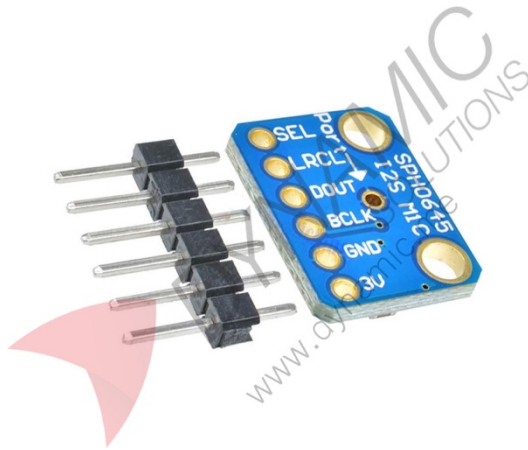


I2S MEMS Microphone Breakout Sensor Module SPH0645



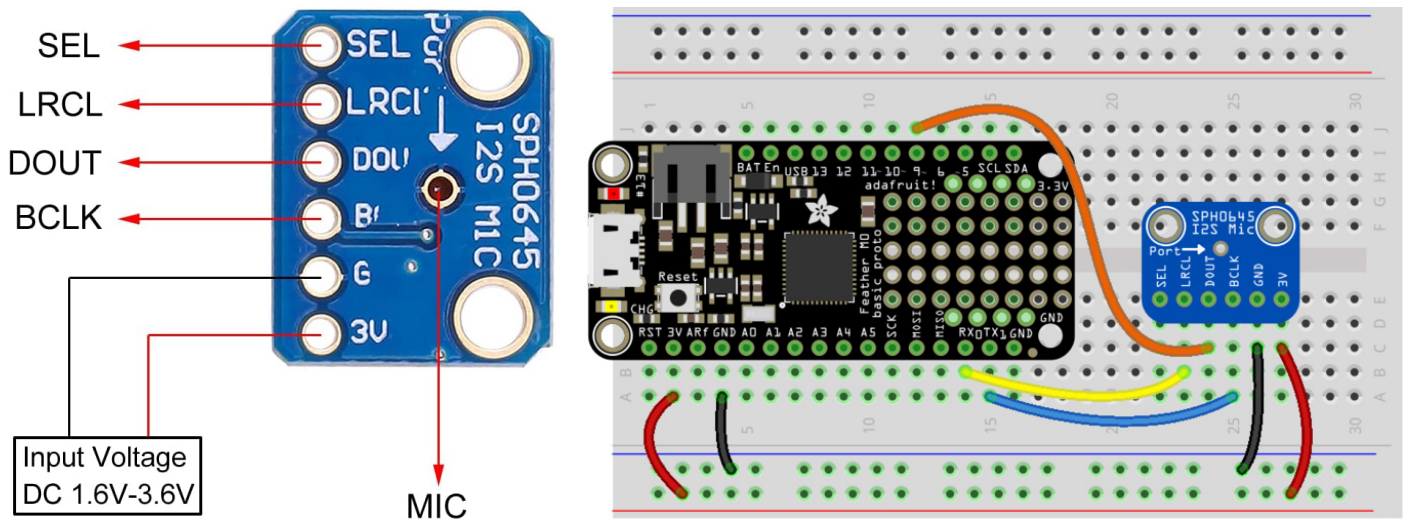
Features:

The I2S MEMS Microphone Breakout Module SPH0645 is a digital microphone designed for embedded systems that require reliable, low-noise audio capture. Using the I2S protocol, it outputs audio data directly to supported microcontrollers and single-board computers without requiring analog-to-digital conversion. The module supports left or right channel configuration, enabling easy stereo setups by pairing two microphones. Its bottom-port design ensures accurate sound capture in compact enclosures. Operating from 1.6V to 3.6V, it is optimized for ARM Cortex M-series microcontrollers (Arduino Zero, Feather M0) and Raspberry Pi boards.

Specifications	
Input Voltage	1.6V - 3.6V DC
Interface	I2S Digital (Clock, Data, Word Select)
Frequency Response	50Hz - 15kHz
Channel Selection	Left or Right (via Select pin)
Port Type	Bottom port
Dimensions	17 × 13 × 3mm
Operating Temperature	-25°C ~ +85°C
Operating Humidity	5% - 95% RH
Usage	Audio capture, voice input, stereo recording, sound detection

Pinouts:

Pin Name	Type	Description
SEL	Input	Channel select (GND = Left, VDD = Right)
LRCL	Input	Left/Right Clock (Word Select)
DOUT	Output	Digital audio data output
BCLK	Input	Bit Clock input from I2S master
GND	Ground	Common ground
3V	Power	Supply voltage (1.6V - 3.6V)



Product Pictures:

