



## Digital Signal Processor

### Stoltzen Typhoon X1616 DSP

Analog 16x16 | USB

Product number: TYP-X1616

## Product Description

Stoltzen's Typhoon series is a range of versatile and powerful DSPs designed for professional audio applications such as House of Worship, Bars and Restaurants, Conferencing, and Education markets. With the FLOW software as the controller, users can easily configure and manage multiple units to meet specific needs and requirements.

The Typhoon series offers a wide range of audio processing modules, including Adaptive Feedback Control, Acoustic Echo Cancellation, Automatic Noise Suppression, Automatic Gain Control, and AutoMix, ensuring optimal audio quality and intelligibility. Each input and output supports various signal processing options, such as parametric equalization, signal generation, compression, expansion, delay, and limiting, enabling precise control over audio signals.

The Typhoon series is designed to provide high-performance and cost-effective functionality, meeting the needs of audio professionals looking for a flexible and powerful DSP solution.

## Main Specifications

<b>Input Port - Analog Audio</b>	16
<b>Output Port - Analog Audio</b>	16
<b>Ethernet Port (RJ-45)</b>	1x TCP/IP
<b>USB Port (Type-A)</b>	1 USB Audio
<b>Serial Port (Terminal Block)</b>	1x RS-232 1x RS-485
<b>GPI/O Port (Terminal Block)</b>	8x GPI/O



## Extended Specifications

<b>Analog Background Noise</b>	-89 dBu (A-weighted)
<b>Frequency Response</b>	±0.3dB
<b>SNR</b>	110 dB
<b>THD+N</b>	<-94dB @4dBu
<b>Channel Isolation</b>	108 dB (1 kHz)
<b>Common Mode Rejection Ratio @60Hz</b>	80 dB
<b>Analog Input Gain</b>	0db - 48dB (increments of 3db)
<b>Analog Input Level</b>	+24 dBu
<b>Input Impedance</b>	5.4KΩ
<b>Phantom Power</b>	+48V / 10mA max
<b>Input dynamic range</b>	110dB
<b>Analog Output Level</b>	+24 dBu
<b>Output Impedance</b>	600Ω
<b>Output dynamic range</b>	112dB
<b>ADSP</b>	ADI SHARC 21489
<b>Audio Format</b>	48K/24bit
<b>System Latency</b>	<3ms
<b>Expander</b>	✓
<b>Compressor</b>	✓
<b>Parametric EQ</b>	5, 8 & 12 band
<b>Graphic EQ</b>	10, 15 & 31 band
<b>Gate Mixer</b>	✓
<b>Ducker</b>	✓
<b>High and Low Pass Filter</b>	✓
<b>Delay</b>	✓
<b>Limiter</b>	✓
<b>Acoustic Echo Cancellation (AEC)</b>	1
<b>Adaptive Feedback Control (AFC)</b>	✓
<b>Automatic Noise Suppression (ANS)</b>	✓
<b>Automatic Gain Control (AGC)</b>	✓
<b>Ambient Noise Compensation (ANC)</b>	✓



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<b>AutoMix (AM)</b>	✓
<b>Voice Activated Camera Control</b>	✓
<b>Operating Temperature</b>	+32 to +104 °F (0 to +40 °C)
<b>Humidity</b>	10% to 90% RH (non-condensing)
<b>Certifications</b>	CE, RoHS

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