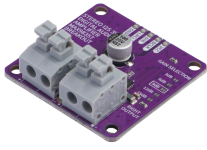


PRODUCT DATASHEET



Stereo I2S Audio Amplifier MAX98357

333355

The MAX98357 Stereo I2S Audio Amplifier delivers high-quality 3W per channel audio with 92% efficiency and minimal distortion for clear sound.

Full product documentation, files and tutorials: solde.red/333355

CORE ATTRIBUTES

SKU 333355

WEIGHT 9 g

BARCODE 732388644100

DESCRIPTION

This **stereo I2S digital audio amplifier** breakout is the perfect solution for adding high-quality stereo audio output to your projects. Built around two **MAX98357A Class D** amplifier chips configured in left and right channel layout, it delivers 3W of power per channel with efficiency and audio quality. The digital I2S interface eliminates noise and interference, providing crystal-clear stereo sound reproduction with 92% efficiency and low 0.013% THD+N distortion at 1kHz.

The breakout features onboard jumpers for gain selection (**6dB, 9dB, 12dB, or 15dB**), allowing you to optimize output levels for different speaker impedances and applications. Secure push terminals provide reliable speaker connections without soldering, while the left-right clock control enables proper stereo channel separation. Operating from a single 2.5V to 5.5V supply with only 2.4mA quiescent current.

Whether you're building a portable music player, digital synthesizer, alarm system, or IoT audio device, this amplifier delivers audio performance in a compact, easy-to-integrate package. The Class D output stage eliminates the need for external components while providing speaker protection and thermal management. Compatible with ESP32, Raspberry Pi, Arduino(Stereo), MicroPython (single channel) and any microcontroller with I2S output capability.

TECHNICAL DETAILS

- 2 x MAX98357A digital i2s class D amplifiers
- Each chip handles one audio channel
- 3v3 power supply
- 3.2W Output Power into 4Ω at 5V
- 2.4mA Quiescent Current
- 92% Efficiency (RL = 8Ω, POUT = 1W)

- 22.8µVRMS Output Noise (AV = 15dB)
- Low 0.013% THD+N at 1kHz
- Sample Rates of 8kHz to 96kHz
- Breadboard-compatible design
- Documentation and simple quick start guides available
- Arduino and MicroPython library support
- Extensive Click-and-Pop Reduction Circuitry

SPECIFICATIONS

INTERFACE	I2S
QWIIC COMPATIBLE	No
BREADBOARD COMPATIBLE	Yes
IC PART NUMBER	MAX98357A

LINKS

Arduino Library	https://github.com/SolderedElectronics/Soldered-I2S-Audio-Amplifier-Arduino-Library
Arduino Library Documentation	https://docs.soldered.com/i2s-audio-amplifier/arduino/examples/
Arduino: Get Started	https://docs.soldered.com/i2s-audio-amplifier/arduino/getting-started/
Full Documentation	https://docs.soldered.com/i2s-audio-amplifier/overview/

GALLERY

