

2.7-W/CH Stereo Filter-less Class-D Audio Power Amplifier

DESCRIPTION

The EUA2012 is a high efficiency, 2.7W/channel stereo class-D audio power amplifier. A low noise, filterless PWM architecture eliminates the output filter, requiring only two external components for operation.

Operating from a single 5V supply, EUA2012 is capable of delivering 2.7W/ channel of continuous output power to a 4Ω load with 10% THD+N.

The EUA2012 features independent shutdown controls for each channel. The gain can be selected to 6, 12, 18, or 24 dB utilizing the G0 and G1 gain select pins. High PSRR and differential architecture provide increased immunity to noise and RF rectification.

The EUA2012 is available in space-saving WCSP, TQFN and TSSOP packages, is an idea choice for mobile phones and other portable communication devices.

FEATURES

- Unique Modulation Scheme Reduces EMI Emission
- Output Power By TQFN Package
 - 3.2W/Ch Into 3Ω at 5V
 - 2.7W/Ch Into 4Ω at 5V
 - 1.6W/Ch Into 8Ω at 5V
 - 800mW/Ch Into 8Ω at 3.6V
- Only Two External components Required
- Wide Supply Voltage: 2.5V to 5.5V
- Independent Shutdown Control for Each Channel
- Selectable Gain of 6,12,18 and 24 dB
- Internal Pulldown Resistor On Shutdown Pins
- High PSRR :74dB at 217Hz
- Fast 10ms Startup Time
- Low 5mA Quiescent Current at 3.6V Supply and 1.5μA Shutdown Current
- Thermal Protection
- Space Saving Packages
 - 4mm × 4mm TQFN-20 package
 - 2mm × 2mm WCSP-16 package
 - TSSOP-20 package
- RoHS Compliant and 100% Lead(Pb)-Free

APPLICATIONS

- Wireless or Cellular Handsets and PDAs
- Portable Audios
- Notebook PC

Typical Application Circuit

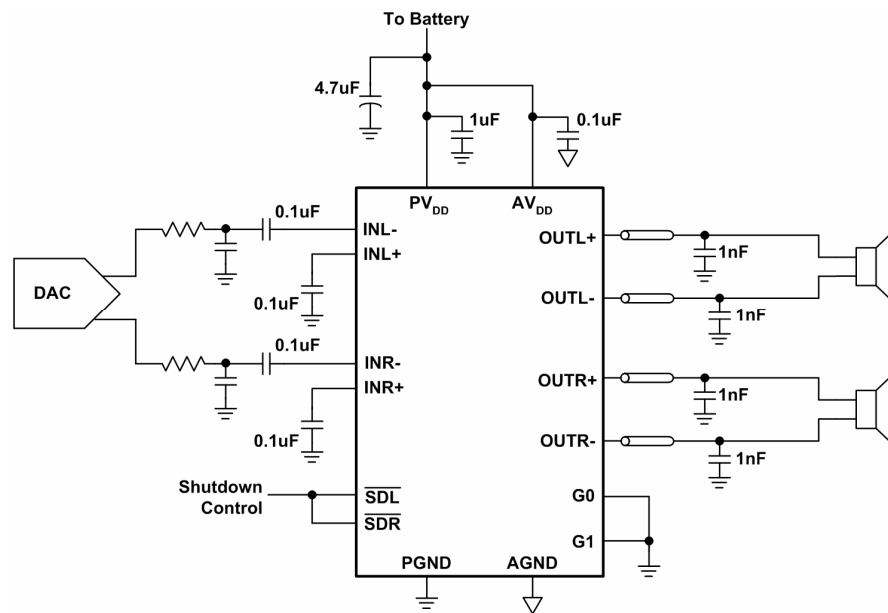


Figure1.