

## 20-W Stereo Digital Audio Power Amplifier

### DESCRIPTION

The EUA2306 is a 20-W, digital audio power amplifier with 4 half-bridged power drivers. The EUA2306 is a slave device that all clocks are provided by the external sources. One serial data input allows processing of up to two discrete audio channels and seamless integration to most digital audio processors. A bidirectional I<sup>2</sup>C interface allows reading or writing to change the internal register status.

The EUA2306 also features short-circuit and thermal protection preventing the device from being damaged during a fault condition. The EUA2306 is available in thermally efficient 48-pin TQFP package.

### FEATURES

- **Audio Input/Output**
  - Wide Power Supply Voltage: 8 V to 26 V
  - Digital Supply: 3.3V
  - 20W/ch into an 8-Ω Load from an 18-V Supply
  - 40W into an 4-Ω Mono load from an 18-V supply
  - Supports 8 kHz - 48 kHz Sample Rates Serial Audio Input (LJ/RJ/I<sup>2</sup>S)
  - Bidirectional I<sup>2</sup>C interface
- **Audio Processing**
  - DC Blocking Filters
  - Channel Volume Control 24 dB to mute
- **Benefits**
  - Soft Mute
  - Auto detect: Automatically Detects Sample-rate Changes
  - Thermal and short circuit protection
- Available in TQFP-48 (EP) Package
- RoHS compliant and 100% lead(Pb)-free Halogen-Free

### APPLICATIONS

- Television
- iPod™ Dock
- Sound Bar

### Typical Application Circuit

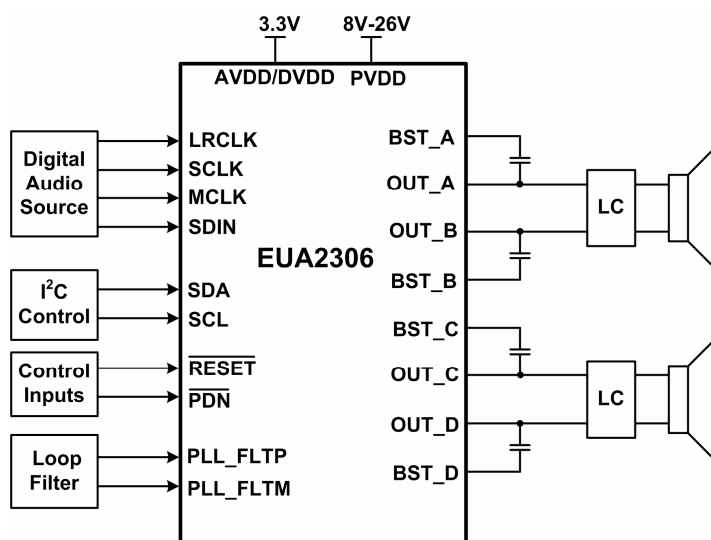


Figure1. Simplified Application Schematic