

## **TS4994**

# 1.2W DIFFERENTIAL INPUT AUDIO POWER AMPLIFIER WITH SELECTABLE STANDBY

**DATA BRIEF** 

- **DIFFERENTIAL INPUTS**
- ZERO POP & CLICK
- 100dB PSRR @ 217Hz with grounded inputs
- OPERATING FROM V<sub>CC</sub> = 2.5V to 5.5V **1.2W** RAIL TO RAIL OUTPUT POWER @ Vcc=5V, THD=1%, F=1kHz, with 8Ω Load
- **70dB CMRR** @ 217Hz
- ULTRA LOW CONSUMPTION IN STANDBY MODE (10nA)
- SELECTABLE STANDBY MODE (ACTIVE LOW OR ACTIVE HIGH)
- ULTRA FAST STARTUP TIME: 15ms typ.
- AVAILABLE IN Flip-Chip 300um/9 bumps. DFN10 3x3, 0.5mm pitch & MiniSO8.

#### **DESCRIPTION**

The TS4994 is an Audio Power Amplifier capable of delivering 1.2W of continuous RMS. ouput power into  $8\Omega$  load @ 5V. Thanks to its differential inputs, it exhibits outstanding noise immunity.

An external standby mode control reduces the supply current to less than 10nA. STBY MODE pin allows the standby pin to be active HIGH or LOW (except on MiniSO8 version).

An internal thermal shutdown protection is also provided and device can sustain short circuits.

The device is equiped with a Common Mode Feedback circuitry allowing outputs to be always biased at Vcc/2 regardless of the input common mode voltage.

The TS4994 has been designed for high quality audio applications such as mobile phones and requires few external components.

### **APPLICATIONS**

- Mobile Phones (Cellular / Cordless)
- Laptop / Notebook Computers
- PDAs
- Portable Audio Devices

#### **ORDER CODE**

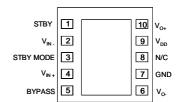
Part Number	Temperature Range: I	Package			Marking
		J	Q	S	wai Kiiig
TS4994IJT		•			A94
TS4994IQT	-40, +85°C		•		K994
TS4994IST				•	K994

All devices available only in Tape & Reel

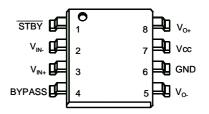
#### PIN CONNECTIONS (Top View)

# TS4994IJT - Flip Chip 9 bumps GND Bypass STRY Stby Mode

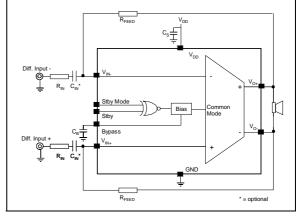
#### TS4994IQT - DFN10



## TS4994IQT - MiniSO8



#### TYPICAL APPLICATION SCHEMATIC



March 2004 1/1