



Small is Beautiful



via vinyl audio

## VIA Vinyl Tremor PCI Audio Controller



### TREMOR

The PC today is increasingly used as a multimedia center for gaming, playing movies, and listening to or recording music. As such, PC users now demand far greater audio performance than what onboard solutions are capable of offering. For this reason, VIA has built upon the proven audio technology of its Envy24 line of audio controllers to design the VIA Vinyl Tremor Audio Controller, intended to satisfy the needs and budgets of a new generation of home-PC users while delivering superb audio fidelity.

#### Benefits of VIA Vinyl Tremor

##### High audio performance

With up to 24-bit resolution/96kHz sampling rates for digital input/output and 20-bit/48kHz analog connections, the VIA Tremor is capable of providing superb audio playback and recording quality to the PC audio enthusiast.

##### Flexible range of connection options

6 outbound streams and 2 simultaneous input streams, along with an integrated S/PDIF transmitter, allow for a wide range of connections that can support Dolby Digital/Dolby Digital EX Surround Sound. A direct access general purpose connector allows for easy use of expanded connection boards, and a MIDI port is also provided.

##### Multiple applications

Applications include gaming, high fidelity home theatre entertainment, music playback and recording.

##### Easy to integrate

I<sup>2</sup>S and AC-link input and output for easy connection with many codec or ADC/DAC solutions. Also supports Windows® WDM drivers.

#### Description

The VIA Vinyl Tremor Audio Controller supports 24-bit/96kHz digital inputs and outputs and 20-bit/48kHz analog connections for startlingly crisp sound that is sure to enhance any gaming or movie experience. Gamers will find that the VIA Tremor offers Immerzio™ gaming support, integrating Sensaura technology for support of the latest 3D gaming standards like EAX 1.0, 2.0, A3D, and DirectSound 3D, and completely immersing the gamer in a realistic audio environment that even captures the stealthy approach of an enemy from behind. Support for Dolby Digital and Dolby Digital EX Surround Sound makes the VIA Tremor a perfect audio solution for home theatre performance.

For flexibility, the VIA Tremor allows up to 6 outbound streams and 2 simultaneous inbound channels, with one input and one output I<sup>2</sup>S/AC-link data stream pairs, and incorporates a 16-pin GPIO direct access port. To allow the easy transfer of PCM, DTS, and AC3 digital audio formats to items like stereos, portable audio devices, and speakers at 24-bit/192kHz quality, the VIA Tremor has an integrated S/PDIF transmitter and IEC958 line driver. Those interested in recording their own music will find an MPU-401 MIDI UART port. The VIA Tremor also brings full support for Windows® WDM drivers.

The VIA Tremor Audio Controller is ideal for anything from gaming to creating a home entertainment center, from high fidelity music playback to multi-track audio recording, and from PC-based instrumentation to data acquisition and waveform generation.

#### Key Features

##### Sound Quality

- » 24-bit resolution audio format support
- » Bit accurate transfers
- » Sampling rates up to 96kHz

##### Input/Output

- » 1 synchronous I<sup>2</sup>S / AC-link output data stream pairs
- » 1 synchronous I<sup>2</sup>S / AC-link input data stream pairs
- » Multi-channel AC-link supported alternatively
- » Integrated S/PDIF transmitter with IEC958 line driver
- » Digital loopback and stream routing mechanism
- » Peak meters on all streams
- » MPU-401 MIDI UART port
- » ACPI and PCI PMI support

##### Architecture

- » PCI 2.2 interface with bus mastering and burst modes
- » I<sup>2</sup>C subset interface for E<sup>2</sup>PROM and peripherals control
- » 16-pin, direct access GPIO port
- » 24.576 / 49.152 and 22.5792 MHz crystal operation
- » Windows® WDM drivers

##### Package

- » 128-Pin PQFP (14 x 20mm body)

##### Power

- » 3.3V operating supply (5V tolerant I/O)

#### Key Features

- » 24-bit/96kHz digital audio quality
- » 20-bit/48kHz analog quality
- » Up to 6-channel outputs
- » Perfect for multimedia soundcards