TRIPATH

TDA2125A

STEREO CLASS-T DIGITAL AUDIO AMPLIFIER DRIVER USING DIGITAL POWER PROCESSING[™] TECHNOLOGY

Preliminary Information

Revision 0.55 - August 2005

GENERAL DESCRIPTION

The TDA2125A is a two-channel, amplifier driver, that uses Tripath's proprietary Digital Power Processing (DPPTM) technology. The TDA2125A offers higher integration over previous Tripath amplifiers driver chipsets while providing exceptional audio performance for real world applications. Class-T amplifiers offer both the audio fidelity of Class-AB and the power efficiency of Class-D amplifiers.

The TDA2125A is typically configured as a split-supply, single-ended, stereo amplifier. The TDA2125A can also be configured single-supply, single-ended, stereo amplifier, via external component choice. For applications that require bridged output drive, please refer to the TDA2125A.

Applications

- Powered DVD Players
- Mini-Compo Systems
- Audio/Video Amplifiers & Receivers
- Multimedia Speakers

Benefits

- Reduced system cost with smaller/less expensive power supply and heat sink
- Signal fidelity equal to high quality Class-AB amplifiers
- High dynamic range compatible with digital media such as CD and DVD

Features

- Class-T architecture with proprietary DPP
- "Audiophile" Sound Quality
- > Full Audio Bandwidth, 20Hz to 20kHz
- High Efficiency
- Supports wide range of output power levels and output loads by changing supply voltage and external Mosfets
- Compatible with unregulated power supplies
- Output over-current protection
- Over- and under-voltage protection
- Over-temperature protection
- > 36-Pin HSOP Package with heat slug

Typical Performance for TDA2125A