

## DESCRIPTION

The PT2307 is an integrated audio power amplifier utilizing CMOS Technology. In the input section 2 microphone and 2 stereo audio inputs are supported, and also provides a stereo earphone output and a 1W low noise mono power amplifier for speaker out. The earphone output could be selected in dual mode (A or B) for various applications. The major functions is controlled via the I<sup>2</sup>C bus such like wide range volume control (0dB ~ -90dB), and the earphone output volume could fine tuning (0dB ~ -10.5dB) to matching the speaker output volume.

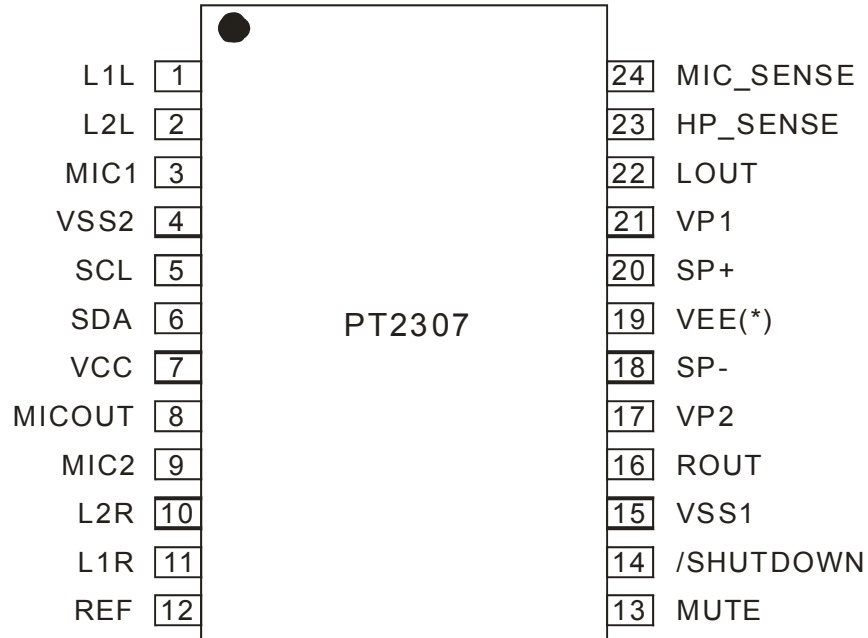
## FEATURES

- 1W (8Ω) mono channel speaker output + stereo earphone driver
- Digital volume control
  - Main volume: 32 steps/0dB ~ -90dB
  - Earphone volume: 8 steps/0dB ~ -10.5dB
- 2 microphone inputs, 1 microphone output
- 2 stereo audio inputs, selected via I<sup>2</sup>C bus
- Output coupling capacitor-free earphone output (PT2307-A)
- Dual earphone output mode (A/B) Integrated. (PT2307-A or PT2307-B)
- Mute function
- Shutdown (power save) mode
- I<sup>2</sup>C register keeps the last status when the shutdown active
- Each section can be turn off individually for most power saving
- Over Temperature protection
- Very low pop noise in mode changed
- Wide operating voltage: 2V ~ 6V
- Available in 24 Pins TSSOP

## APPLICATIONS

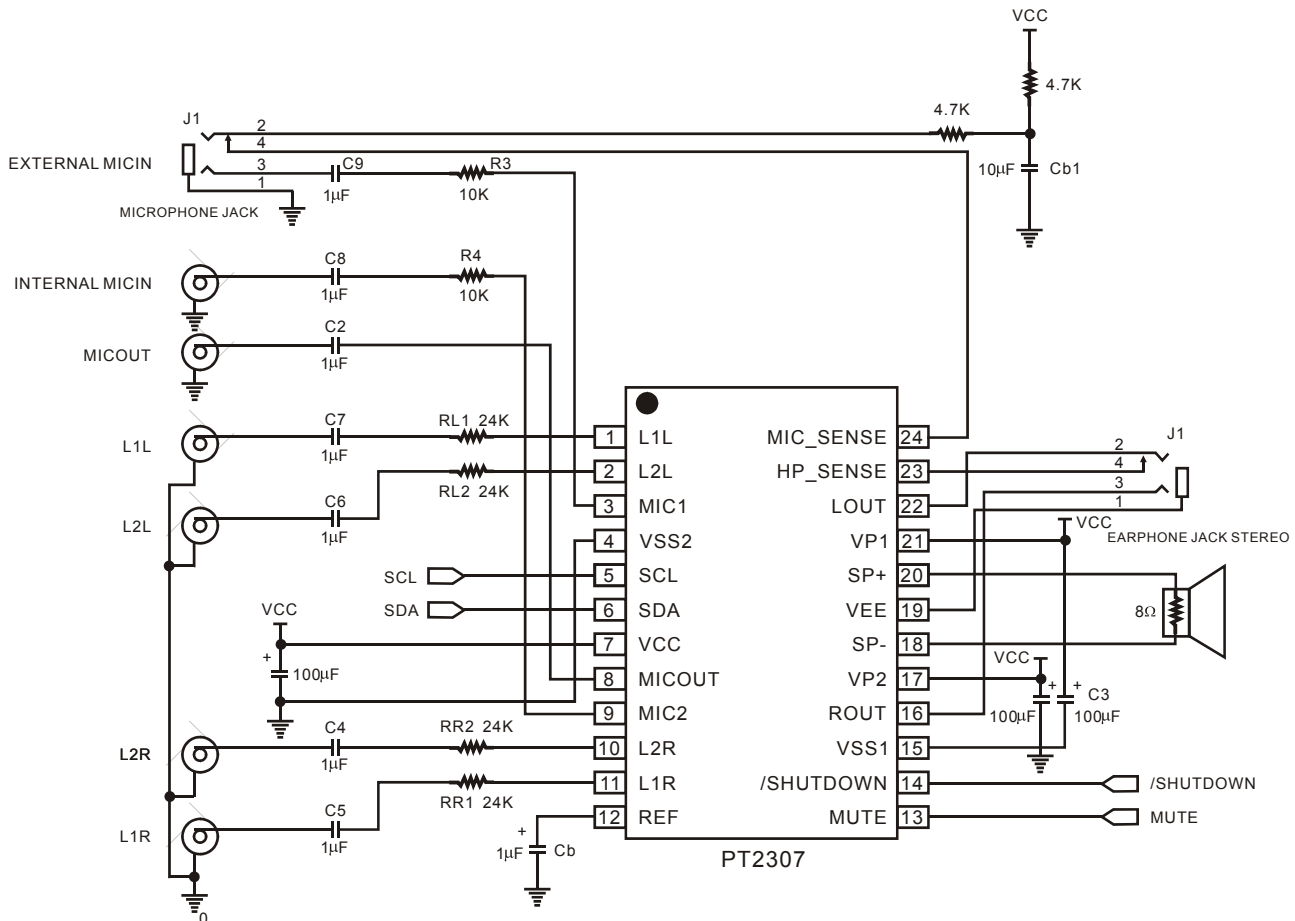
- PDA
- Portable mini audio system
- Multimedia audio household appliances system

## PIN CONFIGURATION



**NOTE. \*: PIN 19 OF PT2307-A IS VEE, PIN 19 OF PT2307-B IS NC.**

# APPLICATION CIRCUIT I (PT2307-A)

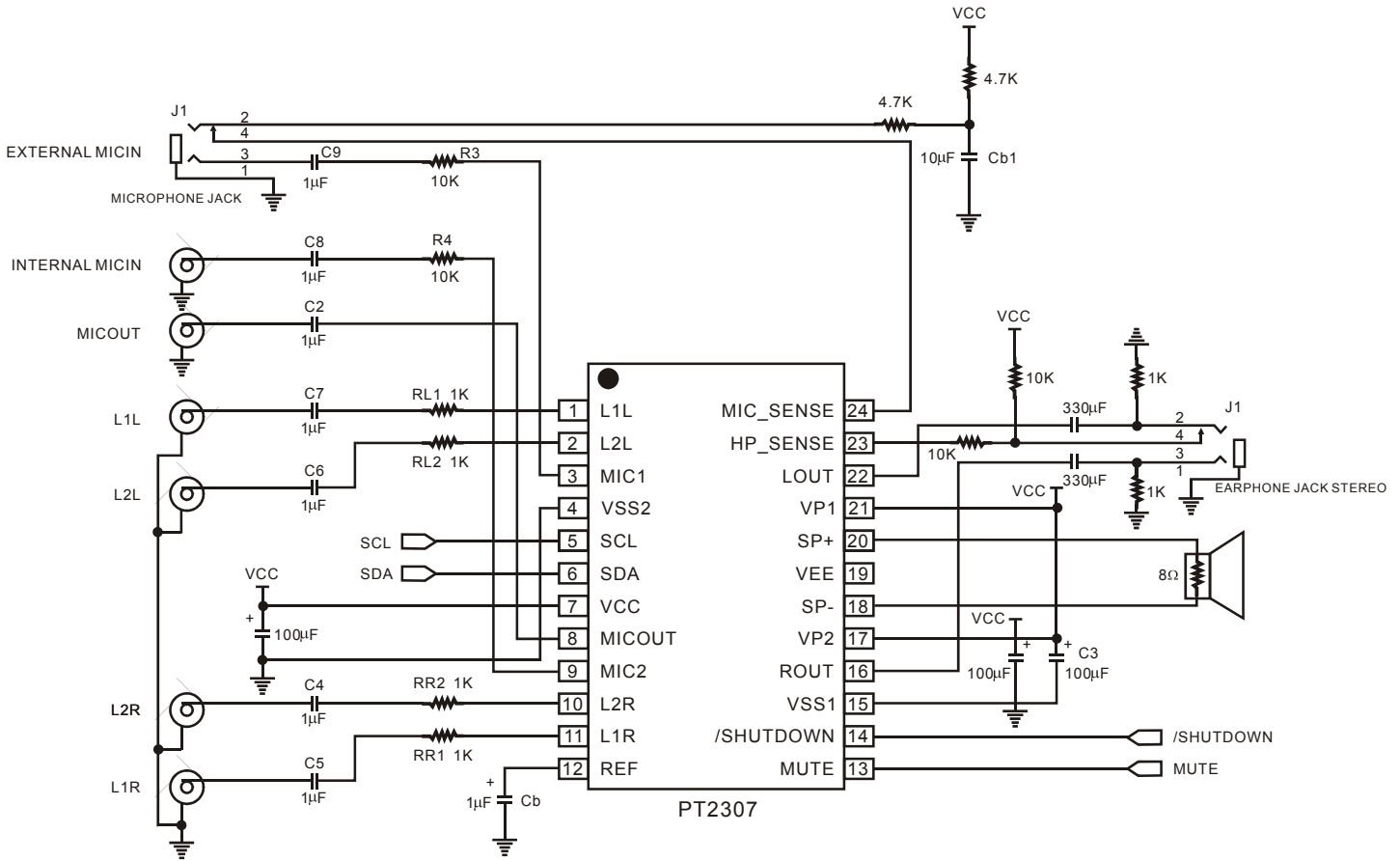


Note 1: The I/O capacitor's positive polarity must face to the higher voltage side.

Note 2: Due to the earphone output capacitor-free circuitry, the Pin23 HP\_SENSE should be returned back from the Pin22 LOUT .

Note 3: In the circuit board layout, the input resistors R3 · R4 · RL1 · RL2 · RR1 · RR2 must placed very close to the PT2307.

# APPLICATION CIRCUIT II (PT2307-B)



Note 1: The I/O capacitor's positive polarity must face to the higher voltage side.

Note 2: In the circuit board layout, the input resistors R3 · R4 · RL1 · RL2 · RR1 · RR2 must placed very close to the PT2307.

## ORDER INFORMATION

Order Part Number	Package	Top Code
PT2307	24 Pins TSSOP, 173mil	PT2307
PT2307 (L)	24 Pins TSSOP, 173mil	PT2307 (L)

Notes:

1. (L) = Lead Free
2. The Lead Free mark is put in front of the date code.