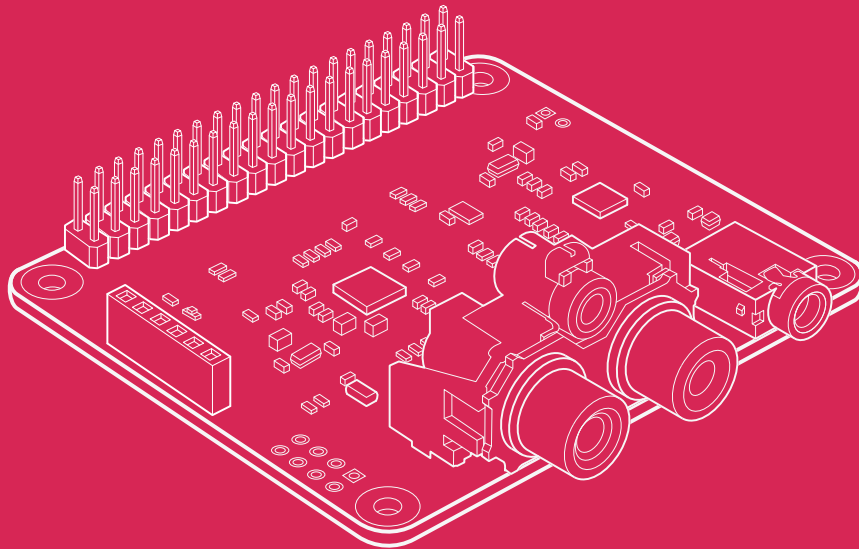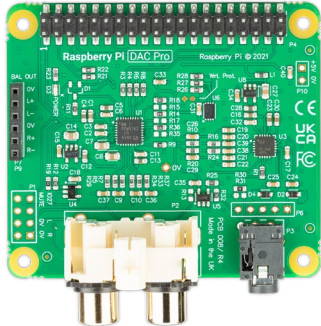# Raspberry Pi DAC Pro

Published December 2022

Overview

Raspberry Pi DAC Pro is our highest-fidelity audio HAT, and is compatible with any Raspberry Pi computer that has a 40-pin GPIO header. With the Texas Instruments PCM5242, the DAC Pro provides an outstanding signal-to-noise ratio (SNR) and supports balanced/differential output in parallel to phono/RCA line-level output. It also includes a dedicated headphone amplifier.

The DAC Pro does not require external power, and connects directly to Raspberry Pi's GPIO header with no need for soldering or cables.

Specification

Form factor: 58 mm × 65 mm

Performance: Full high definition 24-bit 192kHz Texas Instruments PCM5242 digital audio codec (DAC)

Input power: Supplied by Raspberry Pi through the 40-pin GPIO header. No external power source required

Features: Power LED

Analogue out (0–2V RMS via P7)

Dedicated headphone amplifier, output via 3.5mm panel-mounted barrel socket

Panel-mounted stereo phono (RCA) socket output

40-pin pass-through GPIO header

HAT EEPROM write-enabled

Operating temperature: 0°C–50°C

Production lifetime: Raspberry Pi understands the value to customers of long-term availability of product, and therefore aims to continue supply for as long as practically possible. We expect Raspberry Pi DAC Pro to remain in production until 2028

Compliance: For a full list of local and regional product approvals, please visit pip.raspberrypi.com

Physical specification

65

58

57   49

26

53.2

4 x M2.5 Holes in corners
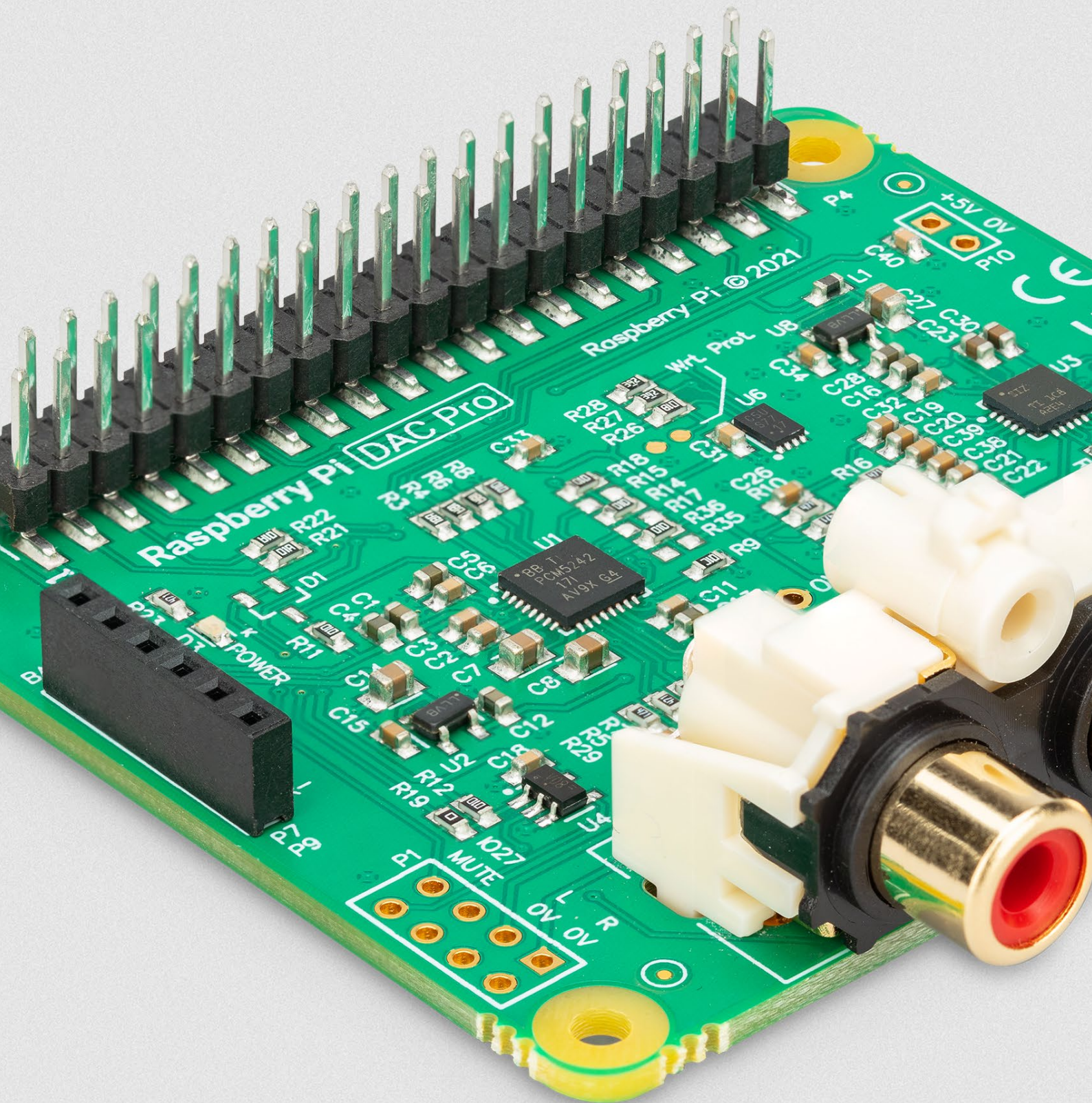**Note: all dimensions in mm**
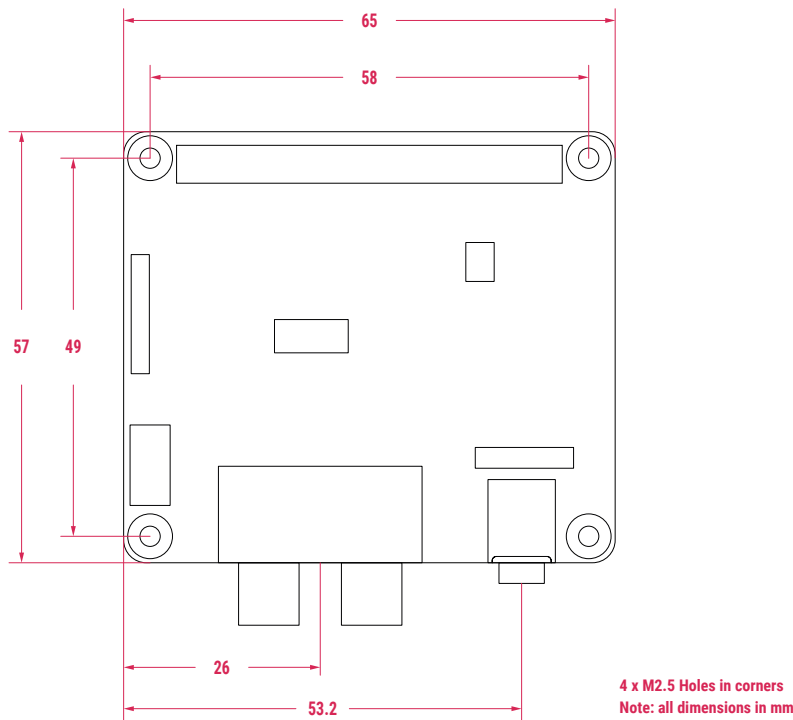
WARNINGS

- This product should only be connected to a Raspberry Pi via the GPIO header.

- Any external power supply used with this product should comply with relevant regulations and standards applicable in the country of intended use.

- This product should be operated in a well-ventilated environment. If used inside a case, the case should not be covered.

- Whilst in use, this product should be placed on a stable, flat, non-conductive surface, and should not be contacted by conductive items.

- The connection of incompatible devices to the Raspberry Pi DAC Pro may affect compliance, result in damage to the unit, and invalidate the warranty.

- The connection of incompatible devices to the GPIO connection of a Raspberry Pi computer may affect compliance and result in damage to the unit and invalidate the warranty.

- All peripherals used with this product should comply with relevant standards for the country of use, and should be marked accordingly to ensure that safety and performance requirements are met.

- The cables and connectors of all peripherals used with this product must have adequate insulation so that relevant safety requirements are met.

- Operation of this device requires adult supervision.

SAFETY INSTRUCTIONS

To avoid malfunction or damage to this product, please observe the following:

- Do not expose the product to water or moisture, or place it on a conductive surface while it is in operation.

- Do not expose the product to heat from any source; Raspberry Pi computers and the Raspberry Pi DAC Pro are designed for reliable operation at normal ambient temperatures.

- Take care whilst handling to avoid mechanical or electrical damage to the printed circuit board and connectors.

- In order to minimise the risk of electrostatic discharge damage, avoid handling the Raspberry Pi DAC Pro while it is powered. If it is necessary to do so, handle it only by the corners.