

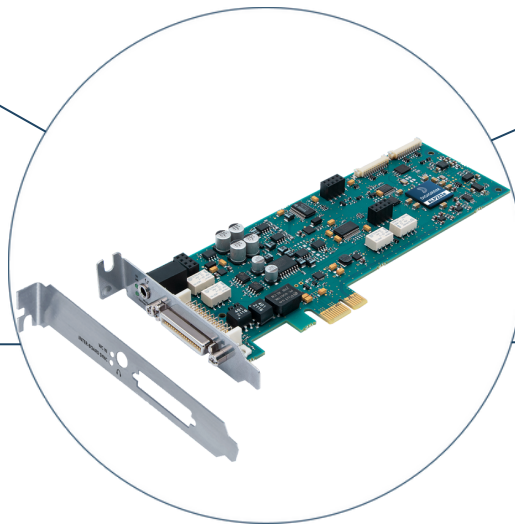
# THE NEW ICONIC PCIe STEREO SOUND CARD

ALP222e is a versatile PCIe sound card for professional PC-based audio systems running under Windows and Linux environments. Extremely reliable and stable, this card is ready for any challenge. ALP222e is the perfect fit for mission critical applications where audio is key – broadcast (24/7/365), audio production, utility, public safety or transportation markets.

This card is ready for any challenge. It offers one stereo AES3 input and output.

A zero latency embedded mixer allows to route and mix audio channels from physical and software input devices to physical and software output devices.

Low profile card  
with 2 brackets



Connector for  
breakout cable or  
custom integration  
Headphones jack

2 mono analog channels  
1 stereo AES3 channel  
(total of 4 mono I/Os)

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™ (PCIe™) 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)

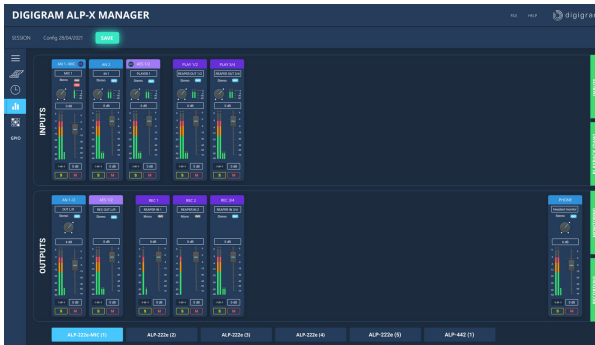
- Asio Control Panel: up to 8 ALP-X cards (intercard synchronization)
- Select I/Os used through ASIO (others can be used through Wasapi)

### Digigram ALP-X Manager (On Windows)

- One unified control panel for the whole ALP-X range
- Manages up to 8 ALP-X cards
- 2 working modes
- Light: Set the card as 2 I/O channels (like stereo VX / PCX cards)
- Full: Set the card as 4 I/O channels (analog and AES3)

### Main functions

Zero latency FPGA-based mixer  
Adjustment of input and output levels  
Mixing before monitoring and recording  
Clock & sync selection  
GPIO status



## 5 ANALOG AUDIO PERFORMANCES

### Frequency response

@48 kHz: 20 Hz - 20 kHz  
Inputs : +/- 0.5 dB  
Outputs : +/- 0.08 dB

### THD + Noise

Inputs: <-96 dB @18 dBu (1 kHz)  
Outputs: <-101 dB @18 dBu (1 kHz)

### SNR

Inputs  
A-Weighted: >110 dBA  
Unweighted: >108 dB

### Crosstalk

Inputs  
-111 dB @1 kHz / -110 dB @15 kHz  
Outputs  
-130 dB @1 kHz / -111 dB @15 kHz

### Outputs

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

### Channel phase

Inputs: < 0.01° @1 kHz  
Outputs: < -7.5° @1 kHz

## 7 CABLE & CONNECTORS SPECIFICATIONS

### Breakout cable

Total breakout cable length: 1 m  
XLRs for audio I/Os and AES11 input  
BNC for Word Clock I/O  
DB9 for GPIO



### Inter board synchronization

Headphones: 3.5 mm TRS female jack

## 4 HARDWARE SPECIFICATIONS

### INPUTS

#### Analog

2 Balanced line level  
A/D Converter: 24 bits / 192 kHz  
Max level / Impedance: +24 dBu / >10 kOhms  
Adjustable analog gain: from from -88 dB to +39 dB, in 0.5 dB steps  
Adjustable digital gain: from -90 dB to +12 dB in 0.1 dB steps

#### Digital

1 stereo AES3 input  
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: from 1:8 to 7,5:1

#### Other

1 AES11 synchronization input  
1 Word Clock synchronization input  
2 dry contact GPIOs

### OUTPUTS

#### Analog

2 servo-balanced line outputs  
D/A Converter: 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  
1 stereo headphone output (20 mW for 600 Ω)

#### Digital

1 stereo AES3 output  
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

2 relay GPIOs (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)