
# VX882e – Multichannel PCM Sound Card

**Key Workflow**: Linear PCM multichannel stereo sound card for professional audio workstations

VX882e is a professional linear (PCM) multichannel sound card based on the PCI Express bus interface. It is designed for use in any professional system running under Windows or Linux. It is a reference card in radio broadcast automation for applications such as automated recording and play-out and multichannel production.

## At a glance

VX882e features eight input and output channels and offers balanced analog and AES/EBU connectivity, with the possibility to synchronize on an external clock (AES11, Word clock, black burst video). It can be used under Windows or Linux operating systems, with software applications based on standard driver interfaces such as WDM Kernel streaming, DirectSound, Wasapi, and ASIO for Windows, and Alsa for Linux.

- Developed for the broadcast industry
- Supports balanced analog and AES/EBU audio
- Interoperable with most third party software applications for audio production, under Windows and Linux

## Key features

- Multichannel linear PCM sound card
- PCI Express bus interface
- Eight balanced analog inputs and outputs, +24 dBu max level
- Four AES/EBU inputs/outputs, with hardware sample rate converter on each AES/EBU input
- Adjustable input and output analog and digital gains
- On-board 3-band parametric EQ and Maximizer effects
- Support for Linux (Alsa driver) and Windows 32-bit and 64-bit (WDM Kernel streaming, DirectSound, Wasapi, ASIO)
- Breakout cable or breakout box (BOB8) with XLR connectors for audio connectivity

## Configuration

- **Bus/Format :** PCI EXPRESS™ (PCIe®) x1, (x2, x4, x8, x16, x32 compatible)
- **Size :** 168 mm x 111 mm x 20 mm
- **Power requirements (+3.3V / +12V) :** 2.5A / 0.5A
- **Operating: temp / humidity (non-condensing) :** 0°C/+50°C • 5%/90%
- **Storage: temp / humidity (non-condensing) :** -5°C/+70°C • 0%/95%

## Inputs

- **Analog line inputs (mono) :** 8 balanced*****
- **Maximum input level/ impedance :** +24 dBu/ >10 kW
- **Digital inputs (stereo) :** 4 AES/EBU****** with hw Sample Rate Converters, 7.5:1 to 1:8, up to 192 kHz
- **Programmable input gain :** analog: from –94.5dB à +15.5 dB (*maximum sensitivity: 0 dBFs for –15.5 dBu input),* digital:from –110 dB à +18 dB
- **Other inputs :** AES/EBU Sync (up to 192 kHz), Word clock (up to 96 kHz), LTC, Video
- **AES11 synchronization :** Yes

## Outputs

- **Analog line outputs (mono) :** 8 servo-balanced*******
- **Maximum output level / impedance :** +24 dBu / <100 W
- **Digital outputs (stereo) :** 4 AES/EBU******, up to 192 kHz
- **Programmable output gain :** analog: from –86 dB to +24 dB / digital: from –110 dB to +18 dB
- **Other outputs :** Word clock (up to 96 kHz)

## Connectors

- Internal connector: inter-board synchronization
- External connectors: 68-pin SCSI MDR
- Digigram accessories available : Breakout cable or 2U 19” Breakout Box

## Audio specifications

- Sampling frequencies available : Programmable from 8 to 192kHz
- A/D and D/A converter resolution : 24bits
- Supported audio formats : PCM (8, 16, 24 bits), Float IEEE754

## Audio performance measured at Fs = 48kHz

Frequency response (record + play): 20 Hz – 20 kHz: +0 /-0.2 dB

Channel phase difference: 20/20kHz: <0.2°/2°

Dynamic range (A-weighted) : analog In: >104 dB / analog out: > 104 dB

THD + noise 1 kHz at -1 dBfs : analog In: >-97 dB / analog out: <-94 dB

Crosstalk (Analog in or out) : 1 kHz at 24 dBu: <–100 dB / 15 kHz at 24 dBu: <-85 dB

## Development environments

Digigram management : np SDK (PCM only)

Other management : Wave, ASIO, DirectSound,WASAPI, ALSA

OS supported : Windows 32bit and 64 bit versions, Linux

Main on-board processing features (available through the Digigram np SDK) : PCM play, rec, Float IEEE754, direct monitoring, real-time mixing, level adjustment, panning, cross-fade, punch-in/punch-out, scrubbing

** can be used with unbalanced signals*

*** can be used as S/PDIF interface as well*

**** electronically servo-balanced outputs provide automatic level adjustment to accommodate either balanced or unbalanced lines*