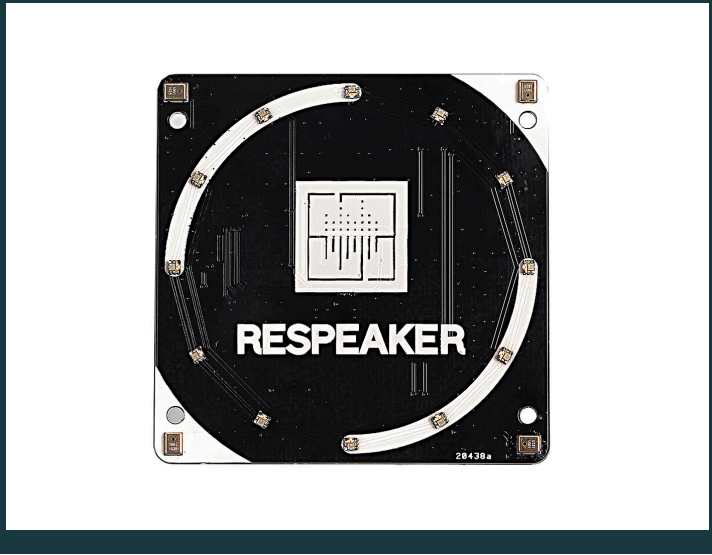
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INDUSTRIAL PRODUCT DATASHEET

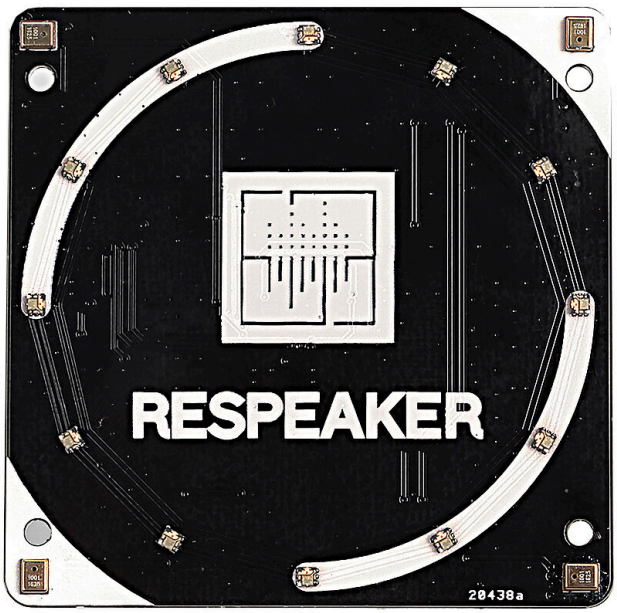
reSpeaker 4-Mic Array for Raspberry Pi - AC108 Audio Codec, 4 Analog Microphones, 12 Programable RGB LEDs, 2 Grove ports, attached with NLU software algorithms, VAD,DOA, KWS

Complete voice user interface add-on for Raspberry Pi with 4-mic array, DSP algorithms, programmable LEDs, and Grove connectivity.

SKU	UPDATED	PRICE
103030216	2026-04-15 09:18:58	$24.90(Excl. VAT)



Overview



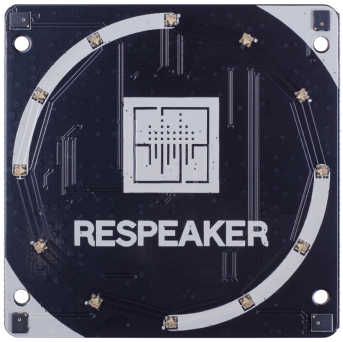
The reSpeaker 4-Mic Array for Raspberry Pi features four analog microphones and an AC108 audio codec for high-definition voice capture with integrated VAD, DOA, and KWS algorithms. It includes 12 programmable RGB LEDs and two Grove ports for expanded speech recognition peripherals and easy attachment to Raspberry Pi.

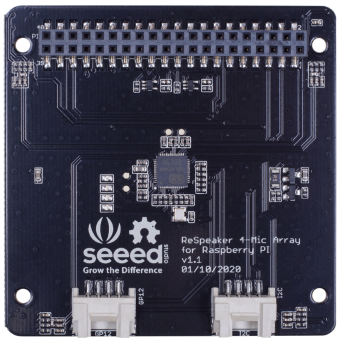
Key Features

- **Voice User Interface for Raspberry Pi Series**: Placed by 4 analogue microphones, which come with the **Voice Interaction algorithms** of VAD(Voice Activity Detection), DOA(Direction of Arrival), KWS(Key Word Spotting)
- **AC108 Audio Codec**: Integrated quad-channel ADC with I2S/TDM to output transition for high-definition voice capture
- **Controllable Peripherals**: Provide 12 programable RGB LEDs and 2 Grove ports for attached Speech Recognition usage
- **Easy Assembly**: Simply pop up on the Raspberry Pi to use

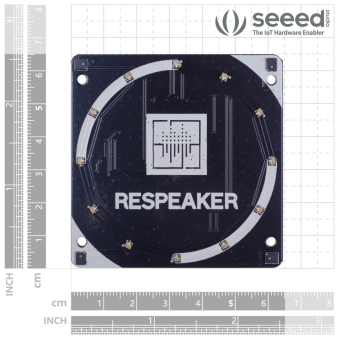
Product Gallery











Specification

Specification	Details
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 1B+/2B/3B/3B+/4B
AC108 codec	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
Battery	Exclude
Dimensions	65mm x65mm x9mm
Weight	G.W 38g

Applications

- **Voice Interaction Learning**
- **Secondary Software Development**
- **Voice-based remote-control cars**

Part List

reSpeaker 4-Mic Array for Raspberry Pi	x1

Compliance & Logistics

HSCODE	8518900090
USHSCODE	8518902000
UPC	841454120049
EUHSCODE	8517180000
COO	CHINA

Resource Links

- https://www.seeedstudio.com/ReSpeaker-4-Mic-Array-for-Raspberry-Pi.html
- ReSpeaker 4-Mic Array for Raspberry Pi(PDF)
- ReSpeaker 4-Mic Array for Raspberry Pi v1.0
- ReSpeaker 4-Mic Array for Raspberry Pi v1.0 3D Model
- AC108 DataSheet
- Seeed-Voice Driver
- Algorithms includes DOA, VAD, NS
- Voice Engine project, provides building blocks to create voice enabled objects
- AEC

Seeed Technology Co.,Ltd.
9F, Building G3, International E City,
Zhongshanyuan Road, Nanshan, Shenzhen, China

Tel: +86 0755-80695676
Web: www.seeed.cc
Shop: www.seeedstudio.com