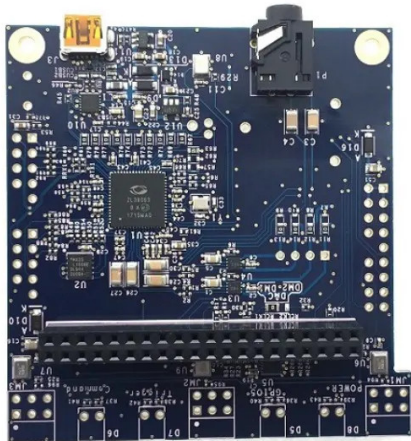


Item no.: BPI-MICROSEMI

## BPI MICROSEMI - Banana Pi, Raspberry Pi - Speech Recognition Module

from **164,03 EUR**

Item no.: BPI-MICROSEMI  
shipping weight: 0.10 kg  
Manufacturer: BPI



### Product Description

**BPI-AI-Voice (Microsemi) - Speech Recognition Module** Banana Pi BPI-AI-Voice (Microsemi) is a module for speech recognition. Now, you can use it on Raspberry Pi with Amazon AVS.

Designed for world-class voice front-end applications, Microsemi's new ZL38063 audio processor features the company's AcuEdge(TM) technology. This innovative technology is a set of highly-complex and integrated algorithms that significantly improves automatic speech recognition (ASR) for both embedded and cloud-based ASR solutions. The ZL38063 delivers audio enhancements that perform noise reduction and smart automatic gain control (AGC), enabling speech recognition at distance in noisy, real-world conditions.

Key Features:

- Supports 2 or 3 microphones linear or triangular array placement for enhanced audio pick up
- Noise reduction
- Smart automatic gain control (AGC)
- High-quality stereo acoustic echo canceller for barge-in and full duplex audio
- Fully configurable and scalable solution delivering a two microphone configuration for both 180° and 360° audio pick-up
- Enhanced beam forming technology to enhance audio pick-up in adverse conditions, in presence of noise and outside sound sources
- 2-way full duplex voice communication
- Turnkey designs available as well as all appropriate drivers and documentation, along with worldwide support

BPI-AI-Voice External Interfaces

- Raspberry Pi 3/Banana Pi HeaderP2: I2S port; SPI; 8 GPIO
- Audio Header: JMM1: digital microphones; Analog out; 3 GPIO
- SPI Flash Devices: U2: optional SPI flash component used to store ZL38063 firmware
- USB J3: Optional USB power and debug port
- Debug Headers: JAIB2/2: auto tuning headers
- Digital Microphone Headers: JM1-4: optional header for off-board microphones

Audio Characteristics

- Digital Microphones: 4 on-board digital microphones (AKU441): supports a 2 microphone configuration for 180° and 360° audio pick-up
- Analog Output: J1: 2 x 2.65 Low cost class D audio amplifier (NCP2820)

Connectors

- Stereo 3.5 mm male-to-male audio cable: P1: audio output
- MicroUSB Cable: J3: optional USB power and debug port

### Specifications

**Scan this QR code to  
view the product**  
All details, up-to-date  
prices and availability



