reSpeaker 2-Mics Pi HAT V2.0 for Raspberry Pi - TLV320AIC3104 Audio Codec,2 Analog Microphones, 3 APA102 RGB LEDs, 3.5mm Audio Jack, User Button, attached with NLU software algorithms, VAD, DOA, KWS

SKU: 107100001

ReSpeaker 2-Mics Pi HAT is a dual-microphone expansion board for Raspberry Pi designed for AI and voice applications. You can build a more powerful and flexible voice product that integrates Amazon Alexa Voice Service, Google Assistant, and so on

Feature

Note: The reSpeaker 2-Mics Pi HAT has been upgraded to version 2.0. The codec chip has been replaced from WM8960 to TLV320AIC3104, enabling support for Raspberry Pi 5 and expanding the sampling rate range from 8 kHz to 96 kHz.

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)

TLV320AIC3104 Audio Codec: Low power, high-quality stereo Codec designed for portable digital audio applications.

Controllable Peripherals: Provide 3 programable APA102 RGB LEDs and 1 User Button for attached Speech Recognition usage.

Easy Assembly: Simply pop up on the Raspberry Pi to use.
The reSpeaker 2-Mics Pi HAT is the voice user interface for Raspberry Pi Series, which has been equipped 2 analogue microphones and TLV320AIC3104 Audio Codec for high-definition voice capture. Attach with NLU software algorithms and noise reduction algorithms, it has the abilities of Voice Activity Detection, Direction of Arrival and Key Word Spotting, widely used in Voice Interaction applications.

Specification

MIC:
2 analog microphones

LED:
3 APA102 RGB LEDs

Raspberry Pi 40-Pin Headers:
Support Raspberry Pi5, Raspberry Pi Zero, Raspberry Pi 1B+/2B/3B/3B+/4B

TLV320AIC3104 codec:
Low power, high quality stereo Codec designed for portable digital audio applications

Software Algorithm:
VAD(Voice Activity Detection), DOA(Direction of Arrival) and KWS(Keyword Search)

User button:
1 programmable button

Voice Capture Distance:
3 meters radius voice capture

Battery:
Exclude

Dimensions:
65mm x 30mm x 15mm

Application

Voice Interaction Learning
Secondary software Development
Voice-based remote control cars

Technical Details

Dimensions: 65mm x30mm x15mm
Weight: G.W 33g
Battery: Exclude