

Technical Specifications of the Sound Blaster AWE32 series

Model Numbers:

CT3999

CT3991

CT3990

CT3980

CT3930

CT3900

CT3919

CT3910

CT3780 (Sound Blaster AWE32 Value, no Wave Blaster header)

CT2760 (Creative/Panasonic Interface)

CT2760A (Creative/Panasonic Interface)

The Sound Blaster AWE32 is a standard Sound Blaster16 with the EMU 8000 Advanced WavEffect music synthesizer chip. The card includes all the standard Sound Blaster16 features.

The EMU8000 is a sub-system offering high quality music synthesis using advanced wave effects technology. It comes with an onboard dedicated effect engine. The effect engine provides high quality effects like reverb and chorus to MIDI playback. The EMU8000 supports up to 32 voices, and the effect amount for each voice can be controlled via MIDI.

General Hardware Specifications

Wave-Table Synthesis

E-mu Systems EMU8000 wave-table synthesizer

Digital Effects engine for reverb, chorus, flange, and delay

32-voice polyphony and multi-timbral capability

128 GM & Gs compatible instruments and 10 drum kits

16 MIDI channels

1MB ROM of built-in sound samples

Advanced Audio Technology

SoundFont downloadable samples allow new sounds and musical instruments to be added to the card

E-mu 3D Positional Audio positions sound in a 360 degree environment, providing an immersive audio experience with supported applications

Creative 3D Stereo Enhancement Technology expands the spaciousness of the sounds in a traditional two speaker system

Hardware acceleration of Microsoft DirectSound games and applications

Memory Subsystem

512k onboard RAM supports SoundFont banks and E-mu 3D Positional Audio

Expandable up to 28MB of RAM with 30pin SIMM sockets

CD-Quality, 16-Bit Stereo Digital Audio

8 and 16-bit, mono and stereo recording and playback

User-selectable sample rates from the 5kHz to 44.1kHz

Full-Duplex support enables simultaneous record and playback for Internet communications software

Other Specifications

Signal to Noise: 85 dB

Frequency Response: 20Hz-20kHz

Year 2000 Compliant

Built-In Stereo Power Amplifier: Yes

Built-In Digital/Analog Mixer: Yes

CD-ROM Interface: IDE

Hardware Settings

Note: settings are software selectable via Plug and Play for the CT39xx AWE32 cards. The I/O port for other AWE32 models (CT27xx) can only be changed via jumpers on the card.

Interrupt (IRQ): 2, 5, 7, 10

8-bit DMA Channel: 0, 1, 3

16-bit DMA Channel: 5, 6, 7

Joystick I/O Address: 200 Hex

Audio I/O Address: 220, 240, 260, 280 Hex

MPU-401 I/O Address: 300, 330 Hex

FM Synthesizer I/O Address: 388 Hex

Wave Synthesizer I/O Address: 6x0, Ax0, Ex0 Hex

IDE Interface Port: Secondary, Tertiary, Quaternary

IDE Interface IRQ: 10, 11, 12, 15

MPU-401 Port [Enabled] (MFBEN closed), Disabled (MFBEN open)

Extra DRAM Present Enabled (DRAM_EN on 1 & 2), [Disabled] (DRAM_EN on 2 & 3)

Connectors

Line-In: Yes

Mic-In: Yes

Line-Out: Yes

Speaker-Out: Yes

PC Speaker-In: Yes

SPDIF-Out: Yes

Game/Joystick Port: Yes

CD-ROM Audio-In (Sound Blaster Audio Socket): Yes

CD-ROM Audio-In (MPC2 Socket): Yes

30-pin SIMM RAM Upgrade Module: Yes (512k on-board RAM)

CSP Chip Socket: No

Wave Blaster Daughter Board Connector: Yes (Except CT3780)

External CD-ROM: Not Applicable

Modem Feature Connector: Yes

Minimum System Requirements

80386 or faster processor

4MB system RAM

Windows® 3.1 / Windows® 9x

Open, half-length 16-bit ISA slot

Speakers or headphones