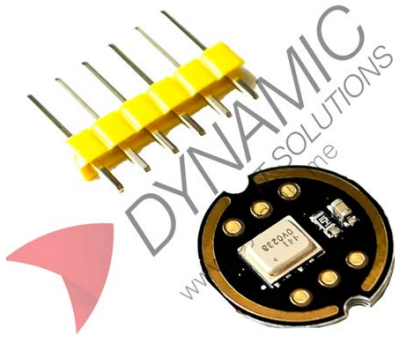


Microphone Module I2S Interface INMP 441



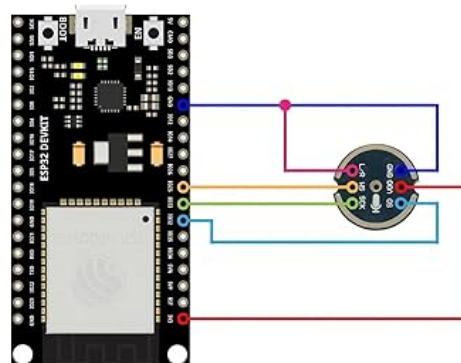
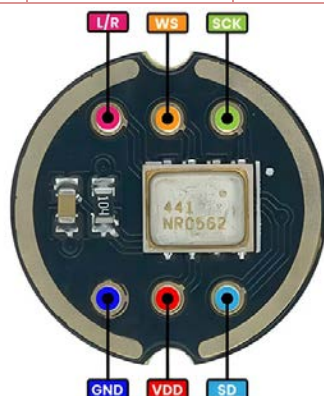
Features:

The INMP441 MEMS microphone module delivers high-fidelity digital sound via the I²S interface. It features a 24-bit data output, 61 dBA SNR, and low current draw of only 1.4 mA, making it suitable for continuous audio monitoring and voice capture in embedded systems. Its omnidirectional design ensures consistent pickup from all directions, and the flat frequency response from 60 Hz to 15 kHz allows accurate audio representation. With support for both left and right channel configuration, it's easily integrated into multi-microphone arrays and AI voice assistants.

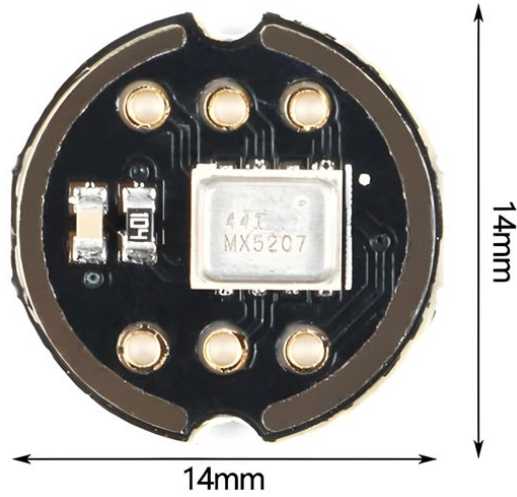
Specifications	
Interface	Type I ² S Digital Output
Signal-to-Noise Ratio (SNR)	61 dBA
Sensitivity	-26 dBFS
Frequency Response	60 Hz – 15 kHz
Current Consumption	1.4 mA
Power Supply	1.8 V – 3.3 V
PSR	-75 dBFS
Compliance	RoHS/WEEE
Usage	Audio capture, voice recognition, embedded applications

Pinouts:

Pin Name	Type	Description
SCK	Input	Serial-Data Clock for I ² S Interface
SD	Output	Serial-Data Output for I ² S Interface, tri-states when inactive
WS	Input	Serial Data-Word Select for I ² S Interface
L/R	Input	Left/Right Channel Select, low for left channel, high for right channel
VDD	Power	Power Supply, 1.8 V to 3.3 V
GND	Ground	Ground Connection



Product Dimensions:



Product Pictures:

