

## 2.4W, Mono Class G Audio Power Amplifier with AGC

### DESCRIPTION

The EUA6230 is a mono Class G power amplifier with an integrated inverting charge-pump power supply and automatic gain control (AGC). The charge pump can supply up to 500mA of peak out-put current over a 2.7V to 5V supply voltage range, guaranteeing up to 2.4W output power into an 8Ω load. The AGC function can prevent distortion of the audio signal by detecting output signal clip due to the over level input signal and compressing it automatically.

The EUA6230 offers good performance through the class G output stage, which provides efficiency levels greater than Class AB devices without the EMI penalties commonly associated with Class D amplifiers. The device utilizes fully differential inputs and outputs, comprehensive click-and-pop suppression, shutdown control, and soft-start circuitry. The EUA6230 is available in 28-pin TQFN (4mm×4mm) package.

### FEATURES

- 2.7V-5.0V Operation
- Auto Gain Control for Non-Clipping
- 61% Efficiency ( $V_{CC}=5V$ ,  $P_{OUT}=1W$ )
- 2.4W Output Power into 8Ω at  $V_{CC}=5V$
- Up to 2.4W Instantaneous Output Power into 8Ω
- Integrated Charge-Pump Power Supply
- Click-and-Pop Suppression
- Auto Gain Control for Non-Clipping
- Available in TQFN-28 Package
- RoHS Compliant and 100% Lead(Pb)-Free Halogen-Free

### APPLICATIONS

- Mobile Phones/ Smartphones
- Personal Media Players
- Tablet PC
- Handheld Gaming
- Notebook Computers

### Typical Application Circuit

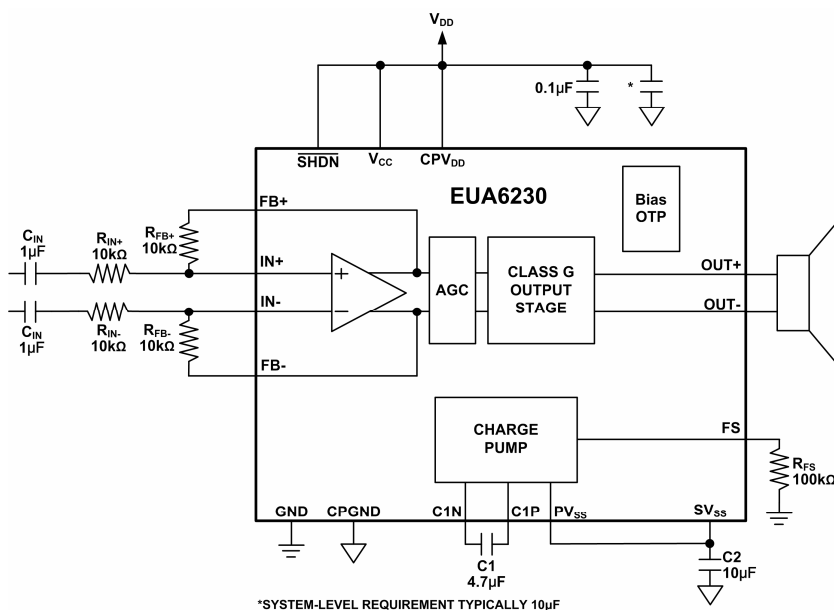


Figure1.