# THE LATEST GENERATION MULTI-CHANNEL LOW PROFILE PCIe SOUND CARD

ALP882e is a versatile multichannel PCIe sound card for professional PC-based audio systems running under Windows and Linux environments. Reliable, stable and compact low profile ALP882e is ready for any challenge and ideally suited for mission critical applications where audio is key - broadcast, utility, public safety or transportation markets.

It features 8 balanced analog line inputs plus 4 stereo AES3 inputs, 8 balanced analog outputs plus 4 AES3 output, and 8 GPIs / 8 GPOs. The on-board zero latency mixer features 32 I/O channels (8 analog, 8 AES3, 16 software play/record). Each of the 32 output channels has its own mix from the 32 inputs.

Low profile card
with 2 brackets
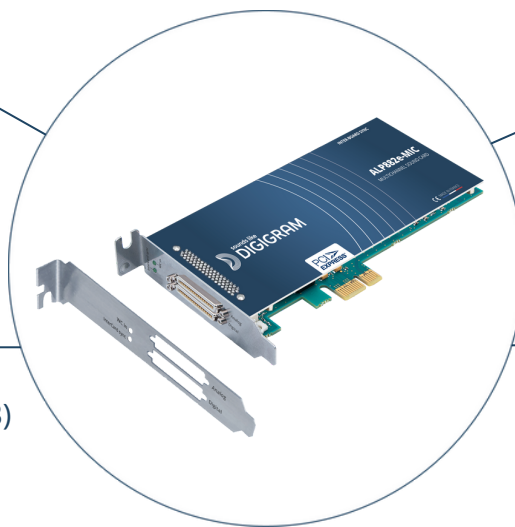
16 stereo software
devices for playout
and recording
32x32 on-board mixer

8 analog I/O channels
8 digital I/O channels (AES3)
8 GPIs and 8 GPOs

Inter-board
synchronization*
(up to 8 ALP-X cards)

KEY FEATURES

For Windows
and Linux

Iconic Rock-solid &
life-long

Pristine Digigram
sound quality

Multi-
applications

Hiccup free
reliability

*soon available

1 FORMAT

Dimensions
L: 168 mm x H: 69 mm x l: 20 mm
L: 6.6 inch; H: 2.7 inch; l: 0.8 inch

Form Factor
Low profile
(standard and low profile brackets included)

Expansion Bus
PCI Express™ x1
(x2, x4, x8, x16 compatible)

2 DRIVERS

Supported OS
Windows (from Windows 10 and Server 2016)
Linux (from Linux Kernel 4.9)

Drivers
Windows: Asio, Wasapi/DirectSound
Linux: Alsa, Libgpiod

One Driver Package
Multi-application and multi-card API available

3 CONTROL PANEL

Digigram ALP-X ASIO Settings (On Windows)
• Asio Control Panel: up to 8 ALP-X cards
(intercard synchronization)
• Select I/Os used through Asio
(others can be used through Wasapi)

Digigram ALP-X Manager (On Windows)
• One unified control panel for the whole ALP-X range
• Manages up to 8 ALP-X cards

Main functions
• Zero latency FPGA-based 32x32 mixer
• Adjustment of input and output levels
• Mixing before monitoring and recording (32 mix buses)
• Clock & sync selection
• GPIO status
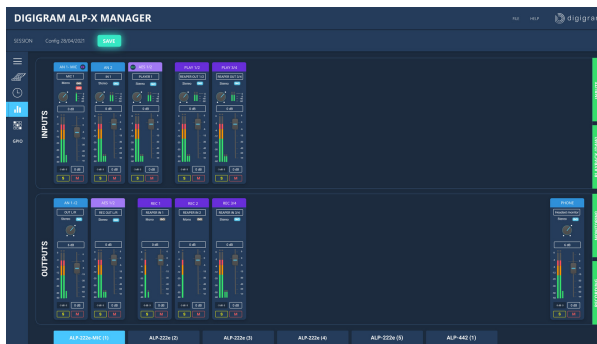
5 ANALOG AUDIO PERFORMANCES

Frequency response
@48 kHz: 20 Hz - 20 kHz
Inputs : +/- 0.83 dB
Outputs : +/- 0.57 dB

SNR
Inputs
A-Weighted: >115 dBA
Unweighted: >112 dB

Outputs
A-Weighted: >109dBA
Unweighted: >106 dB

THD + Noise (@22 dBu /1 kHz)
Inputs: <-98 dB @24 dBu
Outputs: <-96 dB @24 dBu

Crosstalk
Inputs: @1 kHz / @15 kHz
        128 dB / -107 dB
Outputs: @1 kHz / @15 kHz
        -127 dB / -112 dB

Channel phase (@1 kHz)
Inputs: < 0.01°
Outputs: < -0.02°

7 CABLE & CONNECTORS SPECIFICATIONS

Breakout cable for analog I/Os
- Length 1m, XLR connectors

Breakout cables for digital I/Os
- Length: 1 m
- XLR for I/Os and AES11 sync input
- BNCs for Word clock I/O
- 2 x D-Sub 25 for GPIs and GPOs

Inter board synchronization

4 HARDWARE SPECIFICATIONS

INPUTS

Analog
• 8 balanced line inputs
• A/D Converters: 24 bits / 192 kHz
• Maximum input level/impedance: +24 dBu / >10 kΩ
• Adjustable analog gain: from -24 dB to +16 dB, in 0.5 dB steps
• Adjustable digital gain: from -90 dB to +12 dB in 0.1 dB steps

Digital
• 4 stereo AES3 inputs
• Adjustable digital gain: from -90 dB to +12 dB, in 0.1 dB steps
• Sample rate (kHz): 32, 44.1, 48, 64, 88.2, 96, 128, 176.4, 192
• Hardware Sample Rate Converter frequency ratio: 1:8 to 7,5:1

Others
• 1 AES11 synchronization input
• 1 Word Clock synchronization input
• 8 dry contact GPIs

OUTPUTS

Analog
• 8 servo-balanced line outputs
• D/A Converters: 24 bits / 192 kHz
• Max level / Impedance: +24 dBu / <100 Ohms
• Adjustable digital gain: from -90 dB to +12 dB, in 0.1 dB steps

Digital
• 4 stereo AES3 outputs
• Adjustable output gain: from -90 dB to +12 dB, in 0.1 dB steps
• Sample rate (kHz): 32, 44.1, 48, 64, 88.2, 96, 128, 176.4, 192

Other
• 8 relay GPOs (0.5 A, 48 VCC)
• 1 Word Clock output

6 SAMPLE FORMAT

PCM (8, 16, 24, 32 and 32 float bits), Float IEEE754

8 SYNCHRONIZATION SOURCES

• Internal clock (kHz)
  11.025, 16, 22.05, 24, 32, 44.1, 48, 64, 88.2, 96, 128, 176.4, 192
• AES11 (kHz)
  32, 44.1, 48, 64, 88.2, 96, 128, 176.4, 192
• Word Clock input (kHz)
  32, 44.1, 48, 64, 88.2, 96, 128, 176.4, 192
• Intercard clock* (possibility to connect up to 8 ALP-X cards linked with an inter-board sync cable)