

Features

- Floating point SHARC DSP
- Flexible and powerful multichannel audio processor
- Dirac Live 3.x upgrade option
- Class-leading analog I/O noise and distortion specifications
- Full suite of miniDSP processing
- Upgradeable with Dirac Live

Hardware

- ADI ADSP21489 @400MHz
- Multichannel USB audio (8ch)
- EARC/ARC HDMI input (8ch PCM)
- 8ch AD/DA with audiophile specs
- SPDIF/optical stereo inputs
- OLED front panel with IR control
- 12V trigger output

Software Control

- Real time live control
- Win & Mac compatible
- Firmware upgradeable
- 4 preset memories
- CEC control from TV

Applications

- Home theater
- PC based multichannel audio
- Low latency gaming
- Subwoofer integration

The **Flex HTx** is the bigger brother of the Flex HT, targeting the need for a multichannel processor with HDMI ARC/eARC capabilities and stellar analog and USB audio capabilities. Within a single rack unit, we packed all the possible connectivity we could fit.

Eight-channel audio input is via analog audio (RCA and TRS), eARC linear PCM over HDMI¹, or USB Audio. Additional digital stereo input is supported over SPDIF and TOSLINK optical. Internally, we've provided a full suite of miniDSP's flexible routing and audio processing features: bass management, parametric EQ, crossovers, advanced biquad programming and delay/gain adjustments. In addition, the miniDSP Flex HTx is software-upgradable with full-frequency Dirac Live®, the world's premiere room correction system.

Continuing miniDSP's focus on affordable high-performance audio, the Flex HTx features class-leading low noise and distortion figures. An OLED front panel display and volume control/encoder knob provides easy control.

The **miniDSP Flex HTx** is the perfect solution for a modern compact processor for home theater and multichannel sound.



1. The Flex HT does not support bitstream (e.g. Dolby/DTS) decoding. The audio source must be able to output linear PCM (LPCM) for multichannel support over HDMI.

TYPICAL APPLICATION



TECHNICAL SPECIFICATIONS

	Description	
Digital Signal Processing Engine	Analog Devices Floating point SHARC DSP: ADSP21489 @ 400MHZ	
Processing resolution / Sample rate	32 bit/48 kHz	
USB Audio support	UAC2 Audio - ASIO driver provided (Windows) - Plug&Play (Mac/Linux) Multichannel USB Audio interface (8ch) for up to 7.1 configurations / 32bit / 44.1~96kHz	
Input/Output DSP structure	8ch IN (USB/HDMI/Analog) or 2ch IN (Toslink/SPDIF) => DSP => 8 channels OUT (Analog)	
Digital Stereo Audio Input Connectivity	1 x SPDIF (stereo) on RCA connector, 1 x OPTICAL (stereo) on Toslink connector Supported sample rates: 20 - 216 kHz / Stereo source will be automatically assigned to Input 1&2	
HDMI connectivity	ARC/EARC compliant for up to 8ch of LPCM audio streaming Supported sample rates: 32 - 96 kHz / Supported sample sizes: 16-24bits WARNING: No onboard Dolby/DTS decoding. Use your source (E.g. TV) to output in PCM mode.	
	Balanced 6.35mm TRS	Unbalanced RCA
Analog Audio Input Connectivity	8 x Balanced TRS	8 x Unbalanced RCA
Analog Audio Input Impedance	200 k Ω	100 k Ω
Analog Audio Output Impedance	300 Ω	150 Ω
Analog Input/Output Max Level	4 Vrms/4 Vrms	2 Vrms/2 Vrms
Frequency Response	20 Hz - 20 kHz $\pm$ 0.1 dB	20 Hz - 20 kHz $\pm$ 0.1 dB
Digital to Analog (input 1 kHz, 0 dBFS) / AES17 20kHz LPF		
SNR	127 dB(A)	124 dB(A)
THD+N / SINAD	-120 dB (0.0001 %) / 120dB SINAD	-117 dB (0.00014 %) / 117dB SINAD
Crosstalk	-132 dB	-120dB
TRS Analog to Analog (input 1 kHz, 4 V RMS) / AES17 20kHz LPF		
SNR	120 dB(A)	118 dB(A)
THD+N / SINAD	-114 dB (0.0002 %) / 114dB SINAD	-112 dB (0.00025 %) / 112dB SINAD
Crosstalk	-130 dB	-120 dB
Filtering Technology	miniDSP DSP toolbox (routing, bass management, parametric EQ, crossover, gain/delay). Optional software upgrade to multichannel Dirac Live® 3.x Full Range correction (20 Hz - 20 kHz)	
DSP Presets	Up to 4 presets	
Dimensions (HxWxD)	41.5 x 429 x 236 mm	
Accessories	IR Remote	
Power Supply	Included external switching Power Supply 12V/1.6A (US/UK/EU/AU plugs)	
Trigger out	12V trigger out controls external ON/OFF powering of amplifiers, 3.5mm jack	
CEC control	HDMI CEC command for Mute/Volume/Standby	
Power Consumption	16.5 W (idle) 3.7 W (standby)	

