

3-W Stereo Class-D Audio Amplifier with 32-Step DC Volume Control

DESCRIPTION

The EUA2008 is a high efficiency, 2 channel bridged-tied load (BTL), class-D audio power amplifier. Operating from a 5V power supply, EUA2008 is capable of delivering 3W/channel of continuous output power to a 3Ω load with 10% THD+N. The EUA2008 features a differential input architecture offering improved noise immunity over a single-ended (SE) input amplifier. Stereo speaker volume is controlled with a dc voltage applied to the volume control terminal offering a range of gain from -38dB to 20 dB.

The EUA2008 also features short-circuit and thermal protection preventing the device from being damaged during a fault condition. The EUA2008 is available in thermally efficient 24-pin TSSOP package.

FEATURES

- Unique Modulation Scheme Reduces EMI Emission
- Efficient 5V Class-D Technology
 - 3W Per Channel into 3Ω Load (THD+N=10%)
 - Low Supply Current, 7mA
 - Low Shutdown Control, 1μA
 - 0.33% THD at 1.5W, 1kHz
 - Low Noise Floor, 62μV
 - Maximum Efficiency into 3Ω, 85%
 - Maximum Efficiency into 8Ω, 90%
 - PSRR, -70dB
- No Large, Expensive LC Output Filter Required
- 32-Step DC Volume Control with 2dB Steps from -38dB to 20dB
- Thermal and Short-Circuit Protection
- Integrated Click and Pop Suppression
- 24-pin TSSOP Package with Thermal Pad
- RoHS Compliant and 100% Lead(Pb)-Free Halogen-Free

APPLICATIONS

- LCD Monitors/TVs
- All-in- One PCs
- Powered Speakers

Typical Application Circuit

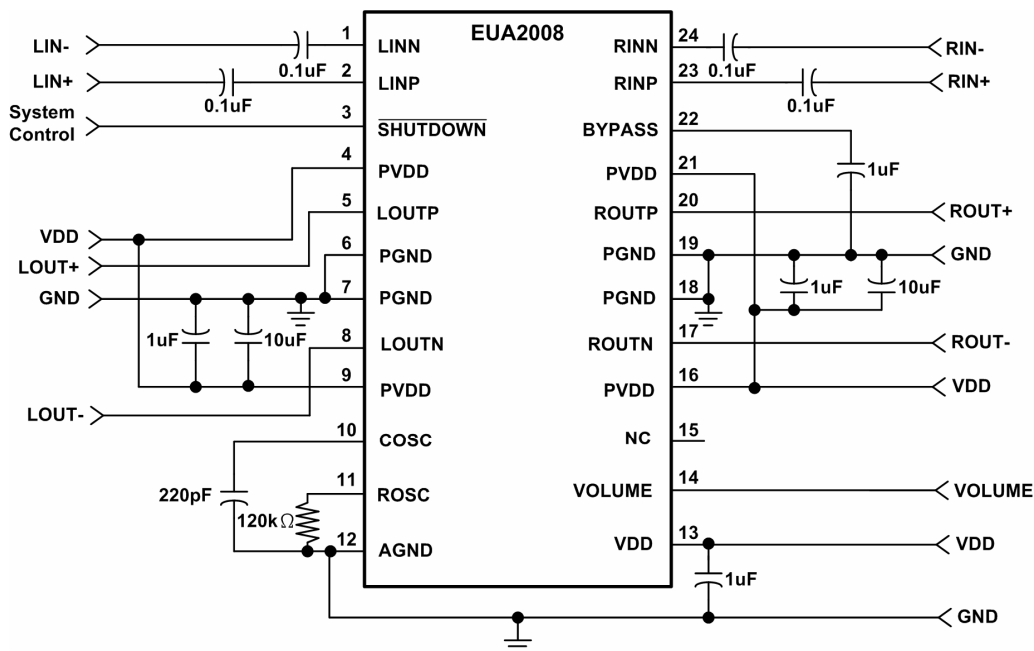


Figure1.