



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 (DPP™) 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