miniDSP

Features
- Floating point SHARC DSP
- USB, analog & digital inputs
- Low power & small form factor
- FIR & IIR filter banks

Hardware
- Analog Devices ADSP21489
- XMOS Async USB audio
- 2ch analog input on RCA
- 2ch digital input on TOSLINK
- 4ch analog outputs on RCA
- IR control with learning feature

Software Control
- Real time live control
- Win & Mac compatible
- Firmware upgradeable
- 4 preset memory

Power
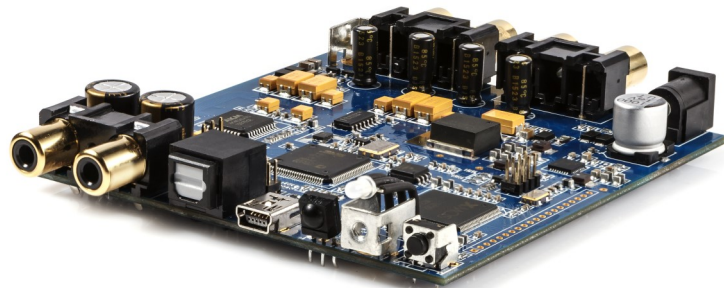- Single external 12VDC supply
- Low power (2.5W)

Applications
- Two-way active loudspeakers
- Sub-sat systems
- System equalization
- Subwoofer integration
- Multi-sub integration

Introducing the long-awaited "reboot" of miniDSP's best-selling 2x4 digital audio processor: the **miniDSP 2x4 HD**! This tiny powerhouse is jam-packed with miniDSP's tried and proven audio processing functionality: flexible parametric EQ, Butterworth and Linkwitz-Riley crossovers, advanced biquad programming, and delay on each output channel. miniDSP's "one hardware many plugins" concept allows for many interesting future applications!

The upgraded on-board 400 MHz Analog Devices SHARC processor also enables substantial processing upgrades previously available only on more expensive platforms, such as 96 kHz internal processing for true high-resolution audio capability and assignable FIR filter taps for sophisticated equalization, crossover, and room correction capabilities. All to be accessed and programmed with miniDSP's easy-to-use interface software.

I/O capabilities get an upgrade too, with the addition of USB audio streaming up to 192 kHz and a TOSLINK digital input. The **miniDSP 2x4 HD kit** will find application in full-sized hifi and home theater systems, on desktops, in cars, in recording studios — anywhere a compact, simple, yet surprisingly powerful DSP audio processor is needed.

TYPICAL APPLICATION

miniDSP 2x4 HD

www.minidsp.com

miniDSP
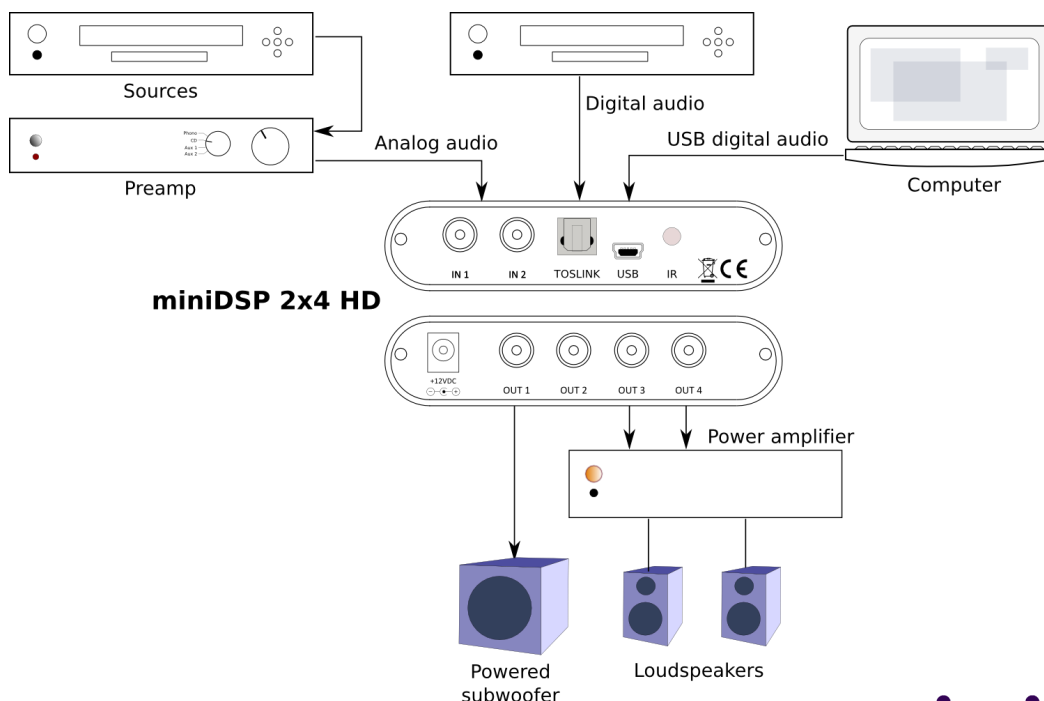
HARDWARE SPECIFICATIONS

Item	Description
Digital Signal Processor	32-bit Floating point Analog Devices SHARC ADSP21489 / 400 MHz
Control	Driverless USB 2.0 control interface for Windows/Mac OS X environments A computer is only required for the initial configuration and for USB audio streaming
USB audio input	XMOS asynchronous USB audio up to 192 kHz, USB Audio Class 2 compliant • ASIO drivers for Windows • Driverless for Mac OS X
Digital audio input	TOSLINK optical input. The input signal is processed by a high quality onboard Asynchronous Sample Rate Converter for compatibility with most common sample rates (20–216kHz)
Analog audio input	Unbalanced stereo (2 channels) analog audio on RCA connectors - Max input of 4V or 2V RMS, jumper–selectable - Input impedance: 10kΩ - THD+N: 0.003% (RCA to USB) - Dynamic range: 103dB
Analog audio outputs	Unbalanced analog audio (4 channels) on RCA connectors - Max output: 2V RMS - Output impedance: 560Ω - THD+N: 0.001% (USB to RCA) - Dynamic range: 103dB
FIR capabilities	FIR filtering with number of taps assignable to each output channel. FIR filters are designed by third-party programs. FIR file format: IEEE 754 single-precision binary floating-point.
Filter storage	Four on-board presets, selectable by remote control
Infrared remote control	Learning remote feature for input selection, volume, mute, and preset recall
ADC/DAC Sample rate & Resolution	Resolution: 24 bit Sample rate: Depending on plugin selected
USB port	USB port type Mini-B for audio streaming, real time control and firmware upgrade
Power supply	12 VDC single supply / 2.1 mm round plug / 2.5W
Dimensions (H x W x D) mm	16 x 119 x 93 mm

MECHANICAL SPECIFICATIONS

- 2 x RCA inputs
- Toslink
- USB audio & Control
- IR receiver
- Multicolor LED
- Reset/Control switch
- 4 x RCA outputs
- 12V DC in