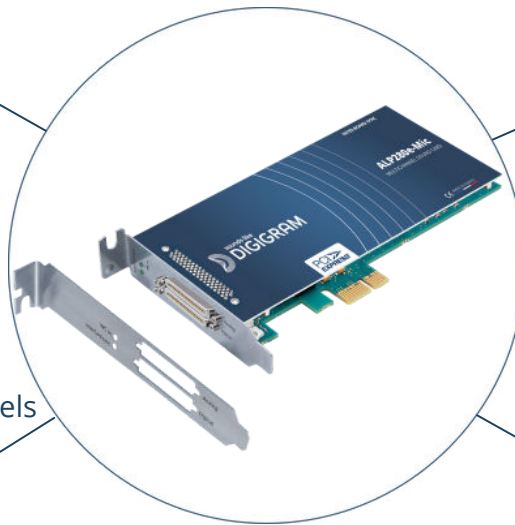# MULTI-CHANNEL LOW PROFILE PCIe SOUND CARD WITH MIC/ LINE INPUTS

ALP280e-MIC has been designed for the **acquisition of analog signals** coming from **eight audio input at line or microphone level**, on professional PC-based audio systems running under Windows and Linux* environments. This **low profile form factor** card guarantees unrivaled quality when audio and voice recording applications are critical – audio production, equipment monitoring and recording markets.

ALP280e-MIC features 8 balanced analog mic/line inputs equipped with independent switchable 48V phantom powers and high-end preamplifiers, 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 Mic/Line input channels
2 analog line output channels
8 GPIs 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 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 2019)
Linux* from:
- Ubuntu 20.04 kernel 5.15,
- Debian 11 kernel 5.10
- RHEL 9 kerel 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

4 HARDWARE SPECIFICATIONS

INPUTS
Analog
• 8 balanced Mic / 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
• Mic level
- Maximum input level/impedance: +10 dBu / >10 kΩ
- Adjustable analog gain: from 0dB to +56 dB, in 0.5 dB steps
- Maximum sensitivity: 0 dBfs for a -56 dBu input signal
- Switchable 48 V phantom power on each input
- Equivalent Input Noise: <-124 dB @ Gain +56 dB (48kHz)

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

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

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°

7 CABLE & CONNECTORS SPECIFICATIONS

Breakout cable for analog I/Os
• Length 1m
• 8 female XLR connectors
• 2 male XLR connectors

Breakout cable for digital I/Os
• Length 1m
• 1 XLR for AES11 sync input
• 2 BNC connectors for Word clock I/O
• 2 x D-Sub 25 for GPIs and GPOs

Inter board synchronization*

6 SAMPLE FORMAT

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

available soon

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)