

2.8W/CH Stereo Filterless Class-D Audio Amplifier with 64-Step DC Volume Control, AGC and Headphone Output

DESCRIPTION

The EUA2075 is a high efficiency, 2 channel bridged-tied load (BTL), class-D audio power amplifier with headphone output. Operating from a 5V power supply, EUA2075 is capable of delivering 2.8W/channel of continuous output power to a 4Ω load with 10% THD+N. The EUA2075 features an advanced 64-step DC volume control which offers a range of speaker gain from -70dB to 20dB and a range of HP gain from -80dB to 3.5dB. The AGC detects output signal clip due to the over level input signal and suppresses it automatically. Moreover the AGC can adapt the output clip caused by power supply voltage down with battery. The new filter-less architecture allows the device to drive the speaker directly, without low-pass output filters, which will save system cost and PCB area.

The EUA2075 also features short-circuit and thermal protection preventing the device from being damaged during a fault condition. The EUA2075 is available in 24-pin SOP and 20-pin 4x4 TQFN package.

FEATURES

- Wide Supply Voltage: 2.7V to 5.5V
- Unique Modulation Scheme Reduces EMI Emission
- 2.8W/ch into an 4Ω Load From 5V Supply
- 64-Step DC Volume Control
- Headphone Output Function
- Auto Gain Control
- Thermal and Short-Circuit Protection
- Integrated Click and Pop Suppression
- Available in SOP-24 and TQFN-20 Packages
- RoHS Compliant and 100% Lead(Pb)-Free Halogen-Free

APPLICATIONS

- LCD Monitors/TVs
- All-in-One PCs
- Portable Audio
- Notebook PC

Typical Application Circuit

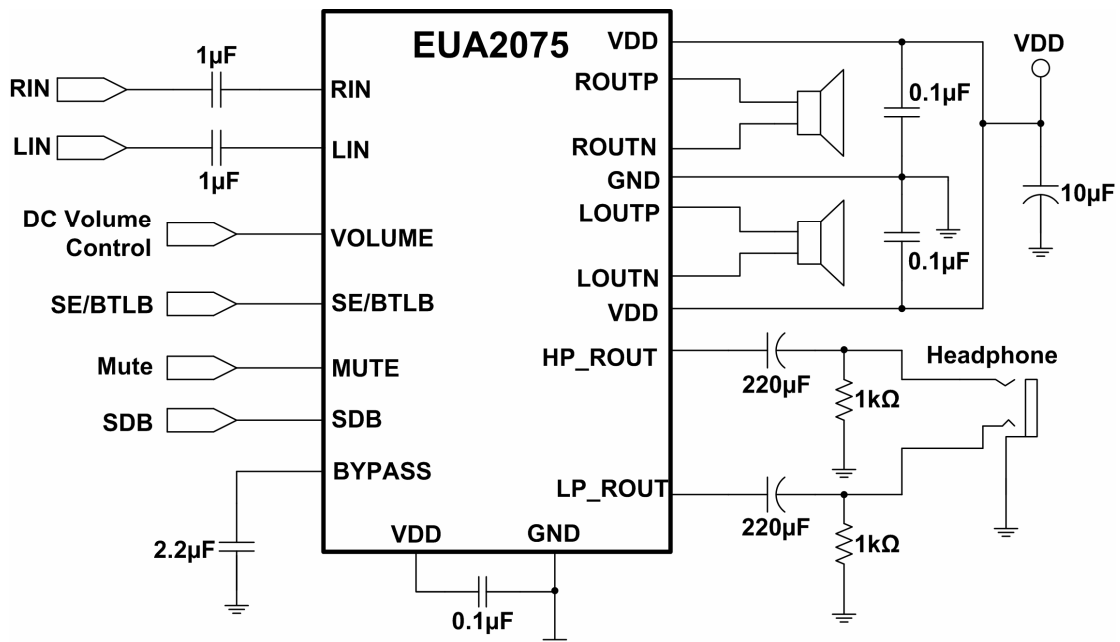


Figure1.