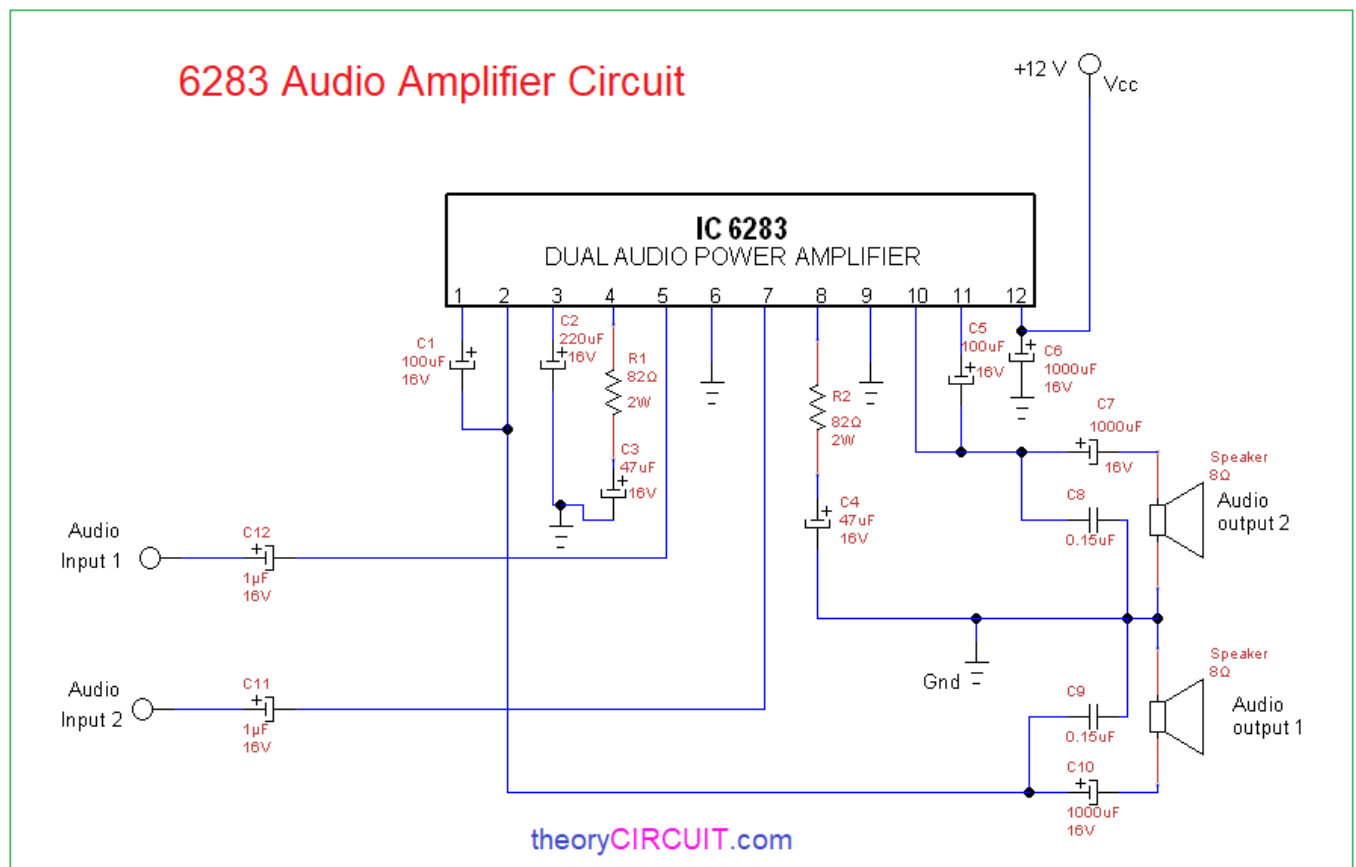


Low power Stereo Audio [Amplifier circuit](#) designed with single monolithic IC, the 6283 is an audio power IC with built in two channels developed for portable audio devices. This IC comes in SIP (Single Inline Package) and this IC will give 2.5W output for 9 volt Vcc & 4.6W output for 12 Vcc.

This IC has built in Thermal shut down protection, and capable of operating with 6V to 15V power supply. IC 6283 provides 30K $\Omega$  input Resistance hence no need for audio pre-amplifier at input.

### Circuit Diagram



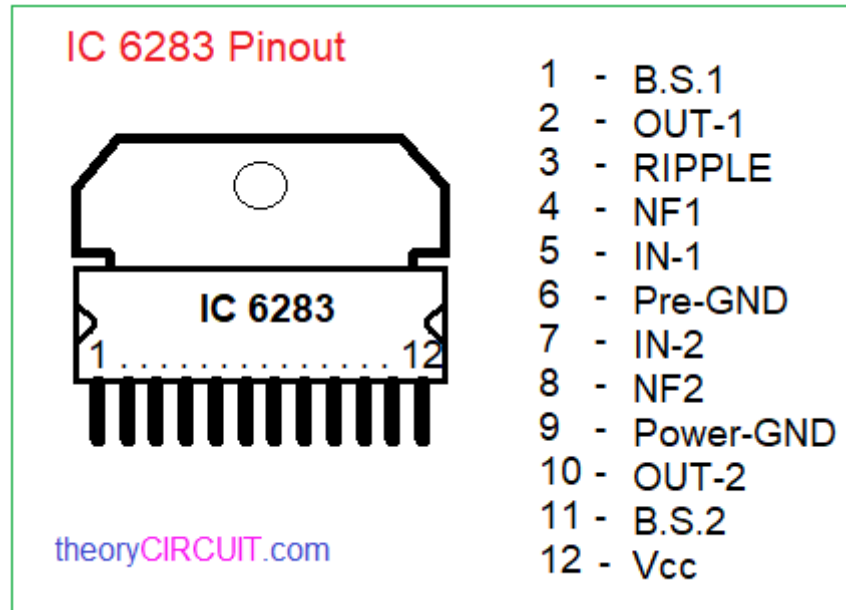
### Construction & Working

This circuit constructed as Stereo power amplifier and biased with 12V Vcc, at input two 1 $\mu$ F capacitors C11 and C12 used as audio coupling capacitors, two 8 $\Omega$  speaker used at the output.

Here for Channel 1 pin 5 acts as audio input pin and pin 2 acts as audio output pin, for Channel 2 pin 7 acts as audio input and pin 10 acts as audio output pin.

Voltage gain Can be adjusted by changing R1 and R2 Resistors here this circuit designed to give 45dB Voltage gain. Refer data sheet for voltage gain calculation.

### IC 6283 Pinout



This IC contains only 12 pins all are arranged in a single inline package, due to its internal circuit design minimum numbers of external components enough to form stereo amplifier.

Tags: [12v audio amplifier circuit](#), [6283 audio amplifier](#), [6283 Audio Amplifier Circuit](#), [audio amplifier circuit](#), [ic 6283 pinout](#), [sip audio amplifier](#), [stereo amplifier circuit diagram](#)