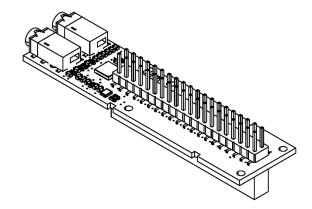


# **OSA ELECTRONICS DACBERRY 400 M**

#### Features

- Up to 96kHz/32bits
- 102dB SNR DAC, 92dB SNR ADC
- THD+N @1kHz 0.006 %
- Integrated DSP
- 3D Effects and De-Emphasis
- Low-Noise design with isolated Digital and Analog parts
- Board leaves all the USB ports free
- GPIO accessible w/ or w/o case
- Compatible with Raspberry Pi and others with the same GPIO



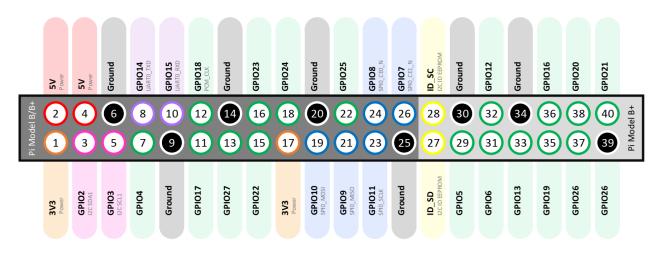
Specifications		
Model		DBR400M
DAC	-	102dB SNR @96kHz / 32 bits
ADC	-	92dB SNR @96kHz / 32 bits
THD+N		0.006 % @1kHz
Features	-	<ul> <li>Integrated DSP</li> <li>3D, Bass, Treble, EQ, or De-Emphasis Effects</li> <li>Ultra-Low-Power Mode With Passive Analog</li> <li>Bypass</li> <li>Programmable I/O Analog Gains</li> <li>Automatic Gain Control (AGC) for Record</li> <li>Programmable Microphone Bias Level</li> <li>Headset auto-detect</li> <li>High Power Outputs</li> </ul>
Inputs	-	1x mic in on headset/headphone connector, 1x stereo line in
Outputs	-	1x stereo on headset/headphone connector
Top header connector	-	Included / Soldered
Case	-	Included
Weight	-	28g
Size WxHxD	-	77 x 20 x 20 mm



#### **GPIO Usage**

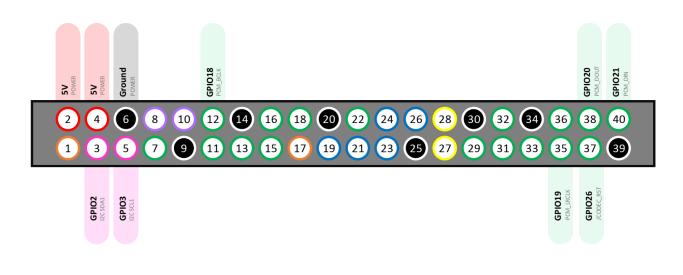
Raspberry Pi 400 uses the same GPIO Pinout like the rest of Raspberry Pi devices, however, be aware that the Pin 1, is located on the right-top side.

Pi GPIO for reference:



DACBerry 400 Series:

- GPIOs 2-3 (Pins 3, 5) are used by our products for configuration. If you are experienced with I2C, you might add other slave devices. If you are a novice, we don't recommend this at all.
- GPIOs 18-21 (Pins 12, 35, 38 and 40) are used for the sound interface. You can't use them for any other purpose.
- GPIO 26 (Pin 37) is used for Board reset function. You can't use it for any other purpose.

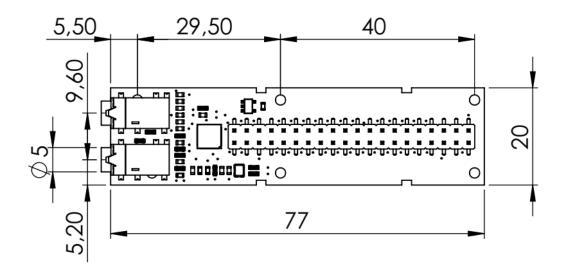


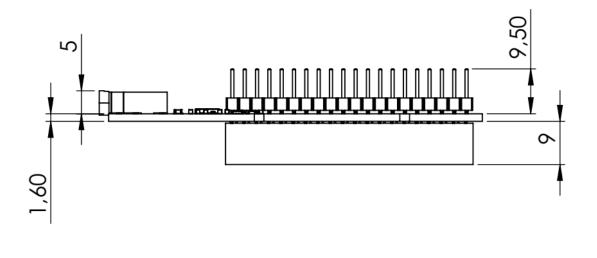


## **Mechanical Specifications**

The DACBerry 400 M is a compact  $77 \times 20 \times 20$  m board.

- 4 × M2 Mounting holes
- PCB thickness 1.6mm ± 10%





\*All dimensions in mm



### Packaging

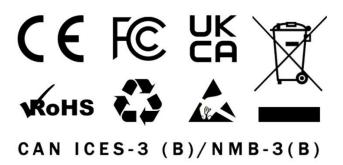
DACBerry 400 Series boards are supplied in individual cardboard boxes. These have an internal ESD coating so that a separate ESD bag is not required. This packaging is recyclable and reduces waste.

### EAN-13



### Certifications

DACBerry 400 Series complies the following certifications:



### Support

For support and/or device configuration, please see the documentation tab on the DACBerry 400 product page, inside the OSA Electronics website.

