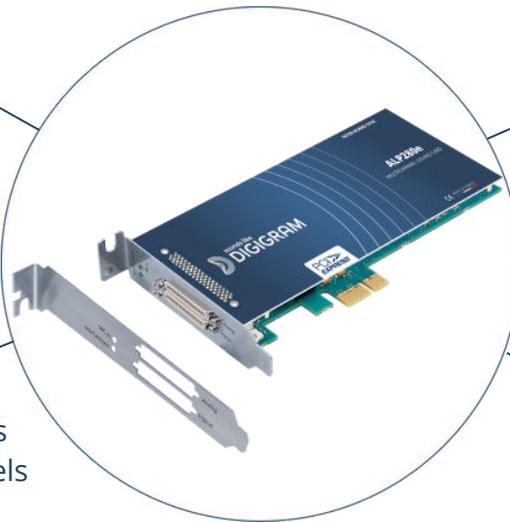


# MULTI-CHANNEL LOW PROFILE PCIe SOUND CARD FOR RECORDING ANALOG INPUTS

ALP280e has been designed for the **acquisition of analog signals** from eight line-level audio inputs, on professional PC-based audio systems running under Windows and Linux\* environments. This **low profile** card is ready for any challenge and guarantees unrivaled reliability and utmost quality when audio recording applications are critical – audio production, recording and audio analysis markets.

ALP280e features 8 balanced analog line inputs with analog and digital gains adjustment, and 8 GPIOs. The on-board zero latency mixer features 16 inputs (8 analog + 8 software playback channels), and 10 outputs (2 analog + 8 software recording channels). Each of the output channels has its own mix from the 16 inputs.

Low profile card with 2 brackets



16x10 on-board mixer  
8 playout channels  
8 recording channels

8 analog line input channels  
2 analog line output channels  
8 GPIOs and 8 GPOs

Inter-board synchronization\*  
up to 8 ALP-X cards

## KEY FEATURES



For Windows and Linux\*



Iconic rock-solid & lifelong durability



Pristine Digigram audio quality



Multi-applications



Hiccup free reliability

\* available soon

## 1 FORMAT

### Dimensions

L: 168 mm x H: 69 mm x I: 20 mm  
L: 6.6 inch; H: 2.7 inch; I: 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 2019)  
Linux\* from:  
- Ubuntu 20.04 kernel 5.15,  
- Debian 11 kernel 5.10  
- RHEL 9 kernel 5.14

### 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 16x10 mixer
- Adjustment of input and output levels
- Mixing before monitoring and recording (10 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: >109 dBA  
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°

## 6 SAMPLE FORMAT

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

\* available soon

## 4 HARDWARE SPECIFICATIONS

### INPUTS

#### Analog

- 8 balanced line level inputs
- A/D Converters: 24 bits / 192 kHz
- Line level
- 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

#### Others

- 1 AES11 synchronization input
- 1 Word Clock synchronization input
- 8 dry contact GPIOs

### OUTPUTS

#### Analog

- 2 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

#### Others

- 8 relay GPIOs (0.5 A, 48 VCC)
- 1 Word Clock output

## 7 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)

## 8 CABLE & CONNECTORS

### Breakout cable for analog I/Os

- Length 1m
- 8 female XLR connectors
- 2 male XLR connectors

### Breakout cables for digital I/Os

- Length 1m
- 1 XLR for AES11 sync input
- 2 BNCs for Word clock I/O
- 2 x D-Sub 25 for GPIOs and GPOs

### Inter board synchronization\*