

8 Ohm 1W Speaker
- [P/N: BAS8100]



Features:

- Third party mini speaker
- Sensitivity: 86 ± 3 dB
- Impedance: 8 Ohm
- Frequency range: 320 ~ 20 kHz
- Max. Power 2W
- Size: 28 x 28 x 11 mm





Audio Codec and Audio Power Amplifier Module

- [P/N: MAC5310]

The MAC5310 Audio Codec and Audio Power Amplifier can be used as audio input/output interface in the WiRobot system by directly connecting with the PMB5010 Multimedia Controller board. The on-board codec provides high resolution signal conversion from digital-to-analog (D/A) and from analog-to-digital (A/D) using over-sampling sigma-delta technology. With the on-board audio output power amplifier and the microphone preamp in the codec, the speaker and the microphone can directly be connected to the MAC5310.

Features:

- 16-bit over-sampling sigma-delta A/D, D/A converter
- Maximum output conversion rate: - 22 ksps with on-chip FIR filter - 88 ksps with FIR bypassed
- Codec built-in FIR produces 84-db SNR for ADC and 85-db SNR for DAC over 11-kHz BW
- 2s-complement data format
- Codec built-in functions including PGA, anti-aliasing analog filter, and operational amplifiers for general-purpose interface (such as MIC interface and hybrid interface)
- On-board audio output power amplifier can support up to 1.0 W power to the external speaker
- Plug-and-play in the WiRobot system





Uni-directional Electret Microphone

- [P/N: SAM5247]

Features:

- Third party uni-directional electret condenser microphone
- Sensitivity: -47 ± 3 dB
- Standard operating voltage: 1.5V DC
- Impedance: 680 Ohm
- Frequency range: 20 ~ 20 kHz
- S/N ratio: 60 dBA
- Size: D9.7 x 5.2 mm

