

3W/CH Stereo Filterless Class-D Audio Amplifier with 64-Step DC Volume Control, AGC and Headphone Output

DESCRIPTION

The EUA2035 is a high efficiency, 2 channel bridged-tied load (BTL), class-D audio power amplifier with headphone output. Operating from a 5V power supply, EUA2035 is capable of delivering 3W/ channel of continuous output power to a 4Ω load with 10% THD+N. The EUA2035 features an advanced 64-step DC volume control which offers a range of speaker gain from -70dB to 25dB and a range of HP gain from -95dB 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 filterless architecture allows the device to drive the speaker directly, without low-pass output filters, which will save system cost and PCB area.

The EUA2035 also features short-circuit and thermal protection preventing the device from being damaged during a fault condition. The EUA2035 is available in 24-pin SSOP package.

FEATURES

- Wide Supply Voltage: 2.7V to 5.5V
- Unique Modulation Scheme Reduces EMI Emission
- 3W/ch into an 4Ω Load From 5V Supply
- Efficient, Class-D Operation Eliminates Heatsinks
- 64-Step DC Volume Control
- Headphone Output Function
- Auto Gain Control
- Thermal and Short-Circuit Protection
- Integrated Click and Pop Suppression
- 24-pin SSOP Package
- RoHS Compliant and 100% Lead(Pb)-Free Halogen-Free

APPLICATIONS

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

Typical Application Circuit

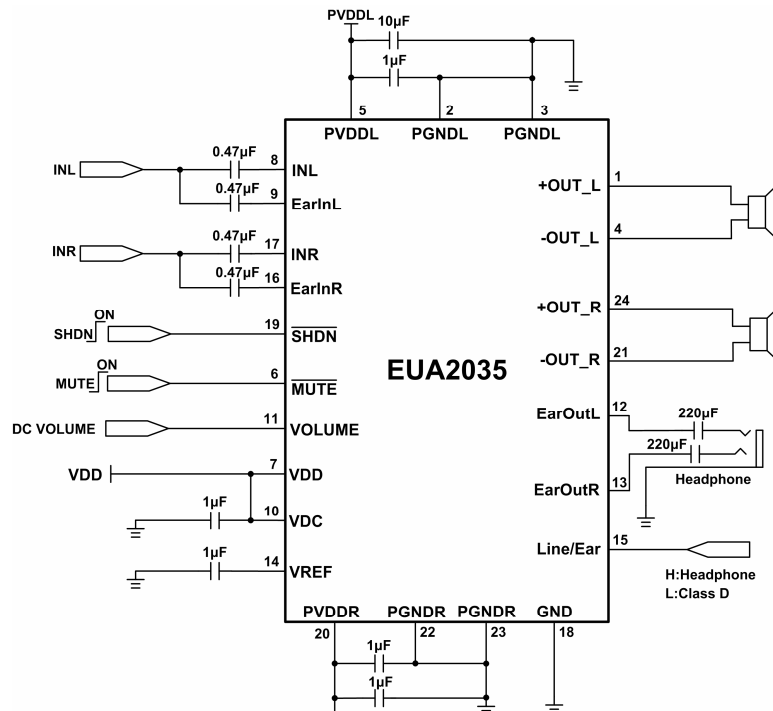


Figure1.