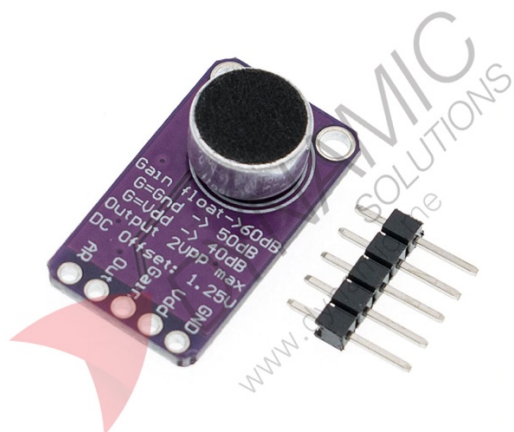


Microphone AGC Amplifier Module

MAX9814 CMA-4544PF-W



Features:

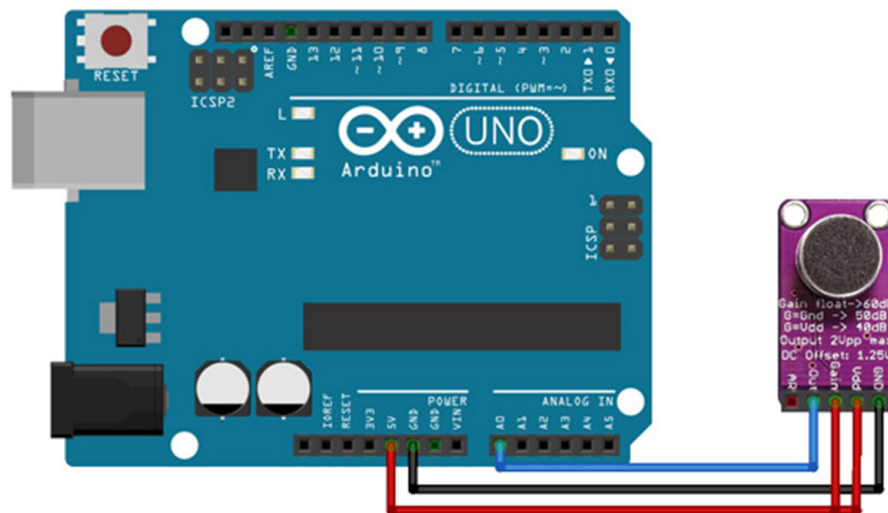
The MAX9814 CMA-4544PF-W Microphone AGC Amplifier Module features high-performance automatic gain control for stable audio output across varying input levels. It offers programmable attack and release ratios, low input-referred noise density, and extremely low total harmonic distortion. Its integrated 2V low-noise microphone bias and low-power shutdown mode make it ideal for embedded voice applications, audio surveillance systems, and precision recording devices. Compact and versatile, it provides reliable performance in an extended temperature range of -40°C to $+85^{\circ}\text{C}$.

Specifications

Supply Voltage	2.7V – 5.5V @ 3mA
Output	2Vpp on 1.25V bias
Frequency Response	20Hz – 20kHz
Gain Control	40dB / 50dB / 60dB
Attack / Release Ratio	Programmable
Input-Referred Noise	30nV/VHz
THD	0.04% (typical)
Shutdown Mode	Low Power Enabled
Microphone Bias	2V Low-Noise
Operating Temperature	-40°C to $+85^{\circ}\text{C}$
Usage	Audio recording, voice detection, embedded electronics projects

Pinouts:

Pin Name	Type	Description
GND	Power	Module ground connection
VDD	Power	Module power supply input
GAIN	Input	Automatic gain control selection
OUT	Output	Analog audio output
AR	Input	Programmable attack and release control



Product Pictures:

