



Only for cars applications

DSP A8

8 outputs digital signal processor

• DATASHEET

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General description:

- 2 analog inputs balanced and unbalanced
- USB 2.0 port for control
- 8 analog outputs balanced and unbalanced
- SPDIF Digital Input (optional)
- Isolated and delayed remote
- Independent parametric equalizer on both inputs and outputs
- Independent pass-band on each output
- High efficiency isolated PWM power supply
- 56 bits and 172 MHz DSP
- Strong metal case

Technologies:

- DSP Analog devices
SigmaDSP 172 MHz - 28/56 bits double precision, RAM 12K
- DAC 24 bit CIRRUS LOGIC, 114 dB dynamic range 96 kHz sample rate
- ADC 24 bit CIRRUS LOGIC, 114 dB dynamic range 96 kHz sample rate
- Digital audio interface receiver, TI Burr Brown SRC4382 for signal up to 216 kHz (with optional digital input card)

Power Supply:

- PWM Mosfet high efficiency power supply
- DC-DC isolation for quiet operation
- First choice components :Panasonic FR low ESR and EvoX RIFA MMK capacitors, DALE 1% resistors, FAIRCHILD rectifiers, Silver Plated Copper / Extruded PTFE (Teflon) internal wire

Features:

- 5 bands parametric equalizer on both inputs and outputs (20hz to 20Khz with 1 Hz steps, 0.1 dB steps, Q factor with 0.1 steps, type peak, high shelving, low shelving and Linkwitz transform)
- Independent pass-band on each output (10 to 20 KHz with 1 Hz steps, 13 different slopes,
- IIR filters on each input and output (8 biquad on each input, and 16 biquad on each output)
- 0 to 9 Ms time alignment
- Phase polarity 0-180°
- 0 to -70db attenuation on each input and output
- Muting and monitoring on each input and output
- Integration in [Room Equalizer Wizard](#)

Technical description:

- Analog inputs (1 & 2)
Balanced (Phoenix Terminal Block) OR Unbalanced (RCA)
Maximum input signal: RCA input: 2Vrms (8 dBu) in unbalanced mode Phoenix terminal: 4Vrms (14 dBu) unbalanced OR 8Vrms (20dBu) balanced

- Digital input:
 - SPDIF (20 to 216 KHz)
 - Optical toslink or coaxial RCA
 - Each circuit isolated with transformer

- Analog outputs (1, 2, 3,4,5,6, and 8)
 - Balanced (Phoenix Terminal Block) OR Unbalanced (RCA)
 - Maximum output signal: RCA input: 2Vrms (8 dBu) in unbalanced mode Phoenix terminal: 4Vrms (14 dBu) unbalanced OR 8Vrms (20dBu) balanced

- Technical features:
 - Sample rate: 96 KHz
 - Bandwidth: 20 Hz à 20 KHz
 - Dynamic range: 114 dB
 - THD + N: 100 dB

- A/N & N/A converters
 - Type: Cirrus logic CS42528F1
 - Sample rate: 96 KHz
 - Dynamic range: 114 dB (ADC) and 114 dB (DAC)
 - THD + N: up to 100 dB
 - Stereo separation: 110 dB

- DSP:
 - Type: Analog devices SigmaDSP ADAU144x
 - Maximal sample rate: 192 KHz
 - Speed: 172 MHz
 - RAM size: 12K
 - Precision: 28/56 bits double
 - Dynamic range: 139 dB
 - THD + N: 133 dB

- Communication:
 - Type: USB 2.0 plug and play driverless
 - Connector type: mini USB
 - Compatibility: XP/Vista/7/MAC
 - Software: MiniDSP 2x8

- Power supply:
 - Type: PWM
 - Maximal input voltage: +16 volts (minus to chassis ground)
 - Efficiency: 95%
 - Remote out output voltage: +12v
 - Remote out maximal current: 0.25A
 - Delayed remote out : > to 2 seconds
 - Consumption: 20W@12V max

- Case:
 - Galvanized steel sheet 10/10 with grained powder paint
 - Top plate: gloss black PMMA 5 mm thickness with CNC engraving
 - Incrusted Aluminium brushed letters

- Size: 325x252xh52 mm
- Weight: 2.5 kg