bit D/A and A/D converter in a stand-alone design which alleviates interference and noise generated by the computer itself. Flying Cow eliminates the need for the computer for doing direct transfers between DATs, CD recorders and other digital devices. 24-bit Delta-Sigma converters with 128x oversampling deliver pristine audio fidelity.

#### SM Pro Audio A08 Analog to ADAT Converter, \$149

The A08 is a compact high quality half rack sized 8-channel analog to ADAT format converter. With eight analog 1/4" inputs and one ADAT output interface, the A08 easily and inexpensively expands the input capability of I/O cards, digital mixers or digital musical instruments. The A08 converts your analog to an 8-channel digital ADAT format stream with low noise, wide bandwidth delta-sigma 24-bit/96kHz A/D converters for superior transient response and absolute fidelity.

#### Sonifex RB-ADDA, \$949

This A/D, D/A converter produces an AES/EBU or S/PDIF level 24-bit, 96kHz digital audio output from a balanced XLR or unbalanced phono stereo audio input. It also produces a stereo balanced XLR or unbalanced phono output from an incoming AES/EBU or S/PDIF digital input signal.

#### Sonifex RB-SC1, \$655

The RB-SC1 sample rate converter standardizes the sample rate of a digital audio signal to one of 32, 44.2, 48, 64, 88.2 or 96kHz, or to a synchronizing input, selectable from AES/EBU, S/PDIF or TTL and is ideal for the transfer of digital audio between different digital equipment.

#### Sonifex RB-DAC1, \$772

The RB-DAC1 D/A converter is a 1U rackmount unit that produces a stereo balanced XLR or unbalanced phono output from an incoming AES/EBU.

#### SM Pro Audio IN5, \$239

This multi I/O audio interface is suitable for mixing analog to high quality analog or 24/96 S/PDIF digital, and will also serve as an ADIA format converter and versatile monitor mixer for up to 12 channels. Features: two mic preamps, two insert points, two phantom power, two XLR balanced I/O, four mono and two stereo line inputs, two headphone monitoring amps and two turn table,

CD or phono inputs with switchable RIAA EQ and level controls.

#### Sydec Audio Engineering MADI-OptiCoax, \$365

The MADI-OptiCoax is a MADI optical to coax converter as well as a MADI coax to optical converter. The unit extends your MADI distance coverage: from 50m (coax) to 2km (optical).

#### Sydec Audio Engineering iBox-48-TA, \$1,895

The iBox-48-TA provides 24 TDIF digital inputs and outputs at up to 48kHz, 12 or 24 TDIF digital inputs and outputs at up to 96kHz, 24 balanced analog inputs and outputs at up to 96kHz, a 64-channel Expansion Bus port and word/super-clock input and output. The iBox-48-TA connects to Mixpander via Expansion Bus port or to Soundscape 32/16, R.Ed, SSHDR1-Plus, Mixtreme or Mixtreme 192 via TDIF. The iBox 48-TA shares the sculpted look of the latest generation Soundscape units and other iBox models.

#### Sydec Audio Engineering iBox-64-MADI-SA, \$3,195

The iBox-64-MADI-SA provides 56 or 64 MADI digital inputs and outputs at up to 48kHz, 28 or 32 MADI digital inputs and outputs at up to 96kHz, 12 stereo AES/EBU digital inputs and outputs (24 input and output channels) at up to 96kHz, 24 balanced analog inputs and outputs at up to 96kHz, 64-channel Expansion Bus port, word/super-clock input and output, video sync input functionality for the word clock input: the Video Sync signal can be converted to word clock internally and transmitted via the word clock output, MIDI input and output.

#### Sydec Audio Engineering iBox-64-MADI-TA, \$2,850

The iBox-64-MADI-TA provides 56 or 64 MADI digital inputs and outputs at up to 48kHz, 28 or 32 MADI digital inputs and outputs at up to 96kHz, 24 TDIF digital inputs and outputs at up to 48kHz, 12 or 24 TDIF digital inputs and outputs at up to 96kHz, 24 balanced analog inputs and outputs at up to 96kHz, 64 channel Expansion Bus port, word/super-clock input and output, video sync input functionality for the word clock input. The iBox-64-MADI-TA connects to Mixpander via Expansion Bus port or connects to Mixtreme via MADI or connects to Soundscape 32/16, R.Ed, SSHDR1-Plus, Mixtreme or Mixtreme 192 via TDIF. All input and output channels can be used simultaneously in any configuration.

#### Sydec Audio Engineering iBox-64-MADI-AA, \$2,850

24 ADAT Lightpipe digital inputs and outputs at up to 48kHz, 12 ADAT Lightpipe digital inputs and outputs at up to 96kHz, 24 balanced analog inputs and outputs at up to 96kHz, 64-channel Expansion Bus port, word/super-clock input and output.

#### Sydec Audio Engineering iBox-8-MPA, \$1,195

The iBox-8-MPA provides eight microphone inputs on balanced TRS/XLR connectors, eight line level outputs on TRS jack and sub-D connectors, individually switchable phantom power, MIDI input and output, and software remote control capability via MIDI. The TRS jack line level outputs provide easy connectivity with mainstream analog audio equipment, and the front panel controls allow it to be used without a computer.

#### Sydec Audio Engineering ADDA-2408-R, \$4,995

The ADDA-2408-R connects to a Soundscape 32, Soundscape 16, Mixtreme 192 or iBox (Mixpander Power Pak) via TDIF. Features: remote control from a software application via RS422 or USB; eight channels of low-noise microphone preamplification; digitally controlled analog gain. Seven slots for optional digital interface cards. The signal source can be set individually for each channel pair and, besides a microphone signal, can be a line level analog signal, or a digital signal from any one of the seven optional interface cards, which can convert between the AES/EBU, S/PDIF, TDIF and ADAT formats.

#### Sydec Audio Engineering IO-896, \$2,495

The IO-896 connects to a Soundscape 32, Soundscape 16, Mixtreme 192 or iBox (Mixpander Power Pak) via TDIF. Eight channel balanced analog I/O at up to 96kHz with Apogee conversion, soft limiting option and front panel metering; eight channel AES/EBU I/O at up to 96kHz; eight channel ADAT I/O at up to 48kHz. Integrates with the design of the latest generation of Soundscape products. An exclusive Apogee Soft Limit analog cir-

cuit allows you to maximize the analog input levels without overloading. The I/O 896 can generate word clock at up to 96kHz or operate as word clock slave.

### Universal Audio 2192 Master Audio Interface, \$2,795

The 2192 serves as a high quality A/D and D/A converter, a master clock generator, and distributor as well as a format transcoder. The 2192 functions at sample rates from 44.1kHz–192kHz and supports sub/over clocking, AES/EBU dual wire and S-MUX interleaving.

## Sound Cards & Audio Interfaces

### Alesis IO12, \$299

The IO12 is a two-channel, portable 24-bit/96kHz USB interface. It features a heavy-duty bead-blasted aluminum housing with tough switches and knobs that are securely bolted on. The ultra-low latency ASIO 2.0 drivers and bundled Cubase LE software make the IO12 a complete recording studio; just add a computer and you're ready to record. The IO12 has mic pres with 48V phantom power and comprehensive metering. The flexible inputs can handle everything from mics to guitars/basses to keyboards and have inserts for outboard processing. The unit has full MIDI and S/PDIF I/O.

### ART D/IO, \$199

A/D-D/A converter w/12AX7 vacuum tube, 24-bit S/PDIF I/O, switchable sampling rates (44.1/48/88.2/96kHz) with 128x oversampling.

### Behringer BCA2000, \$279.99

The BCA2000 is a high-speed USB 2.0 multi-channel audio MIDI control interface with an intuitive control surface, 100mm faders for audio/MIDI sequencing. An analog input section that has two IMP "Invisible" mic preamps with +48V phantom power, line and Hi-Z guitar inputs, digital input and output formats like ADAT, ADAT S/MUX, AES/EBU and S/PDIF (including Dolby Digital and DTS options).

### Behringer UltraMatch Pro SRC2496, \$159.99

As a digital format converter, the UltraMatch enables you to transfer digital audio signals between devices with different sample rates, formats, or interfaces, disable SCMS for 1:1 digital copies, and remove dropouts or jitter from digital media. Simultaneously operable outputs offer splitter functionality, and the 24-bit/96-kHz compatible SRC2496 now offers A/D and D/A conversion.

### CreamWare Scope Home, \$399

Three-DSP PCI board, 12-channel I/O, MIDI-I/O, two analog (TRS) I/O, two S/PDIF (1/8" stereo mini), Z-link port (eight ch I/O via A16 Ultra), 24-bit/96kHz. Expandable to 36 I/O with the optional Home Expansion I/O plate (\$199). Software includes: Studiotools Package, 35 effects, Modular II Synthesizer, the STS 4000 Sampler and the Scope 4.0 software. Win/Mac 9.x

### CreamWare Scope Project, \$999

Six-DSP PCI board, with up to 64-ch MME/ASIO-32 Ch GSIF drivers. Software includes: Studiotools Package, Synthesizer Package I & II, Effects Package I & II, Mixer Package I, STS 4000 Sampler, Modular III Synth. You get a choice of either Mix n' Master or Synths n' Sampler Package upon registering the hardware online and the Scope 4.0 software. Three types of I/O options includes MIDI I/O and ADAT I/O. Win/Mac 9.x

### CreamWare Scope Professional, \$1,799

14-DSP PCI board, with the same features as Scope Project.

### CreamWare Scope SRB, \$1,499

14-DSP Booster Board for Scope Systems. Includes the Mix n' Master or the Synths n' Sampler software pack upon registering the hardware online. Does not include the Scope Software or the I/O Plate.

### CreamWare A16 Ultra, \$995

One rack unit in size, featuring 16 I/O balanced analog TRS, switchable between -10dBV and +4dBu, two ADATs with S/Mux for eight channels at 24-bit/96kHz, two Zlinks for 16 channels at 24-bit/96kHz and BNC wordclock I/O. Sample rates: 32, 44.1, 48, 88.2 and 96kHz.

### Digidesign 192 I/O, \$3,995

192 I/O, the flagship of the Pro Tools HD interface family, is the best-sounding audio interface ever offered from Digidesign. In addition to support for up to 16 channels of analog and digital input and output, 192 I/O features a wide range of analog and digital I/O options to choose from, including eight channels of high-definition, pristine-quality analog I/O, eight channels of AES/EBU, eight channels of TDIF, 16 channels of ADAT, and two additional channels of AES/EBU or S/PDIF digital I/O.

### Digidesign 192 expansion cards

Along with its outstanding sonic specs, 192 I/O includes an additional I/O option bay. Add either a 192 AD card, providing eight more channels of high-definition analog input, or the 192 DA card, which gives you eight additional channels of analog output. 192 I/O can also be outfitted with the 192 Digital card, which adds eight channels of AES/EBU, TDIF, and ADAT I/O connections.

### Digidesign 192 Digital I/O, \$2,495

192 Digital I/O is a high-definition audio interface specifically designed to facilitate digital input from a variety of sources into the Pro Tools HD environment. An alternative to the 192 and 96 I/Os, 192 Digital I/O features up to 16 channels of AES/EBU, TDIF, and ADAT I/O, along with S/PDIF I/O.

### Digidesign 96 I/O, \$1,995

The 96 I/O offers Pro Tools users a high-resolution, multi-channel audio interface with excellent sonic performance. An affordable 16-channel audio interface for Pro Tools HD, 96 I/O features a wealth of I/O options, including eight channels of high-definition analog I/O, eight channels of ADAT optical I/O, two channels of AES/EBU and S/PDIF I/O, and Word Clock I/O.

### Digidesign 96i I/O, \$2,195

96i enables you to readily introduce output from third-party outboard gear and line-level equipment into your Pro Tools environment. Its 16 analog inputs provide balanced or unbalanced A/D conversion using TRS 1/4" connectors. A S/PDIF port capable of 24-bit digital I/O allows you to connect professional DAT recorders, CD players, and other digital recording devices. A/D and D/A converters of the same quality as the 96 I/O ensure that your signal's fidelity is maintained going into and coming out of Pro Tools.

### Digigram UAX220, \$490

The UAX220 is one of the first professional USB audio interfaces that has been specifically designed for broadcast and other demanding pro audio applications. Featuring 2/2 high-quality balanced analog I/Os, it combines Digigram's acclaimed audio performance with the ease of use of standard USB audio. When connected to the USB port of a computer, UAX220 is automatically recognized as an USB audio-compliant device and is immediately operational. Neither a specific driver nor an external power supply are needed.

### Digigram Vxpocket v2 & Digigram Vxpocket 440 Laptop Sound Cards, \$509 & \$649 respectively.

Both Vxpocket models provide 24-bit performance with PC applications using Microsoft's WAVE protocol and ASIO, as well as Mac applications using ASIO. In addition, they feature one stereo SPDIF input and output allowing digital record/playback and an LTC (SMPTE) time-code input. The Vxpocket v2 has two balanced analog mono inputs at microphone or line level and two balanced analog outputs. The Vxpocket 440 has four balanced mic/line analog inputs and four balanced analog outputs. The number of active stereo inputs and outputs available varies with the sampling frequency and bit rate selected.

### Digigram VX882HR, \$2,290

The VX882HR multichannel sound card is one of the first to benefit from the characteristics of Digigram's new HR (High Resolution)

series of VX sound cards. It features 8/8 analog and 8/8 digital I/Os, hardware sample rate converters on all inputs for simultaneous recording of digital signals with different sample frequencies, and a comprehensive set of drivers (Digigram np, WDM DirectSound, Wave, ASIO) in a short-length PCI format (175mm/6.875 inches long). An optional breakout box is available.

### Echo Digital Audio AudioFire8 and AudioFire12, \$599 & \$799 respectively

The AudioFire8 offers 8-in/8-out balanced 1/4" connections, S/PDIF I/O, MIDI I/O, a headphone output with volume knob, and two microphone preamps with phantom power in a FireWire interface. AudioFire12 offers 12 channels of full duplex 24-bit 192kHz recording and playback on balanced 1/4" connections and MIDI I/O. Near zero latency monitoring is also available through the AudioFire Console. Windows ME/2000/XP; Mac OS X; support for all Pro Audio Software (ASIO, GSIF, and CoreAudio).

### Echo Digital Audio Gina3G and Layla3G, \$349 & \$499 respectively

Gina3G gives you 2-in/6-out balanced 1/4" connections, ADAT I/O, S/PDIF I/O, MIDI I/O, a headphone output with volume knob, and two microphone preamps with phantom power in a PCI card interface with a breakout box. Layla3G gives you the same features as Gina3G but with 8-in/8-out balanced 1/4" connections for a total of 16 channels of full duplex recording and playback. Near zero latency monitoring is also available thru the Echo Console. Windows ME/2000/XP; Mac OS X; support for all pro audio software (WDM Kernel Streaming, ASIO, GSIF, and CoreAudio).

### Echo Digital Audio MiaMIDI, \$129

MiaMIDI comes with a pair of balanced 1/4" analog inputs and outputs, S/PDIF and MIDI I/O on a PCI card with a breakout cable. Professional level 24-bit/96kHz converters give you 106dB dynamic range. Eight "virtual" outputs digitally mix down to MiaMIDI's physical outputs using the Echo Console software and onboard DSP, so more than one application can play back at a time. Near zero latency monitoring is also available thru the Echo Console. Windows 95/98/ME/2000/XP; Mac OS 8/9/X; support for all pro audio software (WDM Kernel Streaming, ASIO, GSIF, and CoreAudio).

### Echo Digital Audio Indigo io and Indigo dj, \$199 & \$199 respectively

The Echo Indigo io is a stereo input/output device for laptop computers, providing pristine line-level audio recording and playback suitable for critical listening, mixing, or live performance. It also includes a headphone amplifier for powering studio monitor headphones. If you'd rather have two independent stereo outputs (headphone and line level), then try the Indigo dj. Both Indigo products have near zero latency and eight "virtual" outputs through software. Type II Cardbus slot required. Windows ME/2000/XP; Mac OS X; support for all pro audio software (WDM Kernel Streaming, ASIO, GSIF, and CoreAudio).

### Edirol FA-101, \$695

Edirol's first FireWire Audio interface boasts a large arsenal of features at its disposal: 10-in/10-out at 24-bit/96kHz; 6-in/6-out at 24-bit/192 kHz; 8-in/8-out analog through balanced connections; two premium mic preamps with phantom power; thorough support for both PC and Mac; incredible signal quality and the ability to draw its power directly from a 6-pin FireWire port.

### Edirol FA-66, \$499

The FA-66 offers six-in/six-out performance with two XLR/TRS combo inputs with phantom-power preamps, stereo RCA input, S/PDIF optical input and output, four balanced +4dBu TRS outputs, with up to 24-bit/192kHz performance, a built-in flip-switch limiter, low-latency driver support and native support in Mac OS X, all in a durable, compact, FireWire bus-powered audio interface.

### Edirol UA-1000, \$945

Possibly the world's first USB 2.0 compatible audio interface, the UA-1000 boasts a variety of connections including four phantom

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power preamps with inserts, balanced TRS I/O, ADAT, S/PDIF, Word Clock and MIDI I/O. The UA-1000 supports ASIO, WDM, and MME drivers.

### Edirol UA-3FX, \$215

Lots of options, plenty of desk space left over. The UA-3FX is a USB-bus powered external audio interface offering 24-bit audio quality, RCA in and out, 1/4" mic/guitar input, low-latency driver support, S/PDIF optical I/O, and a variety of useful audio effects, ideal for recording artists just learning to record on the computer, or any computer user looking for a variety of input/output options.

### Edirol UA-20, \$215

24-bit audio quality and MIDI I/O in one USB bus-powered box. The UA-20 is perfect for the traveling recording artist who needs to be able to record from microphones, guitars, line level instruments and be able to connect a keyboard. This device is the simplest, most cost-effective I/O device Edirol currently offers, with 1/4" line/mic/guitar inputs, RCA and optical output, and a headphone out.

### Edirol UA-25, \$295

The UA-25 offers stereo input and output with a built-in flip-switch limiter, phantom-power XLR/TRS combo jack inputs with phantom-power preamps, S/PDIF optical input and output, balanced and unbalanced output, up to 24-bit/96kHz performance, low-latency driver support and unparalleled stability in a durable, compact, USB-powered audio interface.

### Edirol UA-101, \$695

Hi-Speed USB audio interface offering stability and a variety of audio input and output options in a 10in/10out 24-bit/192kHz audio interface. Features two XLR/TRS combo jacks with phantom-power mic preamps and a built-in flip-switch limiter. Inputs three-eight are balanced TRS jacks with selection between +4dBu and -10dBu. Comes with a powerful routing and patching application.

### Edirol UA-1EX, \$99

Simple USB bus-powered RCA input/output interface. Record RCA line level sources into computer, play MP3s or other audio from computer through home stereo with high audio quality. Can use either OS-standard drivers (plug and play) or Edirol's drivers which offer up to 24-bit/96kHz performance with low-latency ASIO, WDM, and CoreAudio support.

### E-MU 1616M Laptop Digital Audio System, \$699

A notebook audio system that has mastering grade 24/192 converters, hardware-accelerated effects (with over 600 effects), zero latency hardware mixing/monitoring, and a portable MicroDock. There are two low-noise mic/line/Hi-Z preamps, four 1/4" balanced ins, six 1/4" balanced outs, three stereo 1/8" speaker outs, turntable in, stereo headphone out, 24/192 ADAT opt I/O, 24/96 S/PDIF coax I/O, MIDI I/O, EDI to PCMCIA card w/ headphone out.

### E-MU 1820M Digital Audio System, \$699

Including 18 inputs and 20 outputs using 24-bit/192kHz A/D converters; two sets of MIDI; hardware-accelerated effects (over 20 plug-ins and 600 presets) and mixing; zero-latency monitoring; comprehensive sync options (SMPTE, Word Clock, MTC); and seamless compatibility with PC audio/sequencer software (ASIO 2.0/WDM). Ships with full version of Steinberg's Cubase VST 5.1, Wavelab Lite, and SFX Machine LT.

### E-MU 0404 Digital Audio System, \$149

Four inputs and 20 outputs and 24-bit/192kHz converters. Offers E-DSP hardware accelerated effects with over 600 presets, zero latency hardware mixing/monitoring, two 1/4" unbalanced I/O, 24/96 S/PDIF opt I/O, 24/96 S/PDIF coax I/O, MIDI I/O. Software studio package includes the E-MU 0404.

### E-MU 1212M Digital Audio System, \$299

The E-MU 1212M Digital Audio System includes 12 inputs and 12 outputs using the world's finest 24-bit/192kHz A/D converters; MIDI I/O; hardware-accelerated effects (over 20 plug-ins and 500 presets) and mixing; zero-latency monitoring; and

seamless compatibility with your favorite PC audio/sequencer software (ASIO 2.0/WDM). Ships with Steinberg's Cubasis, Wavelab Lite, and SFX Machine LT.

### ESI Quatafire 610, \$500

Quatafire 610 is an ultra-portable 1/3-rack size 6-in/10-out FireWire (IEEE 1394) audio interface, offering 24-bit/192kHz audio performance. Front panel features two combo connectors with mic/line preamps with gain control and Hi-Z direct instrument input capability, and headphone output with monitor level volume control. Rear panel features 2-in/2-out MIDI, 2-channel S/PDIF and analog 4-in/8-out. It is compatible with Windows XP. Mac OS X compatible version will be available in the near future.

### ESI Juli@, \$180

Juli@ is the perfect innovative reference audio interface for home recording applications. Juli@ has 24-bit/192kHz ADC (114dB), DAC (112dB), 2x2 analog I/O with swappable I/O socket. Depending on the application the user can select between balanced (TRS) and unbalanced (RCA) connectors. Juli@ supports 4x4 full duplex record/playback up to 24-bit/192kHz, and features S/PDIF input clock frequency detection, optical out, S/PDIF I/O, 1-in/1-out MIDI I/O and complete internal digital mixer. Supports E-WDM (WDM, Direct Sound, ASIO 2.0, GSIF and DirectWire). Compatible with Windows XP/2000/ME/98SE.

### ESI Waveterminal U24, \$300

U24 is an ultra-compact USB audio interface with 2x2 channel analog I/O, 2-channel S/PDIF coaxial I/O and 2-channel S/PDIF optical I/O. U24 features 24-bit ADC (100dB) and DAC (110dB) and supports 32/44.1/48kHz sampling rate. U24 can be used as an optical/coaxial format converter, real-time sample rate converter, and internal digital mixer for input monitoring. U24 supports ASIO 2.0, MME, DirectSound and Direct KS and is compatible with Windows XP/2000/ME/98SE and Mac OS 9.X.

### ESI Waveterminal 192L/192L MIDI, \$200/\$240

WT 192L is a 2-in/8-out PCI audio interface with 24-bit/96kHz ADC (100dB) and 24-bit/192kHz DAC (104dB). Features include 2x6 analog I/O, 2-channel S/PDIF optical out and headphone amp. Supports multiple cards in one computer system, full duplex record/playback, sampling rates up to 192kHz, and E-WDM (WDM, Direct Sound, ASIO 2.0, GSIF and DirectWire). Compatible with Windows XP/2000/ME/98SE and Mac OS X. WT 192L MIDI adds MV/ODI/O add-on card for extra I/O and MIDI support.

### ESI Waveterminal 192M/192M MIDI, \$250/\$290

WT 192M is a 4-in/10-out PCI audio interface with breakout box and 24-bit/96kHz ADC (100dB) and 24-bit/192kHz DAC (104dB). Features include 4x8 analog I/O, two mic preamps with 12V phantom power, 2-channel S/PDIF optical out and two stereo headphone out with amp. Supports full duplex record/playback, sampling rates up to 192kHz, and E-WDM (WDM, Direct Sound, ASIO 2.0, GSIF and DirectWire). Compatible with Windows XP/2000/ME/98SE and Mac OS X. WT 192M MIDI adds MV/ODI/O add-on card for extra I/O and MIDI support.

### ESI Waveterminal 192X/192X MIDI, \$300/\$340

WT 192X is a 2-in/8-out PCI audio interface with 24-bit/192kHz ADC (123dB) and 24-bit/192kHz DAC (106dB). Features include 2x6 analog I/O, 2-channel S/PDIF optical out and headphone amp. Supports multiple cards in one computer system, full duplex record/playback, sampling rates up to 192kHz, and E-WDM (WDM, Direct Sound, ASIO 2.0, GSIF and DirectWire). Compatible with Windows XP/2000/ME/98SE and Mac OS X. 192X MIDI adds MV/ODI/O add-on card for extra I/O and MIDI support.

### ESI WaMi Rack 192L, \$500

WaMi Rack 192L is a rackmount audio interface with 24-bit/96kHz ADC (100dB) and 24-bit/192kHz DAC (104dB). It features 4-in/8-out unbalanced TRS jacks, two balanced XLR output, 4-channel mic preamp with 48V phantom power, headphone amp with volume control and S/PDIF coaxial I/O, and 1-in/1-out MIDI interface. Supports sampling rate up to 192kHz, full duplex record/playback, PCI bus mastering and E-WDM

(WDM, Direct Sound, ASIO 2.0, GSIF and DirectWire). Compatible with Windows XP/2000/ME/98SE and Mac OS X.

### ESI WaMi Rack 192X, \$750

WaMi Rack 192X is among the best rackmount audio interface with 24-bit/192kHz ADC (123dB) and 24-bit/192kHz DAC (106dB). It features 4-in/8-out unbalanced TRS jacks, two balanced XLR output, 4-channel mic preamp with 48V phantom power, headphone amp with volume control, S/PDIF coaxial I/O, and 1-in/1-out MIDI interface. Supports sampling rate up to 192kHz, full duplex record/playback, PCI bus mastering, and E-WDM (WDM, Direct Sound, ASIO 2.0, GSIF and DirectWire). Compatible with Windows XP/2000/ME/98SE and Mac OS X.

### ESI MaXio XD (EX-8000 and MaXio PCI interface), \$2,000

MaXio XD is a two rackspace, 24-bit/192kHz recording system capable of handling 32 channels simultaneously. EX-8000 has 24-bit/192kHz ADC (123dB), 24-bit/192kHz DAC (120dB), eight AES/EBU I/O, eight XLR input, eight TRS/XLR output, internal 64 channel digital mixer, eight S/PDIF I/O, eight ADAT I/O, Wordclock I/O, 1-in/1-out MIDI I/O, 48V phantom power. MaXio PCI interface supports four EX-8000 per host card, four cards in one computer. Supports E-WDM (WDM, Direct Sound, ASIO 2.0, GSIF and DirectWire). Compatible with Windows XP/2000/ME/98SE and Mac OS X.

### ESI MaXio 032, \$600

MaXio 032 is a 32-channel ADAT interface capable of connecting four ADAT-compatible devices for multitrack hard disk recording. Features include two combo jacks for mic/line and instrument inputs with 48V phantom power and input gain control, headphone output with volume control, two XLR and two TRS jacks, 4-port/32-channel ADAT I/O, S/PDIF I/O, WordClock I/O and 1-in/1-out MIDI I/O. Supports E-WDM (WDM, Direct Sound, ASIO 2.0, GSIF and DirectWire). Compatible with Windows XP/2000/ME/98SE and Mac OS X.

### ESI GIGAPort AG, \$200

GIGAPort AG is the first of its kind USB audio peripheral, offering eight analog RCA outputs with 24-bit D/A converters, 2-channel S/PDIF and separate headphone out. GIGAPort AG supports ASIO 2.0, offering low latencies for virtual instruments on Mac and PC. It also includes WDM driver for Windows XP/2000/ME/98SE. It is fully compatible with Dolby Digital 5.1, DTS 5.1 and ready for DTS ES 6.1 and 7.1 surround formats. Transform your system into a full-blown home theater system.

### Frontier Design Group, WavecenterPCI, \$389

The WavecenterPCI is a complete digital audio and MIDI interface featuring an 8-channel ADAT optical I/O port, 2-channel S/PDIF via coax, optical or internal CD-ROM connection, and 2x2 MIDI ports for 32 channels of MIDI I/O communication. It is 16, 20, and 24-bit capable at 44.1 and 48kHz. ASIO, WDM, GSIF and MME drivers make the WaveCenter compatible with a wide variety of audio applications in Windows 98SE/ME/2000/XP and Mac OS 8.6 thru 9.2.

### Frontier Design Group Apache, \$799

The Apache optical patch bay has 12 optical inputs and outputs, letting you route audio between lightpipe-compatible gears with as few as two button presses. Apache provides an independent PLL for each input to precisely relock the signal so that each audio stream carries its full original integrity in trouble-free 24-bit resolution.

### Frontier Design Group Dakota, \$599

Dakota provides a complete solution for digital audio, MIDI and synchronization. With 16 channels of ADAT lightpipe I/O, two channels of S/PDIF I/O (coax, optical or CD-ROM), ADAT sync in, and 2x2 MIDI interface on one compact PCI card. Expansion options include; Montana (\$225), for up to 32-lightpipe channels, word Clock/video sync in; Sierra (\$399), the external 1U 8x8 MIDI interface; and the Tango24 (\$699), a high quality 24-bit analog-to-digital converter interface.

### Frontier Design Group Tango24, \$799

Tango24 is a 24-bit professional external digital audio conversion system in a 1U rack mount enclosure, providing high-resolution A/D and D/A converters and ADAT optical digital I/O. Tango24 has eight balanced analog inputs and eight balanced analog outputs on professional TRS jacks, and also includes BNC word clock I/O. Bundle pricing available with either Dakota or Wave Center/PCI.

### Lynx Studio Technology LynxONE, \$499

LynxONE serves as a front end for any studio-quality audio or MIDI workstation. The LynxONE features two channels of +4dBu balanced or -10dBV unbalanced 24-bit analog I/O, 24-bit/96kHz AES/EBU or S/PDIF I/O, two low-latency MIDI ports, a low-jitter PLL sample clock, and extensive synchronization capabilities. The card operates on the Windows or Macintosh OS platform and includes audio, MIDI and clock breakout cables.

### Lynx Studio Technology LynxTWO, \$1,095 (Model A, 4 in/4 out), \$995 (Model B, 2 in/6 out), \$1,195 (Model C, 6 in/2 out)

The LynxTWO PCI card is a 24-bit/192kHz multi-channel audio interface that is compatible with Windows and Macintosh-based workstations. It features AES digital I/O with SRC, a 32-channel mixing processor, a SMPTE reader/generator, and the ability to lock to composite video and studio reference clocks. Two LStream expansion ports provide additional ADAT and multi-channel AES interface options.

### Lynx Studio Technology L22, \$749

The L22 is a 2-channel audio card that features 200kHz/100kHz analog bandwidth, 24-bit balanced analog I/O, +4dBu or -10dBV line levels, 24-bit AES3 or S/PDIF I/O with full status and sub code support, non-audio digital I/O support for Dolby Digital and HDCD, 32-channel/32-bit digital mixer with 16 sub outputs, word and pixel clock sync, and is compatible with LStream modules for ADAT, TDIF and AES/EBU standards. Operates on the Macintosh and Windows platforms.

### Lynx Studio Technology LS-AES, \$469

The LS-AES is a multi-channel AES/EBU or S/PDIF interface module for the LynxTWO and Lynx L22 professional PCI cards. Four AES inputs and outputs provide eight channels at sample rates up to 96kHz and four channels at sample rates up to 192kHz. Connections are transformer coupled with pro-quality sample rate conversion provided on all inputs. Two LS-AES modules can be used with each LynxTWO or L22 for increased channel capacity.

### Lynx Studio Technology LS-ADAT, \$249

The LS-ADAT is an ADAT interface module for the LynxTWO and Lynx L22 PCI cards. Two lightpipe inputs and outputs provide 16 channels at 48kHz, eight channels at 96kHz, and four channels at 192kHz using S/MUX. An ADAT sync in port provides synchronization for sample-accurate transfers to computer-based DAWs.

### Lynx Studio Technology AES16, \$695; AES16-XLR, \$795; AES16-SRC, \$995

Sixteen channels of AES/EBU digital I/O with sample rates up to 192kHz on a single PCI card prove an elegant solution for integrating digital consoles, multi-channel A/D and D/A converters, and hard disk recorders with computer-based workstations. It includes multichannel XLR (AES16-XLR) and DB25 cabling for most popular brands and devices. Drivers for all popular operating systems and applications provide robust compatibility. AES16-SRC model offers eight channels of mastering quality sample rate conversion.

### M-Audio Delta 1010, \$799

Recognized as one of the top choices in host-based PCI digital audio solutions, the rack-mount Delta 1010 is designed to handle the needs of the most demanding project and professional studios. Superb engineering and ultra-high quality converters deliver fidelity often surpassing more expensive systems. Multiple inputs accommodate recording numerous tracks simultaneously, including zero-latency monitoring for seamless overdubs. Multiple outputs route individual tracks or soft synth/sampler timbres to a mixing console, or directly drive up to 7.1 surround sound systems. The analog outputs also remain live for monitoring

while mixing or transferring digital signals via S/PDIF. MIDI I/O rounds out everything you need to take advantage of today's music software.

### M-Audio Delta 1010 LT, \$399

The 1010LT has the same I/O configuration as the 1010 on a "pigtail" connection to the PCI card, with gold-plated RCA jacks for audio. In addition, there are two mic pres on XLR inputs. Multi-card support lets you add almost any other card in the Delta line for more I/O. Features zero-latency direct monitoring, variable input level controls and bass management. Driver support: MME, WDM (Win 2000, XP), DirectX, PC-ASIO, EASI, GSIF, Sound Manager, Mac-ASIO, OMS, Core Audio and MIDI (OS X).

### M-Audio Delta 44, \$299

The Delta 44 PCI audio card has four 1/4" balanced ins and outs on a breakout box for 24-bit/96kHz operation. Multi-card support lets you add almost any other card in the Delta line for more I/O (ASIO sync only). Also features a digital mixer that allows for zero-latency direct monitoring and variable input level controls. Driver support for: MME, WDM (Win 2000, XP), DirectX, PC-ASIO, EASI, GSIF, Sound Manager, Mac-ASIO, Core Audio (OS X).

### M-Audio Delta 66, \$399

The Delta 66 PCI audio card has four 1/4" balanced ins and outs on a breakout box and a coaxial S/PDIF I/O for 24-bit/96kHz operation. Multi-card support lets you add almost any other card in the Delta line for more I/O. Also, features a digital mixer that allows for zero-latency direct monitoring and variable input level controls. Driver support for: MME, WDM (Win 2000, XP), DirectX, PC-ASIO, EASI, GSIF, Sound Manager, Mac-ASIO, Core Audio (OS X).

### M-Audio Delta Audiophile 2496, \$199

M-Audio's most affordable solution, The 24-bit 96kHz Audiophile PCI card has four analog ins and outs via gold-plated RCA jacks, coaxial S/PDIF I/O, and MIDI I/O. Multi-card support lets you add almost any other card in the Delta series for more I/O. Its virtual digital mixer allows for zero-latency direct monitoring. Digital out will pass AC3 for surround audio. Driver support for: MME, WDM (Win 2000, XP), DirectX, PC-ASIO, EASI, GSIF, Sound Manager, Mac-ASIO, OMS, Core Audio (OS X).

### M-Audio OmniStudio, \$399

This desktop solution combines the Delta 66 and the Omni I/O. The Omni replaces the Delta 66 breakout box with a mixing tool that has two mic pres with Neutrik connectors and phantom power, two balanced line level inputs, and a host of monitoring capabilities to allow for monitoring of up to 14 inputs at once. It also has a gain control for the monitor outs, separate record outs, direct outs and two headphone outs with independent volume controls. The Omni I/O also available separately.

### M-Audio OmniStudio USB, \$449

OmniStudio USB is a 4x4 audio interface with two high-quality mic/instrument preamps—perfect for tracking and overdubbing guitars and vocals. The built-in mixer combines your computer-based tracks—complete with effect sends and return—with four stereo aux inputs to drive an elaborate direct monitoring system. One simple USB connection gives you plenty connectivity, flexibility and core studio functionality.

### M-Audio Omni I/O \$299

Use Omni I/O to expand your Quattro USB, Delta 66 or Delta 44 at any time into a full hardware I/O complement for your computer-based recording needs. With features like dual mic/instrument preamps, effects sends and sophisticated monitoring, Omni I/O turns your existing M-Audio audio interface into a complete mini-studio for your computer. And you can expand anytime you like.

### M-Audio Audiophile 192, \$199.95

The Audiophile 192 features high-definition 192kHz sampling rate, digital I/O, balanced analog I/O and an amazing signal-to-noise ratio. As with all Delta cards, you get solid drivers and seamless integration with your favorite Mac and PC applications—and even the ability to combine multiple Delta cards in one system. Card is also compliant with PCI 2.2 and 64-bit audio

drivers to enable use of next-generation platforms and software.

### M-Audio USB Audiophile, \$249

### M-Audio MobilePre USB, \$179

MobilePre is completely bus powered for completely mobile 16-bit/48kHz digital recording. The MobilePre USB features two mic/instrument preamps with 48V phantom power and zero-latency hardware direct monitoring. It offers two microphone inputs (XLR balanced), stereo microphone input (1/8") and 2 high-impedance instrument/line inputs (balanced/unbalanced 1/4" TRS). Output connections include line level stereo 1/8", 1/4" TRS and 1/8" headphone out. Driver support: MME, WDM (Win 2000, XP), DirectX, PC-ASIO, Sound Manager, Mac-ASIO, Core Audio (OS X).

### M-Audio Fast Track USB, \$129.95

Fast Track USB has an input for instruments like guitar, bass and keyboards, plus a microphone input for recording vocals or other acoustic sounds. The included GT Player Express software gives effects and virtual stomp boxes so you don't need any other gear. GT Player Express also plays standard audio files like AAC, MP3 and WAV that let you learn and jam along at variable speeds.

### M-Audio FireWire 410, \$499.99

FireWire 410 is a FireWire-compatible audio/MIDI interface. 4-in/10-out configuration complete with preamps for personal recording, routing discrete outputs, or directly driving a surround sound system. The on-board mixer and software control panel provide routing flexibility. Ultra-low latency software monitoring and near-zero latency hardware direct monitoring. Two headphone outs with independent level controls let you collaborate with a partner anywhere, anytime.

### M-Audio FireWire Audiophile \$299

FireWire Audiophile is a compact, FireWire-compatible audio/MIDI interface that takes the legacy of M-Audio's award-winning Audiophile line to the next level. 4 x 6 audio I/O combines with powerful on-board mixing in a mobile package that's great for live performance, home recording, and digital DJ work. Stereo headphone output with A/B switching between assignable sources allows precuing for DJs and mobile musicians—and the assignable aux bus is perfect for creating dedicated headphone mixes and effect sends.

### M-Audio FireWire 1814 \$749

The FireWire 1814 is an 18-in, 14-out audio interface complete with ADAT lightpipe for multichannel communication with other digital devices. It features 8 x 4 analog I/O at up to 24-bit/96kHz, and boasts 192kHz on the first two inputs and all four outputs. Flexible internal mixing allows virtually any input to route to any output, including an aux bus for effects send or monitor mix. A front-panel momentary switch allows DJ-style headphone auditioning between two assignable sources. Other features include two headphone amplifiers, assignable level controller, S/PDIF coaxial/optical digital I/O, 1 x 1 MIDI I/O, and BNC Word Clock connectors for synchronization to other digital devices.

### M-Audio FireWire Solo, \$249.95

The FireWire Solo is designed as an easy-to-use interface for songwriters to record guitars, vocals and more on the computer. Compatible with most popular music software, this compact bus-powered unit is small enough to go anywhere. 1/4" guitar input right on the front panel, a professional XLR microphone input also lets you record vocals and acoustic instruments. Dual line inputs for effects, drum machines and other outboard gear. FireWire connectivity, up to 24-bit/96kHz sample rate support and digital I/O.

### M-Audio Transit USB \$99

Small enough to fit in your pocket, Transit brings high-resolution 24-bit/96kHz recording and playback to any USB-compatible computer. Digital I/O lets you transfer pristine audio between your computer and other devices such as MiniDisc and DAT. The digital output can deliver AC-3 and DTS from your computer to an external decoder such as a surround receiver. And the bus-powered design allows you play and record virtually anywhere your laptop can go.

# HARDWARE

## AUDIO INTERFACES

### M-Audio Sonica Theater \$119

Looking for surround sound from your USB computer or laptop? Sonica Theater let's you play DVDs, games and all your music in up to 7.1 surround sound. Full support for Microsoft Windows Media 9 means you can play surround sound audio from the Internet. Built-in SRS Circle Surround II technology instantly transforms your music collection into lifelike surround sound music. And if you don't have a surround sound system, TruSurround XT provides virtual surround on your stereo or even headphones. Sonica Theater packs all this advanced technology into a compact, bus-powered, mobile package that's easy to transport and use.

### M-Audio Black Box, \$329.95

Co-developed by M-Audio and Roger Linn Design, the Black Box is the first creative tool for guitarists that combines amp modeling, powerful beat-synced effects and a drum machine with an audio interface for computer-based recording. Based on AdrenaLinn II technology, the Black Box can be used as a stand-alone amp-modeling and effects unit featuring spot-on models of 12 of the greatest guitar amps of all time. 99 built-in drum patterns with tap tempo make it easy to try out different grooves and tempos. The Black Box also incorporates tons of inspiring unique effects that automatically beat-sync to your drum patterns. A built-in microphone preamp is also included for recording and processing vocals and acoustic instruments. One USB connection sends your output to your computer-based recording software — and syncs the Black Box's drums and effects to your tracks.

### Mackie Onyx 400 F, \$899

The Onyx 400F is designed to easily add high-quality microphone preamps to a DAW-based studio or live recording system. 192kHz are capable of delivering all of the detail and clarity of Mackie's Onyx mic pres. An on-board DSP mixing matrix allows latency-free headphone mixing and routing independent of the DAW software.

### Mackie Spike Compact Recording System, \$495

Recording music on a Mac or PC just got exponentially easier with Spike, a complete digital recording solution from Mackie. Spike consists of the XD-2 USB 24-bit 96kHz Audio/MIDI Interface featuring clean, high-headroom Mackie mic preamps and onboard SHARC dynamics processing; easy-to-use Traktion multitrack audio recording software with unlimited track count and VST plug-in support; and the Nomad Factory Blue Tubes Warmer Phaser plug-in. This is a superb open-ended system for computer music production. Windows XP or Mac OS X; ASIO 2.0, WDM, and OS X Core Audio 5.

### Metric Halo Mobile I/O 2882, \$1,495; 2882+DSP \$2,195

The 2882 and 2882+DSP are 24/96 FireWire interfaces with 18 inputs and 20 outputs: eight analog mic/line/instrument, eight ADAT optical, stereo digital (AES/EBU, S/PDIF), stereo analog headphone out. Powers from the laptop's FireWire bus or from DC power (9V-30V). The 2882+DSP has an 8-channel preamp and A/D/A converter with two channels of digital I/O (AES, S/PDIF), eight channels of ADAT optical, 24/96 headphone output, MIOConsole 80-bit mixer, and includes signal processing plug-ins that run on the hardware. Powers from the laptop's FireWire bus or from AC/DC power (9V-30V).

### Metric Halo Mobile I/O ULN-2, \$1,195; ULN-2+DSP \$1,895

The ULN-2 and ULN-2+DSP are 24/96 FireWire interface, pre-amp, A/D/A converters with two channels of Ultra Low Noise preamps, two channels of digital I/O (AES, S/PDIF), balanced send/return path, individual monitor and headphone outputs, each with front panel level control, and an onboard MIOConsole 80-bit mixer. FireWire bus and battery powerable. The ULN-2+DSP includes Metric Halo signal processing plug-ins that run on the hardware.

### MindPrint Trio USB, \$549

Includes a complete channel strip with phantom-powered mic and instrument input, two-band EQ and compressor, an addition-

al stereo line input with dedicated EQ, a no latency monitor mixer, and a monitor matrix with three pairs of speakers, talk-back, mute, dim and mono function. Trio USB comes with drivers for Mac OS X and Windows XP.

### MOTU Traveler, \$895

The Traveler is a portable bus-powered FireWire audio interface for Macintosh and Windows with 20 channels of input and 22 channels of output expandable to 80/88 channels. Includes eight channels of 24-bit 92kHz analog I/O on balanced quarter-inch connectors, including four Neutrik XLR/TRS combo input connectors, including built-in mic pre-amps, ADAT optical digital I/O, S/PDIF, AES/EBU latency-free 20-input/8-bus monitoring, front-panel programming, stand-alone operation, and a complete set of drivers for compatibility with all major audio software titles.

### MOTU 2408mk3, \$995 (core system), \$695 (expansion I/O)

24-channel, 96kHz audio interface for PCI-equipped Macs and PCs with three ADAT Lightpipe (24-ch.), three TDIF (24-ch.), balanced 24-bit analog (8-ch.), S/PDIF, sample-accurate sync, built-in SMPTE and video sync, expansion to 96 channels, ASIO drivers for compatibility with all major audio software programs, and AudioDesk sample-accurate audio workstation software. Includes CueMix DSP, which provides large-scale, DSP-driven mixing and monitoring with zero monitoring latency for any host audio software.

### MOTU 24I/O, \$1,495 (core system), \$1,195 (expansion I/O)

The 24I/O gives the user computer-based hard disk recording in a single rack-space I/O unit, with 24 balanced (TRS) inputs and outputs and 96kHz, 24-bit converters. Record, edit, mix and master audio recordings entirely inside your computer. It offers built-in SMPTE sync, expansion to 96 channels, ASIO drivers for compatibility with all major audio software programs, and AudioDesk sample-accurate audio workstation software. Also includes CueMix DSP large-scale, DSP-driven mixing and monitoring with zero monitoring latency for any host audio software.

### MOTU 828mkII, \$795

The 1U 828mkII with 20 channels of input and 22 channels of output expandable to 80/88 channels. Includes 10 channels of 24-bit/96kHz analog I/O on balanced quarter-inch connectors, including two Neutrik XLR/TRS combo connectors with built-in mic preamps, ADAT optical digital I/O, S/PDIF, latency-free 20-input/8-bus monitoring, stand-alone operation, and a complete set of drivers for compatibility with all major audio software on both computer platforms. Includes MOTU's Audio Desk multitrack recording software. ASIO drivers are also included for use with compatible hosts.

### MOTU 896HD, \$1,295

The 2U 896HD adds more XLR mic inputs, better metering, Word Clock I/O, AES/EBU ins and outs and 192kHz recording to the features of the 828mkII. The 896HD also has eight channels of ADAT Lightpipe I/O. Up to four 896HDs can be chained off of each other without the need for an additional FireWire hub for 72 input and output channels simultaneously at 48kHz. Includes MOTU's Audio Desk multitrack recording software. ASIO drivers are also included for use with compatible hosts.

### MOTU HD192 High Definition Audio Workstation, \$1,895 Core System, \$1,595 Expansion I/O

HD192 Provides 12 channels of 24-bit audio recording at any standard sample rate from 44.1 to 192kHz on XLR connectors with any PCI-equipped Mac or PC computer, with superb analog sound and a dynamic range over 120dB. Includes AES/EBU digital I/O with real-time sample-rate conversion. HD192 is expandable to 48 simultaneous channels of 192kHz I/O. Front panel includes 19-segment level meters for each input and output. HD192 can be mixed and matched with all other MOTU audio interfaces, adding 192kHz recording and playback to any 2408 or other MOTU system.

### MOTU MIDI Timepiece AV-USB, \$595

Eight-input, 8-output MIDI/SMPTE interface/patchbay/merger

with plug-and-play connectivity to any USB-equipped Mac or PC. MIDI Timepiece AV-USB is the only MIDI interface that offers front panel programming from a built-in LCD display. Includes video, digital audio, and SMPTE-to-MIDI synchronization features for the most demanding professional situations, and provides 128 MIDI channels and a wide range of MIDI processing capabilities. Other MOTU USB and serial MIDI interfaces include the 2x2 FastLane USB (\$79) and the 8x8 MIDI Express 128 (\$249) to the MTP-AV.

### Muse Research Receptor V1.2, \$1,599

Receptor is a unique synth, sampler, and sound module that lets you use your VST instruments and effects on the road. A new I/O routing support gives you four inputs and ten outputs, and a MIDI zoning and mapping function lets you create intricate sonic textures while the patent-pending Z-load lets you load your plug-ins in a flash. Receptor combines the convenience and portability of dedicated hardware with the power and flexibility of a computer. Receptor works with any Mac or PC with an Ethernet port.

### Presonus DigIMAX LT, \$999.95

8-channel mic/line, dual-servo gain stage preamplifier with front panel phantom power buttons and insert points for every channel.

### Radial JPC stereo direct box, \$TBA

The JPC is an active "consumer to pro" stereo direct box developed to meet the unique requirements of interfacing computer sound cards and media devices with professional balanced audio gear. A full compliment of input connectors provide flexibility, and transformer isolation and balanced XLR outputs eliminate the hum, buzz and noise that is common when connecting disparate bits of audio gear. The JPC's sonic purity is aided by 48-volt phantom powering. With its 14-gauge steel I-beam internal chassis wrapped in a 14-gauge steel outer sleeve, the JPC is built solid enough to prop up pianos!

### Steinberg Cubase System 4, \$899

Integrated music production system, featuring M14, a 4-channel USB audio and 16-channel MIDI interface, and Steinberg's sequencer Cubase SL 3.0. A cross-platform music production and audio editing solution. System 4 features two high-quality mic preamps, 24/96kHz recording, and S/PDIF digital I/O. Minimum requirements: Pentium Athlon 800MHz (1.4GHz or more recommended), 384MB of free RAM, XP/2000, Power Macintosh G4, 867MHz (Dual GHz or faster recommended), 384MB of free RAM, OS X (version 10.2.5 or higher)

### Sydec Audio Engineering Mixtreme-192, \$395

The Mixtreme-192 is a PCI audio card with embedded DSP and 16 channels of digital I/O. Ultra low latency Win XP/Win 2000 drivers with true multi-client support (ASIO-2, MME, WDM, GSIF, etc). Seamless integration of VST/VSTi and DSP plug-ins through the 128-column, fully user-configurable Soundscapes software mixer. Mixtreme-192 includes a video sync input, wordclock input/output, two channel S/PDIF I/O at 48/96/192kHz (optional daughter board) and a comprehensive range of TDIF based I/O devices available (balanced/unbalanced analog, mic preamps, AES/EBU, ADAT).

### Sydec Audio Engineering Madixtreme, \$895

The Madixtreme is a PCI audio card with embedded DSP and 64-channel MADI optical I/O (16 ch @ 192kHz) and up to 64 input and 64 output streams simultaneously. Ultra low latency Win XP/Win 2000 drivers with true multiclient support (ASIO-2, MME, WDM, GSIF, etc). Seamless integration of VST/VSTi and DSP plug-ins through the 128-column, fully user-configurable Soundscape Software mixer. The Madixtreme system is capable of running zero latency DSP effects and integrating VST & VSTi effects, with 64 I/O streams and 56/64 physical MADI I/O. It interfaces with any Windows-based audio package, using the ASIO2, GSIF2, MME, WDM & DWAVE drivers in a true multi-client environment.

### Sydec Audio Engineering iBox-8-MPA, \$1,195

The iBox-8-MPA provides eight microphone inputs on balanced TRS/XLR connectors, eight line level outputs on TRS jack and sub-D connectors, individually switchable phantom power, MIDI input and output, and software remote control capability via

MIDI. The TRS jack line level outputs provide easy connectivity with mainstream analog audio equipment, and the front panel controls allow it to be used without a computer.

### Sydec Audio Engineering iBox-64-MADI-SA, \$3,195

The iBox-64-MADI-SA provides 56 or 64 MADI digital inputs and outputs at up to 48kHz, 28 or 32 MADI digital inputs and outputs at up to 96kHz, 12 stereo AES/EBU digital inputs and outputs (24 input and output channels) at up to 96kHz, 24 balanced analog inputs and outputs at up to 96kHz, 64-channel Expansion Bus port, word/super-clock input and output, video sync input functionality for the word clock input: the Video Sync signal can be converted to word clock internally and transmitted via the word clock output, MIDI input and output. The iBox-64-MADI-SA connects to Mixpander via Expansion Bus port or connects to Madixtreme via MADI.

### Sydec Audio Engineering iBox-64-MADI-TA, \$2,850

The iBox-64-MADI-TA provides 56 or 64 MADI digital inputs and outputs at up to 48kHz, 28 or 32 MADI digital inputs and outputs at up to 96kHz, 24 TDIF digital inputs and outputs at up to 48kHz, 12 or 24 TDIF digital inputs and outputs at up to 96kHz, 24 balanced analog inputs and outputs at up to 96kHz, 64 channel Expansion Bus port, word/super-clock input and output, video sync input functionality for the word clock input: the video sync signal can be converted to word clock internally and transmitted via the word clock output, MIDI input and output. The iBox-64-MADI-TA connects to Mixpander via Expansion Bus port or connects to Madixtreme via MADI or connects to Soundscape 32/16, R.Ed.SSHDR1-Plus, Mixtreme or Mixtreme 192 via TDIF. All input and output channels can be used simultaneously in any configuration.

### Sydec Audio Engineering iBox-64-MADI-AA, \$2,850

The iBox-64-MADI-AA provides 56 or 64 MADI digital inputs and outputs at up to 48kHz, 28 or 32 MADI digital inputs and outputs at up to 96kHz, 24 ADAT Lightpipe digital inputs and outputs at up to 48kHz, 12 ADAT Lightpipe digital inputs and outputs at up to 96kHz, 24 balanced analog inputs and outputs at up to 96kHz, 64-channel Expansion Bus port, word/super-clock input and output, Video Sync input functionality for the word clock input: the video sync signal can be converted to word clock internally and transmitted via the word clock output, MIDI input and output. When using the iBox 64-MADI-AA as a stand-alone converter unit, it is possible to link the analogue and ADAT inputs to the MADI outputs and the MADI inputs to the analogue and ADAT outputs (some would call this "224 channel operation!").

### Sydec Audio Engineering IO-896, \$2,495

The IO-896 Connects to a Soundscape 32, Soundscape 16, Mixtreme 192 or iBox (Mixpander Power Pak) via TDIF. Eight channel balanced analog I/O at up to 96kHz with Apogee conversion, soft limiting option and front panel metering; eight channel AES/EBU I/O at up to 96kHz; eight channel ADAT I/O at up to 48kHz. Designed for Soundscape by Apogee, one of the world's most prestigious AD/DA conversion specialists, the I/O 896 packs a wealth of useful options in a stylish, 2U high rackmountable unit that perfectly integrates with the design of the latest generation Soundscape products: Soundscape 32, Soundscape 16, iBox 64-MADI-TA, iBox 64MADI and iBox 48-TA. An exclusive Apogee Soft Limit analog circuit allows you to maximize the analog input levels without overloading. The I/O 896 can generate word clock at up to 96kHz or operate as word clock slave.

### Sydec Audio Engineering Mixpander-PowerPak, from \$3,370

The Mixpander-PowerPak offers a choice of PCI audio cards with either five or nine embedded DSPs and 64 channels of digital I/O. Ultra low latency Win XP/Win 2000 drivers with true multi-client support (ASIO-2, MME, WDM, GSIF). Seamless integration of VST/VSTi and DSP plug-ins through the fully user-configurable Soundscape software mixer. Mixpander-PowerPak supports a comprehensive range of Sydec's iBox-based I/O devices (balanced/unbalanced analog, mic preamps, AES/EBU, ADAT, MADI, TDIF).

### Tascam US-122, \$269

The super-portable portable US-122 is a Mac/Windows compatible (ASIO, WDM, GSIF and Apple Core Audio/OS X) USB audio/MIDI interface with two XLR-based, phantom-powered mic inputs with analog inserts. Bundled software includes Tascam's GigaStudio 24 and a version of Steinberg's Cubasis.

### Tascam FW-1082, \$999

The FW-1082 provides audio and MIDI I/O to small studios and offers a control surface with moving-faders. Ten inputs, including four balanced XLR mic inputs with phantom power. Two MIDI inputs and outputs are also included, plus S/PDIF digital I/O. Eight channel strips each feature a 60mm touch-sensitive moving fader and select/solo/mute buttons, and a moving master fader. The FW-1082 includes the latest Tascam software bundle: Cubasis LE, GigaStudio 3 LE, and Nomad Factory plug-in demos.

### Tascam FW-1884, \$1,599

The FW-1884 is a professional DAW control surface and audio/MIDI interface that uses the FireWire high-speed data transfer protocol. Interfacing to computers as well as control of DAW parameters via eight 100 mm motorized touch-sensitive channel faders, one master fader, and controls for pan, solo, mute and select functions on each channel. Tactile control for four bands of parametric EQ, a jog/shuttle wheel and a variety of shortcut keys for various software applications. Co-designed by Tascam and Frontier Design Group.

### Tascam FW-1804, \$749

The FW-1804 brings many of the audio and MIDI interface features of the FW-1884 to a rackmountable format. It has four XLR microphone inputs with analog inserts and phantom power for professional condenser mics. An additional four line inputs are provided, plus ADAT and S/PDIF digital connection for a total of 18 inputs and 12 outputs. Two MIDI inputs and four MIDI outputs, word clock and a guitar-level input.

### Tascam US-2400, \$1,999

Features 25 touch-sensitive moving channel faders and a touch-sensitive motorized master fader, each with 10-bit resolution. Each channel has dedicated select, solo and mute controls. 24 rotary encoders are selectable to control pan or up to 8 aux sends. Employ all 24 encoders as one large channel strip for four-band EQ, aux and pan control. LEDs can display current settings or double as channel meters during recording and playback. Solid-feeling transport buttons, a shuttle wheel and a joystick.

### TC Works PowerCore Firewire 2.0, \$1,499

PowerCore Firewire is a one rack unit mobile DSP processing solution that connects to your computer via ultra fast FireWire connection, and seamlessly integrates into existing VST and Audio Units applications. Crammed with four times the DSP horsepower of the original PowerCore PCI card. PowerCore FireWire comes with a pro selection of effects plug-ins and virtual instruments.

### Terratec DMX 6fire 24/96, \$399

Terratec's 5.1-ready audio interface is equipped with six 24-bit/96kHz analog outputs that can be used to drive six powered speakers directly from a PC. The card also offers one stereo line in, MIDI I/O, optical/coax S/PDIF I/O, and a stereo headphone out. WDM and MME drivers are included.

### Terratec EWS 88D, \$349

While based on the technology used in the AudioSystem EWS88 MT, the "D" model provides 10 digital audio channels. The optical TOS-Link interface can handle either eight channels in ADAT format, or a stereo S/PDIF signal (up to 24-bit/96kHz). Supports 16-, 20-, and 24-bit resolutions. Other features: two MIDI ports and an S/PDIF interface with coaxial connections.

### Terratec EWS 88MT, \$599

Eight analog input and output converters process audio signals (continuously from the hardware to the software) with up to 24-bit/96kHz resolution. Includes MIDI interface. Can be mounted in a PC drive bay. The PCI card itself also features connections for S/PDIF devices (coaxial), as well as an independent monitor output.

### Terratec EWX 24/96, \$299

24-bit/96kHz audio interface based on the EWS88 MT/D. Supports ASIO 2.0, GSIF (GigaSampler) and DirectSound drivers.

### Terratec Mic 2 w/PCI Card, \$1,299 or \$1,099 without PCI Card

The heart of the Mic 2 system is a preamp section consisting of low-noise operational amplifiers. Balanced inputs and outputs. Can operate as stand-alone preamplifier and audio mixer for numerous applications. With a click of the mouse, analog, S/PDIF signals can be routed to various connections and converted among a variety of formats. Supports WDM, ASIO, and GSIF.

### Terratec Mic 8 w/PCI Card, \$1,499 or \$1,349 without PCI card

The heart of the Mic 8 system is a preamp section consisting of low-noise amplifiers. All eight inputs of can be supplied with line signals. In addition, two audio channels with combined XLR/jack input are available at the front. With a click of the mouse, analog, S/PDIF and ADAT signals can be routed to various connections and converted among a variety of formats. Supports WDM, ASIO, and GSIF.

### Universal Audio 2192, \$2,495

The 2192 dual AD/DA converter supports sample rates up to 192kHz, real-time transcoding between AES/EBU, S/PDIF, and ADAT, and support for single and dual wire AES modes. Features John Hinson-designed Class-A analog circuitry.

### XP Sound XP202 USB Audio Interface, \$199

The XP202 is a USB audio interface that provides cross-platform compatibility, a multitude of connection possibilities, two onboard mic preamps with phantom power, stereo line input, stereo phono preamp, stereo headphone amplifier, mix/balance control (balance USB audio playback and input signal for headphones) and two parallel stereo outputs.

### Yamaha UW10, \$159

Yamaha's UW10 is a high-quality compact USB audio interface featuring stereo S/PDIF optical I/O, two RCA analog inputs and outputs and a headphone jack. The UW10 is Windows 98, ME, XP compatible and uses ASIO drivers, and boasts low-latency performance.

### Yamaha O1X, \$1,699

Combining eight mic preamps, 24/96 A/D converters, a multi-channel 24/96k mLAN FireWire digital audio interface, a multi-port mLAN FireWire MIDI interface, a 28 channel moving fader mixer and a DAW control surface that supports all of the major software platforms, the O1X puts it all the bits needed for a computer-based studio together in a single package. Included for total computer integration are four VST plug-ins: O1X Channel Module, Vocal Rack, Final Master, and Pitch Fix.

### Yamaha i88X Audio/MIDI Interface, \$1,299

The i88X is an mLAN based Audio and MIDI interface which features two mic, six line inputs that deliver pristine audio signal to the unit's precision 24-bit/96kHz A/D converters. Built-in ADAT lightpipe and S/PDIF I/O allows for 18 simultaneous inputs and outputs. The first two input channels feature extremely high-performance head amplifiers derived from the DM2000 consoles. Included are three VST plug-ins: Vocal Rack, Final Master, and Pitch Fix.