

### **TDA2125A**

# STEREO CLASS-T DIGITAL AUDIO AMPLIFIER DRIVER USING DIGITAL POWER PROCESSING<sup>TM</sup> 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<sup>TM</sup>) 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**