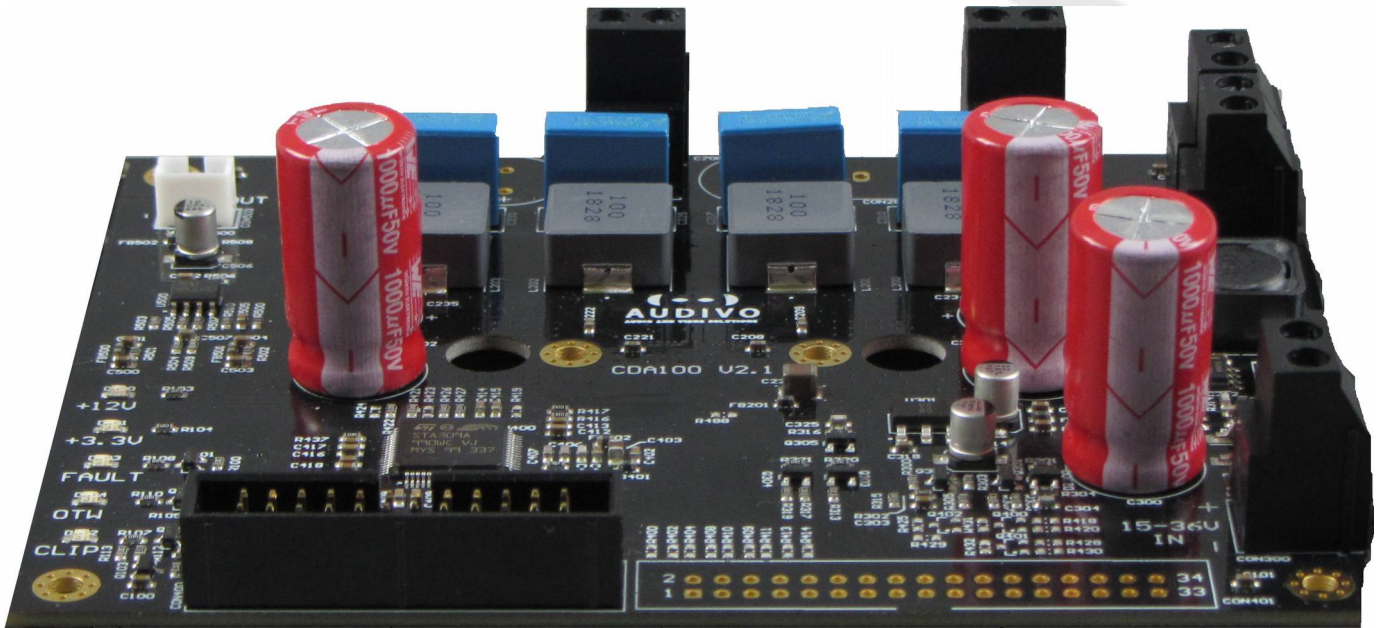


CDA 100

Class-D Amplifier with DSP and Data Interface



1. Key Features

The CDA 100 is part of the Audivo Active Speaker Platform (ASP). ASP consists of a line products for active speaker solutions. The CDA100 can be combined with various wireless audio sources, e.g. Kleernet, BT or our multi-room streaming module.

The design is a single board solution including DC/DC power supply. The complete system is supplied by a 9...36V DC.

The board includes a TI TAS5624A Class-D amplifier with a total continuous sine output power of up to **2x125W (into 4Ω)**. The board is available in configuration for single or multi driver applications:

- stereo in double bridge mode
- 2.1 system: 2 single-ended (mid/high) and 1 bridge mode (woofer)
- Filters are optimized for speaker impedance of 8Ω for single-ended and 4Ω for bridged/parallel-bridged outputs

Connection to different audio sources are available on various pin headers:

- ASP-link (Pin header) for
 - DWAM83 Kleernet module
 - StreamVienna Multiroom-Streaming (on Audivo carrier board)

Integrated DSP (STA309A) for cross over and tuning:

- Independent channel volume and DSP bypass
- Up to 10 32Bit user-programmable biquad filters per channel
- Bass/treble tones and de-emphasis control
- 96 kHz internal processing sample rate with quantization error noise shaping for very low cutoff frequency filters

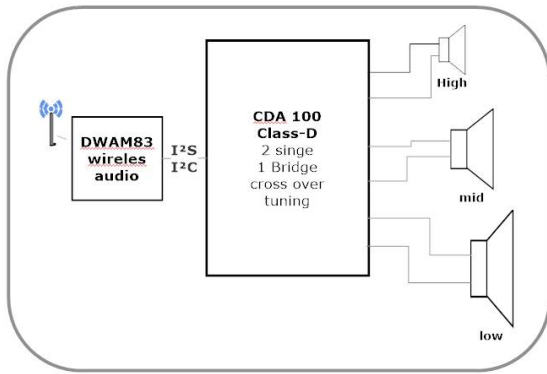
Options:

- Extended Power supply (36V/10A)
- ARC/CEC interface
- DWHP83(DWHP83 wireless speaker module)

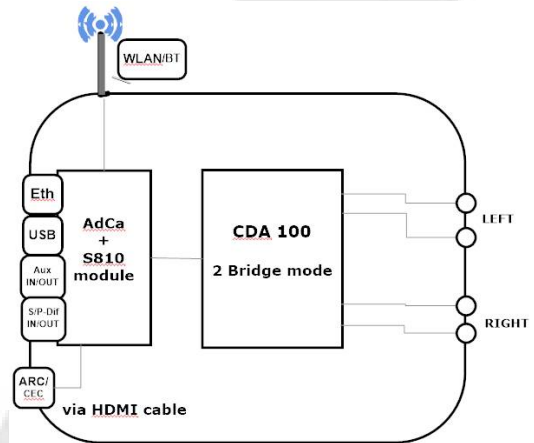
Technical overview

Dimensions (l w h)	120 x 100 x 32 mm ³		
Parallel bridge mode			
Speaker Impedance	4 Ohm		
Max. continuous power (U=36V, RL = 4 Ω, 1% THD+N) per channel	125 W		
Single ended mode			
Speaker Impedance	8 Ohm		
Average continuous output power per channel	45W		
Power supply voltage DC	9 – 36 V		
Max Current Draw in on Mode U=36V, 2*125 W	10 A		
Total harmonic distortion + noise (THD+N)	P _{out} = 1W	0.025	%
Frequency range, BW 20Hz - 22kHz	P _{out} = 1W	< 0.3	dB
Line out for additional subwoofer			

2. Typical applications



3 way active HiFi wireless speaker



Network Receiver