Datasheet DAC2 Pro

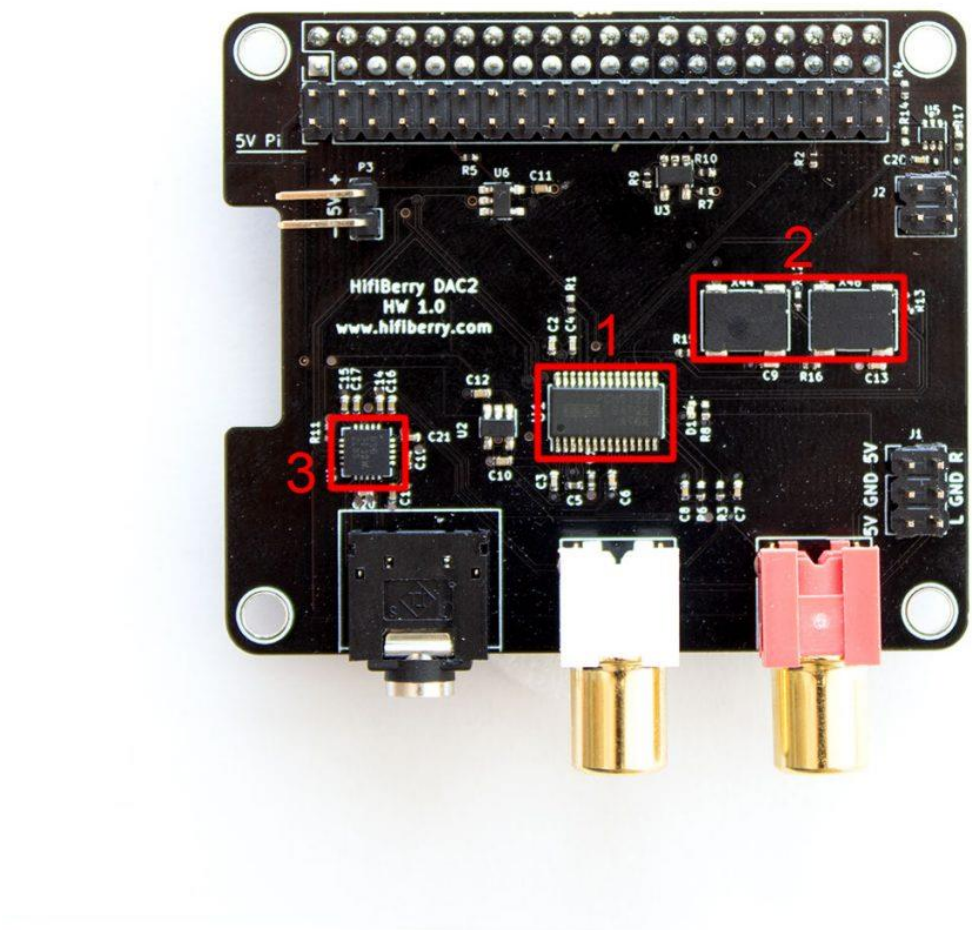
Overview

The HiFiBerry DAC2 Pro is a high-resolution digital-to-analogue converter for the Raspberry Pi (newer models with 40 pin GPIO connector). This is a special sound card for the Raspberry Pi, optimised for one specific use case: affordable high-quality audio playback.

Facts

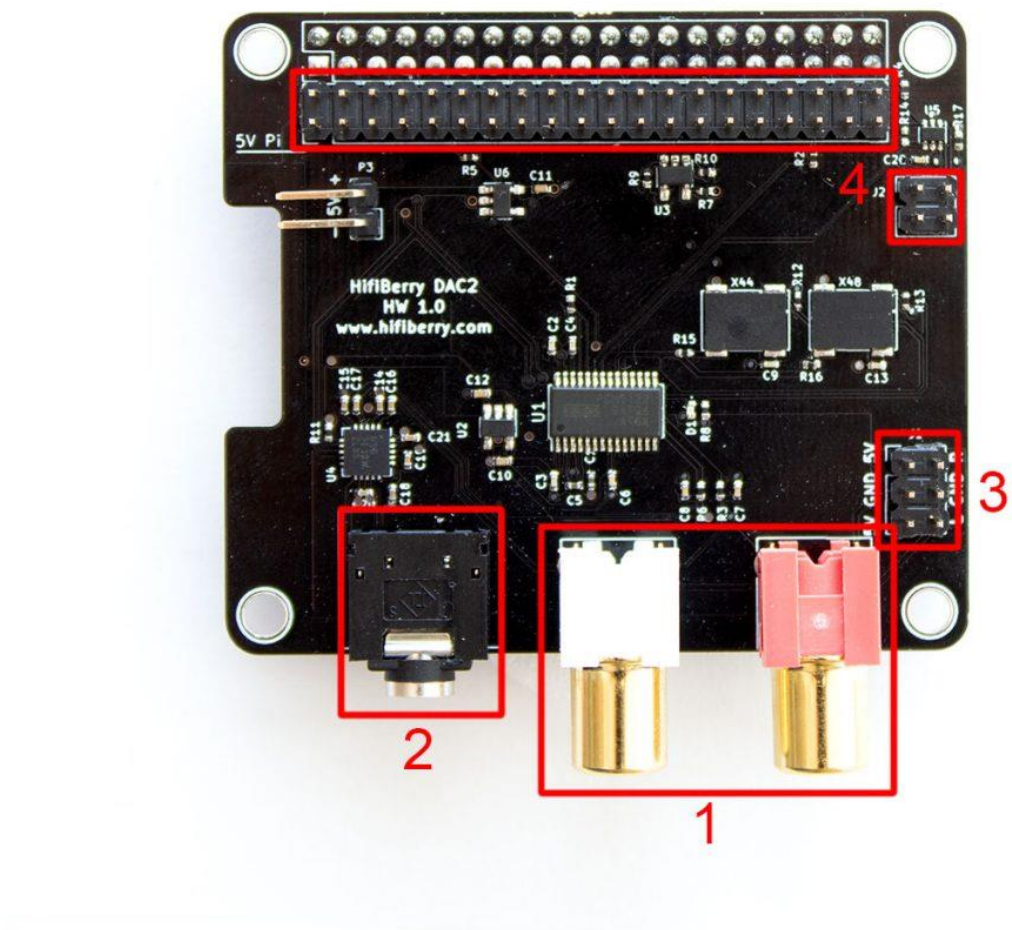
- Stereo output
- Integrated headphone amplifier
- can be equipped with an additional Digital Signal Processor (DSP) for flexible audio processing
- Dedicated 192kHz/24bit high-quality Burr-Brown DAC
- Hardware volume control for DAC. You can control the input and output parameters using “alsamixer” or any application that supports ALSA mixer controls.
- Connects directly to the Raspberry Pi, no additional cables needed
- No soldering, comes as a pre-fabricated kit. You just plug it onto the Raspberry Pi, it is conform to the Raspberry Pi hardware-attached-on-top (HAT) specification.
- Compatible with all Raspberry Pi models with a 40-pin GPIO connector
- Directly powered from the Raspberry Pi, no additional power supply
- Two ultra-low-noise linear voltage regulators for optimal audio performance
- Low-jitter dual-domain clock for optimised clock decoupling from the Raspberry Pi
- HAT compliant, EEPROM for automatic configuration
- Gold plated RCA output connectors
- Comes with all components required to mount it. We include 4 M2.5x12mm spacers to fix the board onto the Raspberry Pi
- Audio connector to connect analog audio amplifier

Hardware



1	Burr-Brown DAC
2	Low-jitter clock circuit
3	Headphone amplifier

Connectors and Jumpers



1	Line output
2	Headphone output
3	Analog output (compatible with Aamp60)
4	DSP expansion header (compatible with DSP add-on board)

Output connector J1

This connector can be used to connect to external components, e.g. an amplifier. The output is connected in parallel to the RCA jacks. Pin 1 is on the top left.

+5V	1	2	R
GND	3	4	GND
+5V	5	6	L

Specifications

Maximum output voltage	2.1Vrms	
DAC signal-to-noise ratio	112db	typical
DAC THD+N	-93db	typical
Frequency response	10Hz-70kHz	-3dB
Power consumption	<0.3W	
Sample rates	44.1-192kHz	

Configuration

Overlay for config.txt

Kernel > 6.1.77
dtoverlay=hifiberry-dacplus-pro

older Linux kernels
dtoverlay=hifiberry-dacplus