

## DESCRIPTION

The PT2369 is an audio amplifier design for the low voltage (5V) application purpose, built-in stereo 2.6W Class-AB power amplifier with 32 steps I<sup>2</sup>C controlled volume, it also provides 4 sources selector, and unique noise suppressor circuit eliminates unpleasant pop noise during power or shutdown on/off, and provides SE/BTL selection for headphone connection.

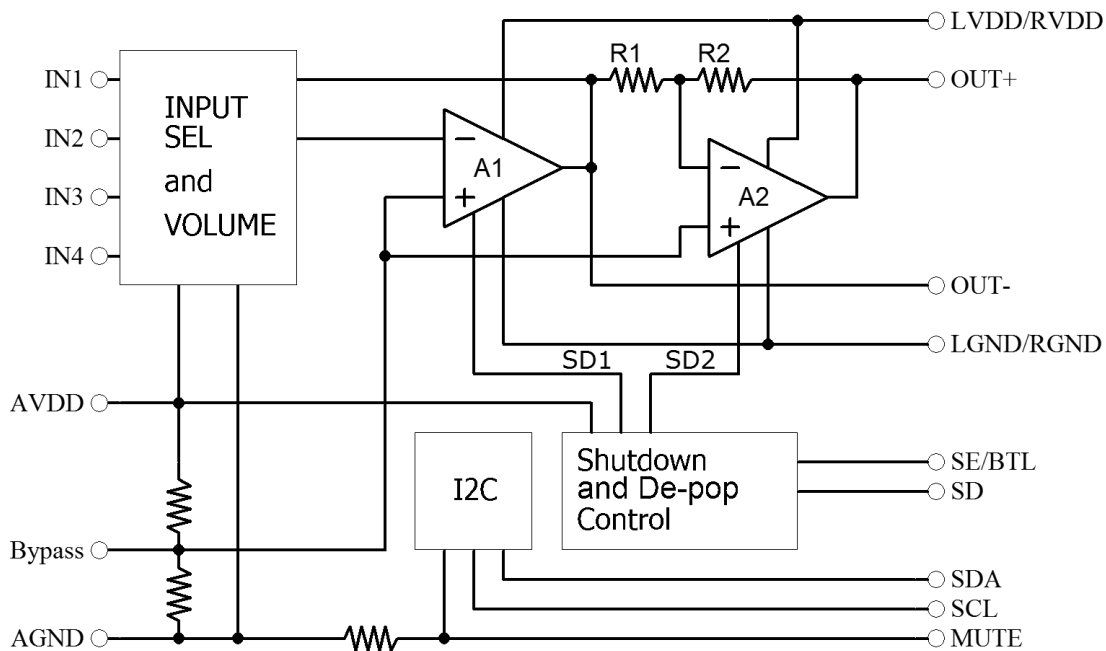
## APPLICATIONS

- Portable DVD player
- Portable audio system
- Docking speaker system
- Flat panel monitor
- Other audio applications

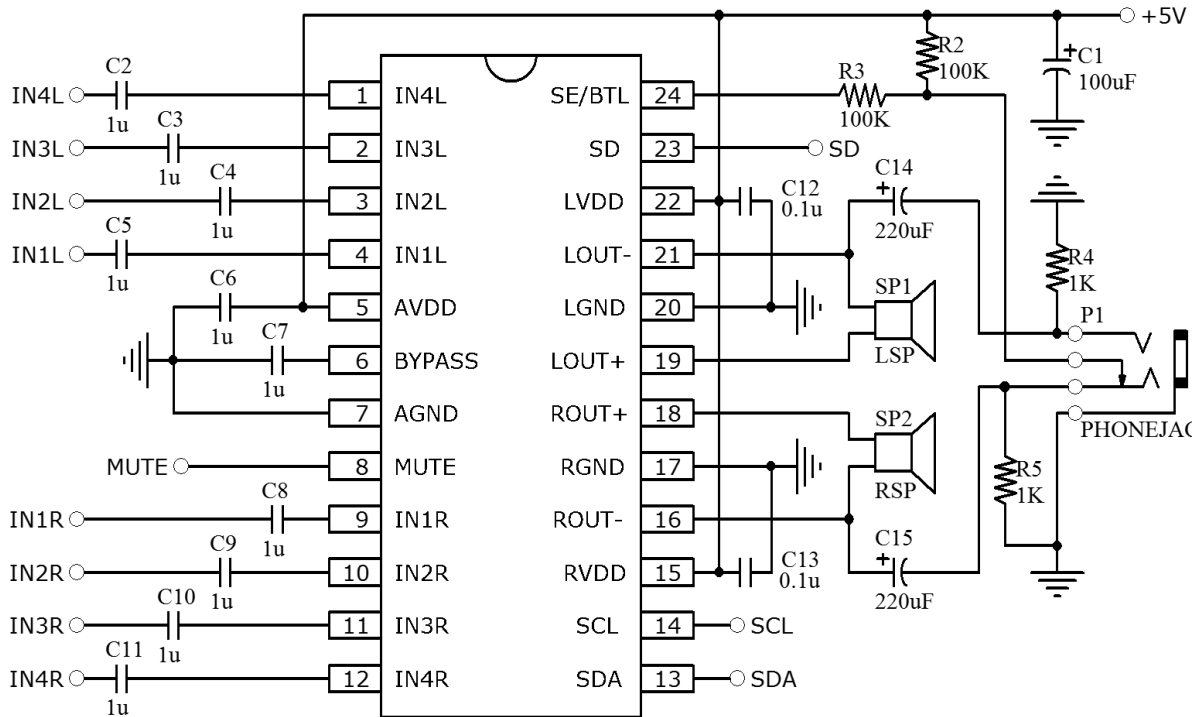
## FEATURES

- Supply voltage: 3~6V
- 4 Stereo inputs
- 32 steps, I<sup>2</sup>C controlled volume from -40dB to +26dB (BTL)
- 2.6W x 2 Class-AB Power Amplifier (VDD=5V, RL=4Ω, THD=10%)
- BTL and SE output selectable
- Pop-Free circuitry eliminates unpleasant noises during power ON/OFF and changing the input source.
- Low power shutdown
- Over Temperature Protection
- Over Current Protection
- TSSOP 24 pin package with thermal pad

## BLOCK DIAGRAM



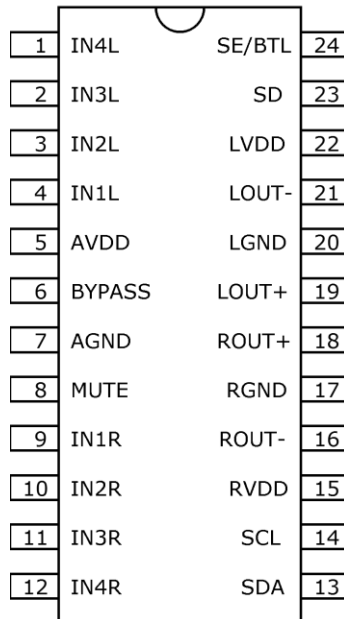
# APPLICATION CIRCUIT



# ORDER INFORMATION

Part Number	Package Type	Top Code
PT2369-HT	24 pins, HTSSOP, 173mil	PT2369-HT

## PIN CONFIGURATION



## PIN DESCRIPTION

Pin Name	I/O	Description	Pin No.
IN4L	I	Left channel positive input 4	1
IN3L	I	Left channel positive input 3	2
IN2L	I	Left channel positive input 2	3
IN1L	I	Left channel positive input 1	4
AVDD	P	Power input for volume control	5
BYPASS	I	Internal 1/2 reference bypassing	6
AGND	P	Ground for volume control	7
MUTE	I	Mute Input, H=muted, L=normal (internal pull down)	8
IN1R	I	Right channel positive input 1	9
IN2R	I	Right channel positive input 2	10
IN3R	I	Right channel positive input 3	11
IN4R	I	Right channel positive input 4	12
SDA	I	I2C data input	13
SCL	I	I2C clock input	14
RVDD	I	Right channel power input	15
ROUT-	O	Right channel negative output	16
RGND	P	Power GND	17
ROUT+	O	Right channel positive output	18
LOUT+	O	Left channel positive output	19
LGND	P	Power GND	20
LOUT-	O	Left channel negative output	21
LVDD	P	Left channel power input	22
SD	I	Shutdown, L=shutdown, H=normal operate.	23
SE/BTL	I	L=BTL (speaker out), H=SE (Headphone out)	24

## **IMPORTANT NOTICE**

Princeton Technology Corporation (PTC) reserves the right to make corrections, modifications, enhancements, improvements, and other changes to its products and to discontinue any product without notice at any time.

PTC cannot assume responsibility for use of any circuitry other than circuitry entirely embodied in a PTC product. No circuit patent licenses are implied.

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