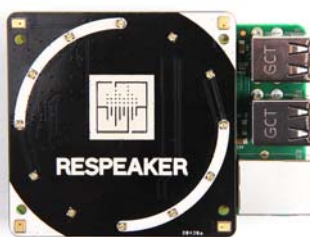


# ReSpeaker 4-Mic Array for Raspberry Pi

SKU 103030216



## Description

ReSpeaker 4-Mic Array for Raspberry Pi is a quad-microphone expansion board for Raspberry Pi designed for AI and voice applications. This means that you can build a more powerful and flexible voice product that integrates Amazon Alexa Voice Service, Google Assistant, and so on.

Different from ReSpeaker 2-Mics Pi HAT, this board is developed based on AC108, a highly integrated quad-channel ADC with I2S/TDM output transition for high definition voice capture. Besides, this 4-Mics version provides a super cool LED ring, which contains 12 APA102 programmable LEDs. With that 4 microphones and the LED ring, Raspberry Pi would have ability to do VAD(Voice Activity Detection), estimate DOA(Direction of Arrival) and show the direction via LED ring, just like Amazon Echo or Google Home.

**Note**

- Please note that the package does not contain Raspberry Pi.
- Please note that there are no any audio output interfaces on ReSpeaker 4-Mic Array for Raspberry Pi. It is only for voice capture. And you could use the headphone jack on Raspberry Pi for audio output.

**Technical Details**

Dimensions	65mm x 65mm x 9mm
Weight	G.W 20g
Battery	Exclude
MIC	4 analog microphones
LED	12 APA102 programable RGB LEDs, connected to SPI interface

Raspberry Pi 40-Pin Headers	support Raspberry Pi Zero, Raspberry Pi 1 B+, Raspberry Pi 2 B and Raspberry Pi 3 B
AC108	highly integrated quad-channel ADC with I2S/TDM output transition
Software Algorithm	VAD(Voice Activity Detection), DOA(Direction of Arrival) and KWS(Keyword Search)
Grove	2 Grove Interfaces
Voice Capture Distance	3 meters radius voice capture

***Part List***

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