

# DAC Audio Decoder Board for Raspberry Pi 3B+/ 4B

DFR0941

## Product Overview

11-30-2022

For the most up-to-date information, visit [www.mouser.com](http://www.mouser.com) or the supplier's website.

## Description

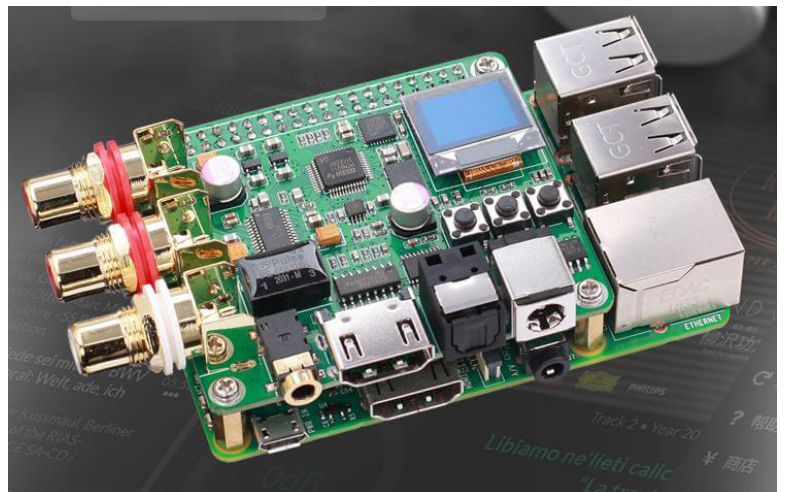
DFRobot DAC Audio Decoder Board for Raspberry supports I2S/DSD/coaxial input, analog/coaxial/optical/I<sup>2</sup>S output, 384K/32Bit decoding function, and unique DSD clock de-jitter. This board also supports decoding I<sup>2</sup>S and DSD digital audio signals output from the Raspberry Pi motherboard and can decode external coaxial signals by setting the three buttons on the board.



The DAC audio decoder board features 300mA rated current, four professional chips, 5V rated voltage, and 20Hz to 20KHz frequency response bandwidth. This board can independently turn ON or OFF the audio output signal of each interface through the button on the board. The DAC audio decoder board includes solid capacitors with large capacity and tantalum capacitors for filtering and decoupling to ensure a stable and clean power supply and effectively improve the overall Signal to Noise Ratio (SNR). This board is used in Raspberry Pi audio output applications.

## Features

- Supports I<sup>2</sup>S/DSD/coaxial input
- Analog/coaxial/optical/I<sup>2</sup>S output
- 384K/32Bit decoding function
- Unique DSD clock de-jitter

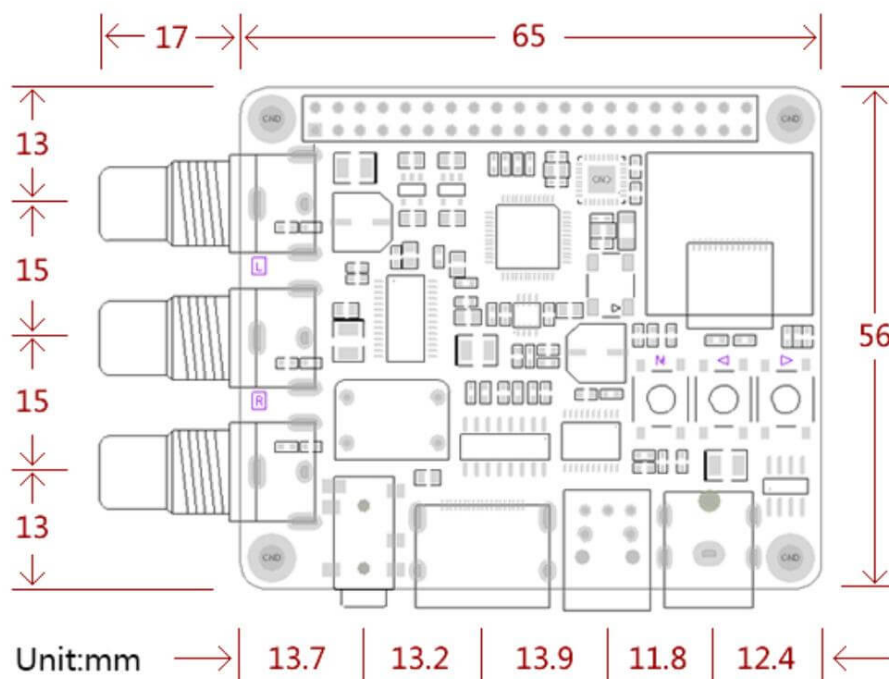


DAC Audio Decoder Board connected to Raspberry Pi

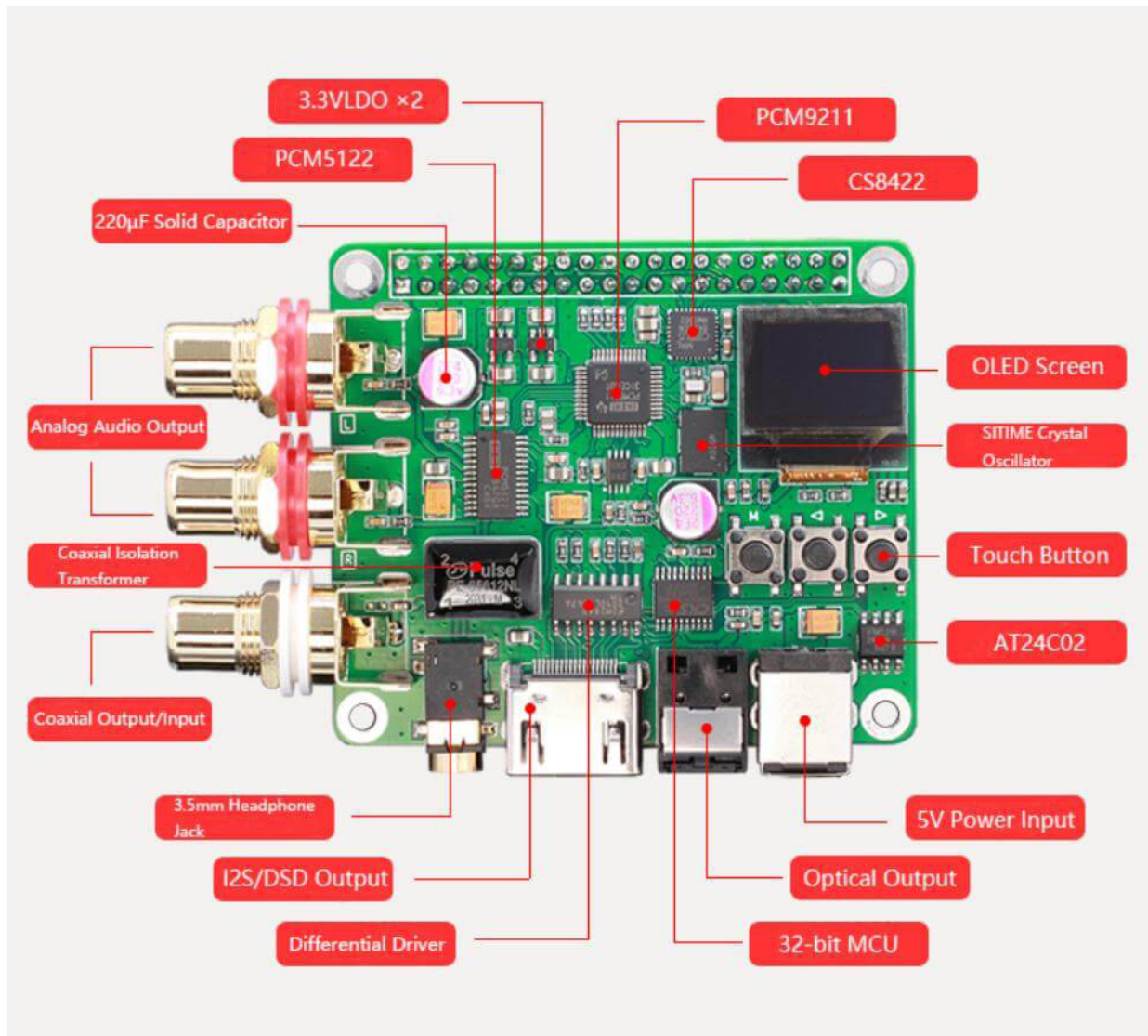
## Specifications

- Analog audio:
  - 32K to 384K/32Bit RCA/headphone jack
  - 20Hz to 20KHz frequency response bandwidth range
  - 2V<sub>rms</sub> output level
  - 120dB Signal to Noise Ratio (SNR)
- Coaxial:
  - PCM 32K to 192K/24Bit and DOP DOP64
- Optical fiber:
  - PCM 32K to 192K/24Bit and DOP DOP64
- I<sup>2</sup>S:
  - PCM 32K to 384K/32Bit, DOP DOP64/DOP128, and DSD DSD64/DSD128
- Rated voltage:
  - 5V (can be powered by the Raspberry Pi motherboard or from the DC socket on the DAC board)
- 300mA rated current
- 56mm x 65mm (2.20" x 2.56") board dimensions
- Supports Raspberry Pi model:
  - Raspberry Pi 3B+/4B
- Supports players:
  - Volumio, Moode, piCorePlayer, and RuneAudio

## Dimensional Diagram



## Board Overview



## Mouser Part Number

[View Part](#)

To learn more, visit <https://www.mouser.com/new/dfrobot/dfrobot-dac-audio-decoder-board/>