

FEATURES

Hardware

- . 28/56bit DSP Engine
- . 24-bit ADC/DAC conversion
- . 48kHz sampling rate
- . I2S inputs/outputs
- . Nichicon Audiophile capacitors
- . Master volume control on pot
- . All signals on headers
- . Gold plated audio connectors

Audio Processing

- . Real time tuning
- . Upgradeable firmware
- . Low/High pass filters
- . Graphic & Parametric equalizers
- . Matrix mixer
- . Level, Mute, polarity
- . Compressor/Limiter / Expander
- . RMS Meters for inputs/outputs

Control

- . Software configurable
- . Plug & Play USB driver
- . WinXP/Vista/7 and Mac OS X compatible

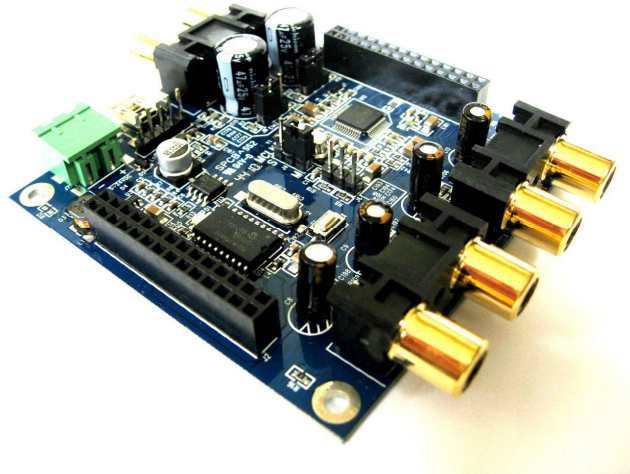
Power

- . USB powered
- . Wide range DC input option (4.5 ~ 24VDC)

Applications

- . Digital room correction
- . Digital crossover
- . Car audio signal processing
- . Musical effects
- . DIY Audio projects
- . Custom Pro Audio projects

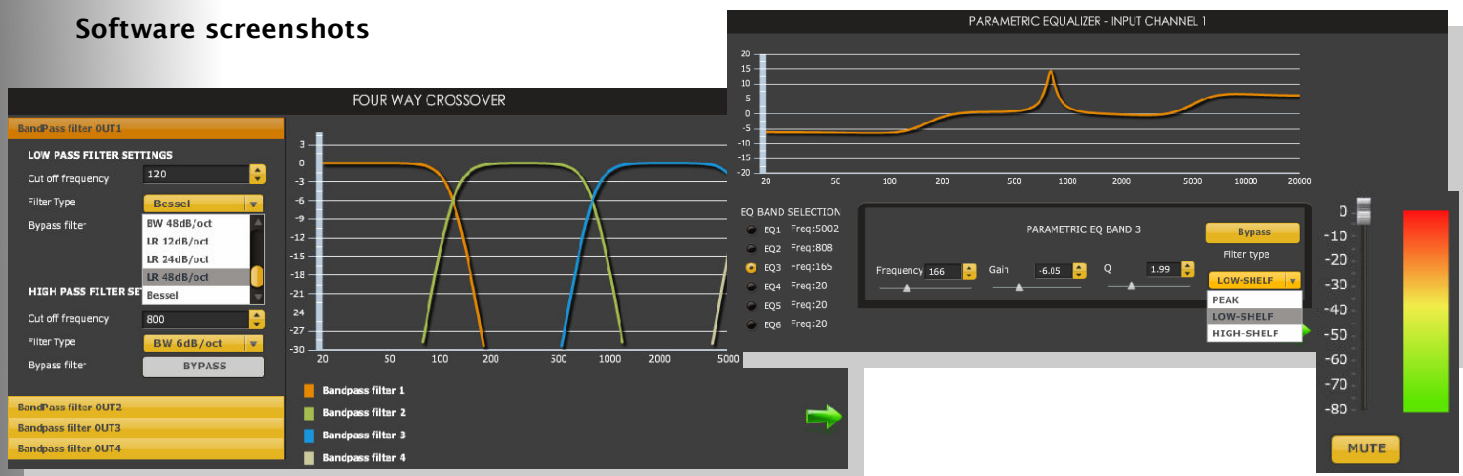
miniDSP kits are a new product concept for digital audio signal processing applications: low cost, low power and great sound in a 3" square. With our "one platform, many configuration" concept, miniDSP gives unparalleled flexibility to engineers, A/V designers and DIYers at a fraction of the cost of typical alternatives. May it be a source mixer, a multi-way digital crossover, a DAC unit or a custom A/V projects, it's all up to your imagination to configure it the way you see fit.



At MiniDSP, we believe that great sound doesn't have to come at a great price. Graphic equalizers, mixers, crossovers, wide range of low pass high pass filters, dynamic range control, RMS meters etc., we packed it all up in a tiny package with the ability to upgrade firmware from the click of a mouse. No design shortcuts with our low noise electronic and double precision audio algorithms which all play a great role in making sure our kits stand out by their sound quality and not their price. Thanks to our real time tuning and powerful programming capabilities, miniDSP is more than a simple digital crossover: it's a powerful development platform for a wide range of applications ranging from DIY to OEM development.

Finally, engineered to be mixed & matched with the miniDSP I/O card range or your custom I2S source, miniDSP is future proof and ready to answer the needs of flexible OEM applications.

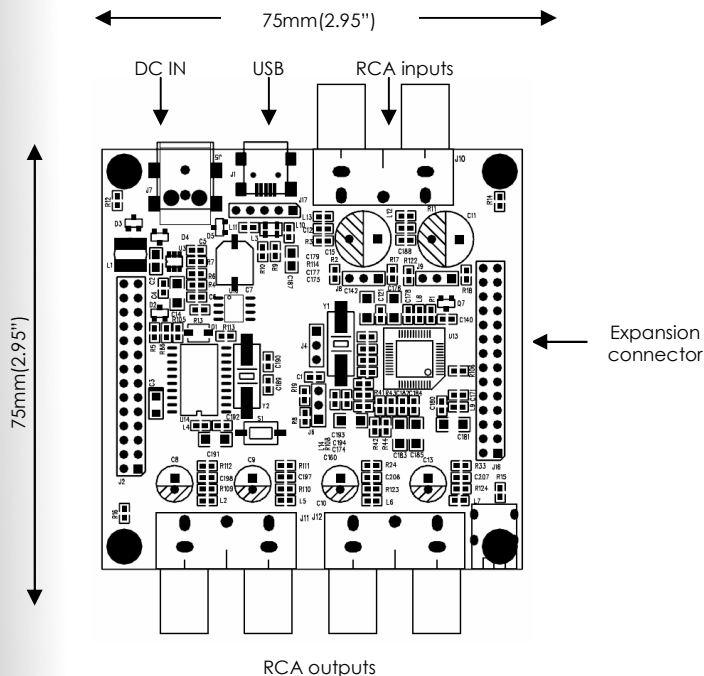
Software screenshots



TECHNICAL SPECIFICATIONS

Item	Description
Digital Signal Processor Engine	28/56 bit Digital Signal Processor Engine / Double precision processing
Host Processor	48MHz microcontroller
Sample rate	48kHz
ADC/DAC Data resolution	24 bits
Analog Audio Input	Unbalanced input, gold plated RCA terminated
Maximum input level <1% THD	0.9Vrms / 2Vrms selectable by jumper configuration
Dynamic range, un-weighted	>98dB
Input Impedance	0.9Vrms position = 9kOhms / 2Vrms position = 20k Ohms
Analog Audio Output	Unbalanced input, gold plated RCA terminated
Maximum level, unbalanced, <1% THD	0.9Vrms (2.5Vpp)
Dynamic range, un-weighted	>98dBs
Output Impedance	560ohms
Expansion connector signals	4 x I2S in/ 4 x I2S out / Analog INx2 / Analog Out x 4/ 3pin connector for volume control on 10k linear potentiometer 5pin USB header for panel mount USB connector
Power supply	USB powered and/or 4.5~24Vdc input via header (150mA @ 5V)
Dimensions (H x W x D)	75mm x 75mm

MECHANICAL SPECIFICATIONS & EXPANSION CONNECTOR PIN OUT



Expansion Connector pin out

Pin	Description	Pin	Description
1	Analog out #4	15	I2S_IN_BCLK
2	Analog out #3	16	I2S_DATA_OUT1&2
3	Analog out #2	17	I2S_DATA_OUT3&4
4	Analog out #1	18	I2S_DATA_OUT5&6
5	GND	19	I2S_DATA_OUT7&8
6	GND	20	I2S_OUT_LRCK
7	GND	21	I2S_OUT_BCLK
8	GND	22	3.3V
9	MCLKIN	23	5V - 300mA from USB
10	I2S_DATA_IN1&2	24	3.3V
11	I2S_DATA_IN3&4	25	GND
12	Potentiometer input/ I2S_DATA_IN5&6	26	GND
13	I2S_DATA_IN7&8	27	Analog In #1
14	I2S_IN_LRCK	28	Analog In #2

ORDERING

SKU	Description
900-124	MiniDSP kit with 2 x inputs, 4 x outputs
900-50	Custom audio firmware for MiniDSP. Contact us for more information.