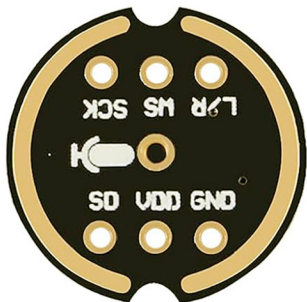


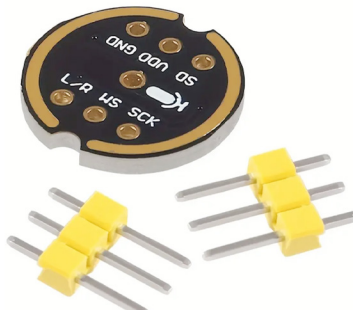
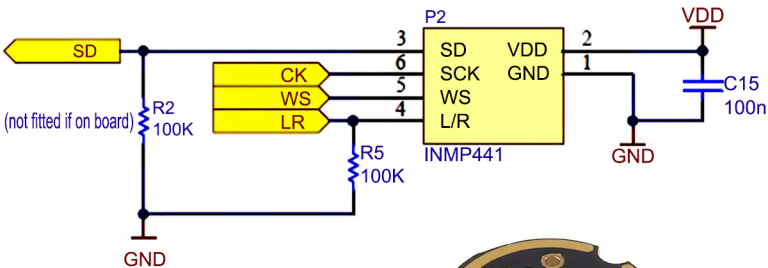
# PIN FUNCTION



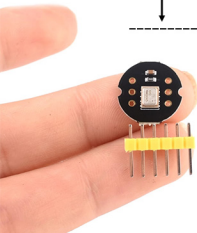
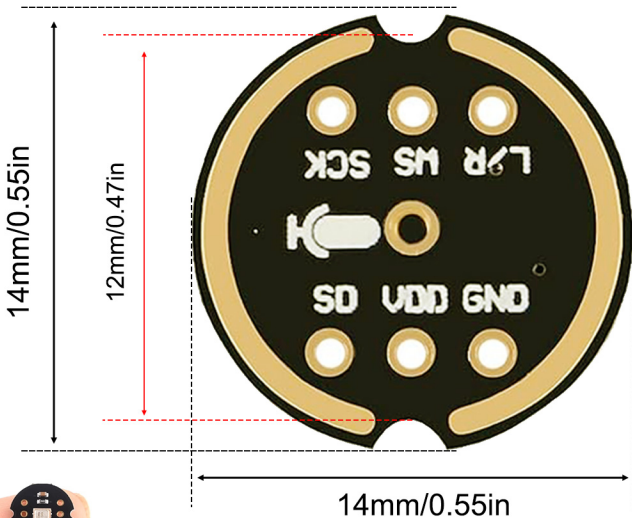
SCK	Serial-Data Clock for I <sup>2</sup> S Interface
SD	Serial-Data Output for I <sup>2</sup> S Interface. This pin tri-states when not actively driving the appropriate output channel.
WS	Serial Data-Word Select for I <sup>2</sup> S Interface
L/R	Left/Right Channel Select. When set low, the microphone outputs its signal in the left channel of the I <sup>2</sup> S frame. When set high, the microphone outputs its signal in the right channel.
VDD	Power, 1.8 V to 3.3 V
GND	Ground.

# SCHEMATIC DIAGRAM

The image below shows the schematic diagram of INMP441 module. Schematics itself is pretty simple. Only a filter capacitor and two pull down resistors are used.



# SIZE



# INMP441

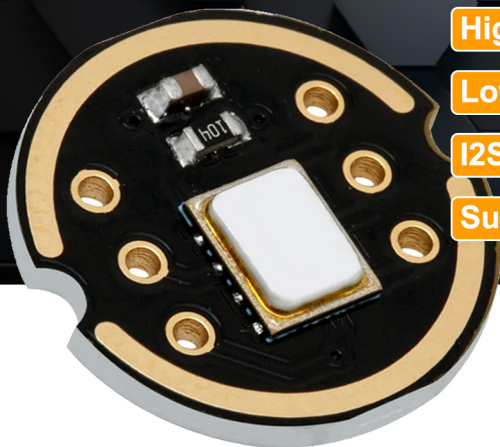
Omnidirectional Microphone Module

High precision

Low power

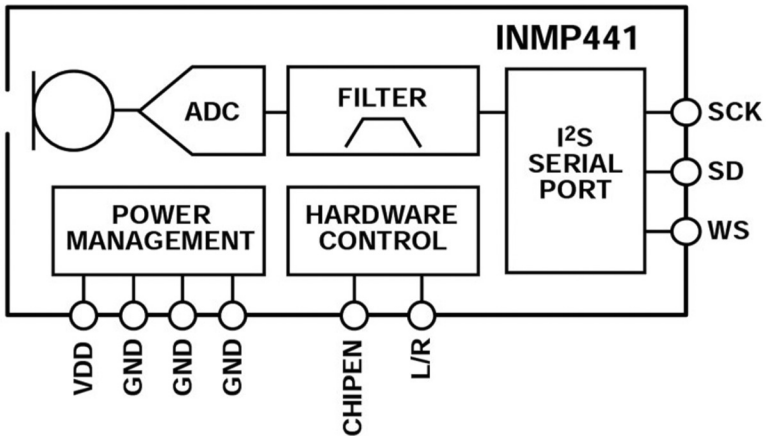
I2S interface

Support ESP32



# Functional Block Diagram

of INMP441 MEMS Microphone



The INMP441 sensor contains a MEMS sensor, signal conditioning, an ADC, anti-aliasing filters, power management, and an industry-standard 24-bit I2S interface all in a small and compact package.

## APPLICATION

Teleconferencing Systems; Remote  
Controls ; Gaming Consoles; Mobile  
Devices ;Laptops Tablets ;Security  
Systems

