# TRIPATH

## TDA2075

# STEREO 75W (8Ω) CLASS-T DIGITAL AUDIO AMPLIFIER DRIVER USING DIGITAL POWER PROCESSING<sup>™</sup> TECHNOLOGY

#### ADVANCED INFORMATION

Revision 2.1 - December 2004

#### GENERAL DESCRIPTION

The TDA2075 is a two-channel, 75W (8 $\Omega$ ) per channel Amplifier Driver that uses Tripath's proprietary Digital Power Processing (DPP<sup>TM</sup>) technology. The TDA2075 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.

#### Applications

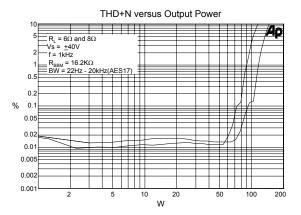
- Powered DVD Players
- > Audio/Video Amplifiers & Receivers
- Multimedia Speakers

#### **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
  - > THD+N 0.015% at 50W, 8Ω, 1kHz
- High Efficiency
  - 91% at +/-40V and 120W, 8Ω
- Supports wide range of output power levels
  Up to 120W/channel (6Ω), single-ended
  - outputs, @+/- 40V with 1% THD+N
- Full Audio Bandwidth, 20Hz to 20kHz
- Output over-current protection
- Over- and under-voltage protection
- Over-temperature protection
- 48-Pin LQFP Package
- > Complete Amplifier Evaluation Board available



### **Typical Performance for TDA2075**



1