

3-W Stereo Audio Power Amplifier with I²C, Tone Control, 3D Enhancement and OCL Headphone Drive

DESCRIPTION

The EUA4832 is a stereo audio power amplifier that provides tone (bass and treble) controls as well as delivers 3W (typ) into 4Ω or 1.72W (typ) into 8Ω with less than 10% THD from a 5V supply. Amplifier gain is externally configured by means of two resistors per input channel.

The EUA4832 also features 3D sound circuitry which can be externally adjusted via a simple RC network. The headphone amplifier features Output Capacitor-less (OCL) architecture that eliminates the output coupling capacitors required by traditional headphone amplifiers.

The EUA4832 features a 13-step tone control for the stereo speakers and headphone outputs. The device mode select and Tone are controlled through an I²C compatible interface. Shutdown is controlled through either the hardware or software interface.

Thermal shutdown protection prevents the device from being damaged during fault conditions. Superior click and pop suppression eliminates audible transients on power-up/down and during shutdown.

Typical Application Circuit

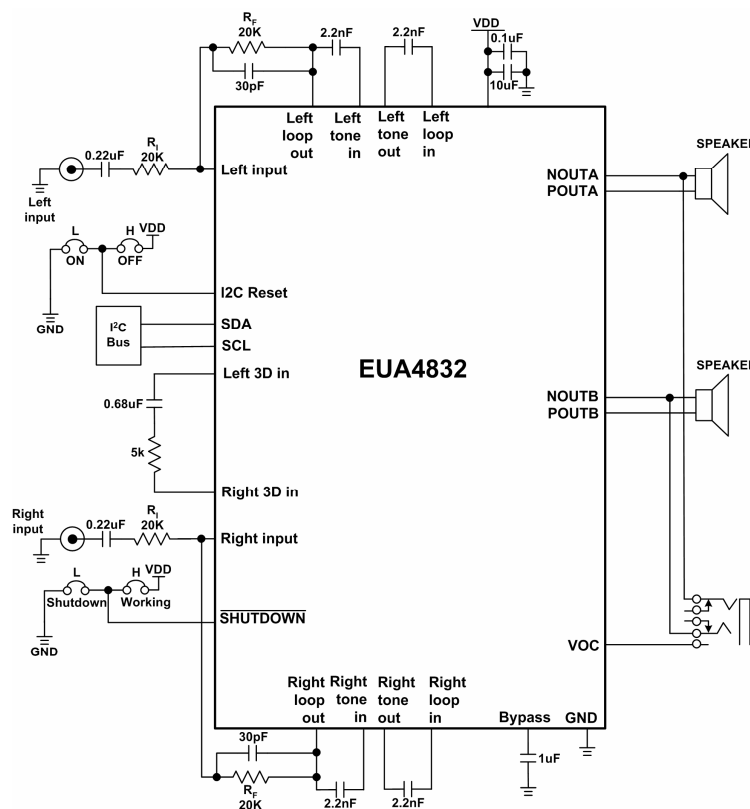


Figure1.

FEATURES

- 3W/ch into 4Ω Load at V_{DD}=5V, THD<10%
- Integrated 92mW OCL Stereo Headphone Drive
- Treble and Bass Control
- 3D Enhancement
- I²C Control Interface
- 2.7V to 5.5V Input Supply
- Click and Pop Suppression
- Thermal Shutdown Protection
- Software & Hardware Control Shutdown Function
- Low Supply Current and Shutdown Current
- Minimum External Components
- 4mm × 4mm TQFN-28 and TSSOP-28 Packages
- RoHS Compliant and 100% Lead(Pb)-Free, Halogen-Free

APPLICATIONS

- All-in-One PC
- Multimedia Monitor
- Desktop Audio Speakers
- Cell Phones, PDA, MP4, PMP