NGTC-1280NX Digital Signal Processor

The NGTC-1280NX is a Dante™ enabled digital signal processor with flexible I/O for the NEXGENTEC AUDIO distribution solution.

The NGTC-1280NX is capable of simultaneously transmitting and receiving up to 64 channels of Dante™ audio (64 x 64) and has a completely flexible DSP design platform.

The NGTC-1280NX can be easily interfaced with 3rd party control systems via the network. It can also be used with the NGTC-SDM, the software defined Dante™ matrix and monitoring device to deliver a virtually unlimited audio matrix system.

The nexgentec DSP super modules enable efficient design and deployment of the NGTC audio network system, featuring the highest levels of functionality and performance.

Key Features

- 12 Analog inputs / 8 analog outputs
- Slot for one option card
- Configurable signal processing
- Rich palette of processing and logic objects, nexgentec DSP super modules
- Dante™ audio, 64 x 64 audio input / output channels per device
- 8 x 8 USB audio interface

- Redundant Dante™ ports (PRIM / SEC)
- LAN port for control
- RS232 port
- Informative front panel display
- 4 Control inputs and 8 logic outputs for GPIO integration
- Interface kit for third party control system integration

Power and Dimensions

Mains Voltage:	100 - 240 VAC, 50 / 60 Hz
Power Consumption:	< 60 Watt
BTU Rating:	< 200 BTU / hr
Operation Temperature Range:	5° to 30°C
Dimensions (H x W x D):	44 mm x 480 mm x 240 mm – 1 U
Weight:	5.9 kg

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Technical Specifications

- Front Panel Led Indicators: signal present, LCD display, data activity
- Analog Inputs: 12 balanced
- Mic/Line Inputs: nominal gain 0 dB, 12, 24, 44 or 54 dB with +/- 24 dB trim
- Input Impedance: 8 kΩ balanced, 4 kΩ unbalanced
- Maximum Input Level: + 23 dBu
- CMRR: > 76 dB at 1 KHz
- THD + Noise: < 94 dB, unweighted; 1 kHz @ + 22 dBu with 0 dB gain
- A/D Latency: 0.28 ms

- Analog Outputs: 8 balanced
- Maximum Output Level: + 24 dBu (+ 22.8 dBu into a 2 kΩ min. load)
- Frequency Response: 20 Hz - 20 KHz (+ 0.5 dB / -1 dB)
- THD + Noise: < 95 dB, unweighted; 1 kHz @ + 22 dBu with 0 dB gain
- Dynamic Range: > 117 dB, A - weighted
- Inpedance: 300 Ω balanced, 150 Ω unbalanced
- D/A Latency: 0.60 ms

- Control Ports: 4 inputs and 8 outputs
- Control Input Voltage: 0 to 4.5 v
- Control Input Impedance: 4.7 kΩ to + 5 V (2 - wire mode), > 1 MΩ (3 - wire mode)
- Logic Output Voltage: 0 or + 5 V unloaded
- Logic Output Impedance: 440 Ωs
- Logic Output Current: 10 mA source, 60 mA sink

- Watchdog Output: Phoenix / Combicon connector for failsafe control
- Opto Output Current: 14 mA maximum
- Withstanding Voltage: 80 V maximum (Off)
- Series Impedance: 220 Ω (isolated)
- Control Network: RJ45 Ethernet connector
- Maximum Cable Length: 100 m / 300 ft, category 5 / 6 / 7

- Digital Audio Bus: 1 x RJ45 Ethernet connectors
- Maximum Cable Length: 100 m / 300 ft, category 5 / 6 / 7
- Maximum Number of Nodes: 60
- Latency per Node: 4 (+/-1) Fs

- Dante™ Audio Network: 1 x RJ45 connectors
- Maximum Cable Length: 100 m / 300 ft, category 5 / 6 / 7

Recommendations

Use the PRCA phoenix to RCA converters for easy connection.

NGTC-PRCA-6	Phoenix to RCA interface input board
NGTC-PRCA-7	Phoenix to RCA interface output board
NGTC-PRCA-8	Phoenix to RCA interface output inverted board