

1 Watt Audio Power Amplifier

PT2301

DESCRIPTION

PT2301 is a multi-purpose audio power amplifier IC utilizing advanced CMOS technology. PT2301 includes 2 microphone inputs and 2 stereo line inputs. PT2301 supports headphone stereo sound output and a single channel loudspeaker output terminal. PT2301 is a low noise power amplifier with a maximum output of 1 watt. It uses the I²C protocol and has a broad volume control range (+15dB ~ -90dB).

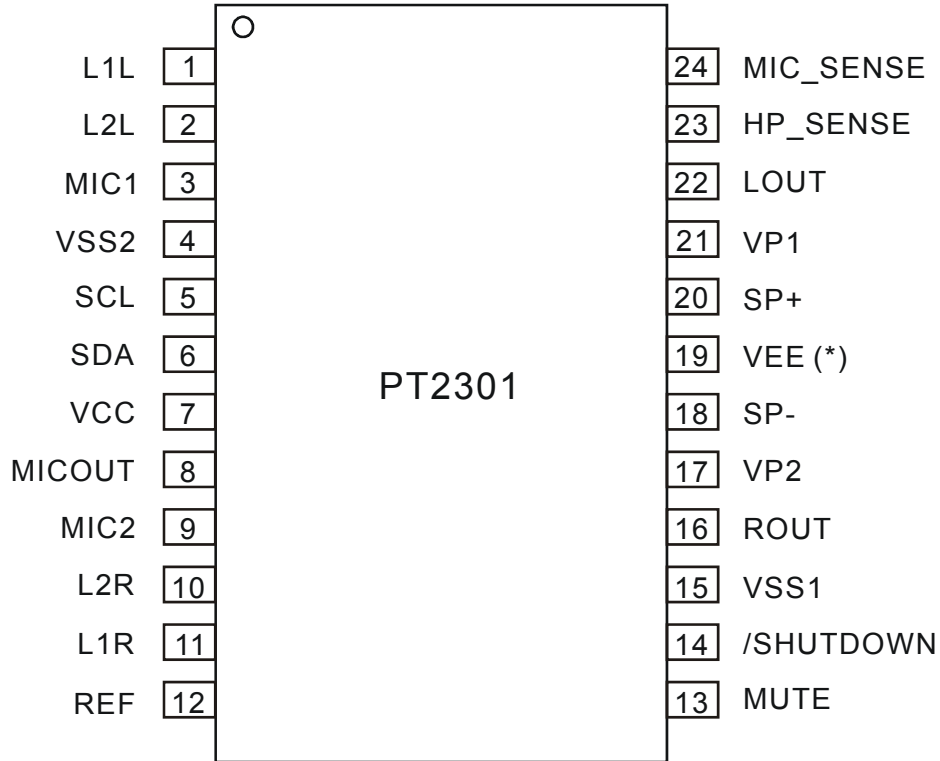
FEATURES

- 1W (8 Ω) single channel loudspeaker output + stereo headphones driver
- Digital volume control (49 steps /+15dB ~ -90dB)
- 2 microphone inputs, 1 microphone output
- The output-port does not need to be connected to the AC capacitor (PT2301-A)
- Standby mode and Mute function
- Thermal shutdown protection circuit
- Energy Save function
- Extremely low (POP) noise
- Wide working voltage range: 2.7V ~ 5.5V
- Low THD: earphone < 0.07%, speaker < 0.03%
- Available in 24 Pin, TSSOP Package

APPLICATIONS

- Electronic dictionary
- PDA
- DSC (Digital Still Camera)

PIN CONFIGURATION

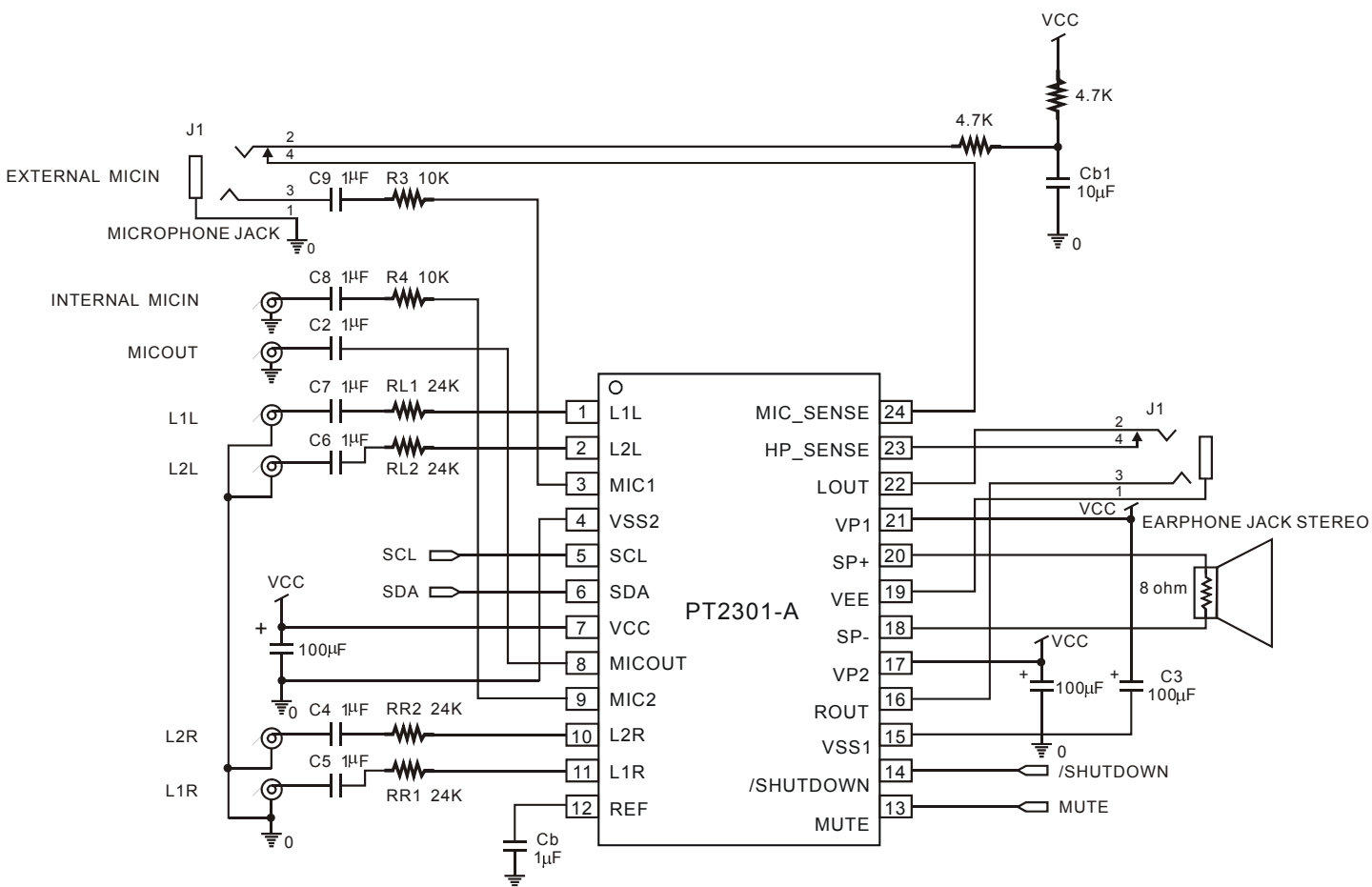


Note: PT2301-A Pin 19 is VEE, PT2301-B Pin 19 is NC.

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APPLICATION CIRCUIT I (PT2301-A)



Note 1: I/O capacitance's positive should face to high level.

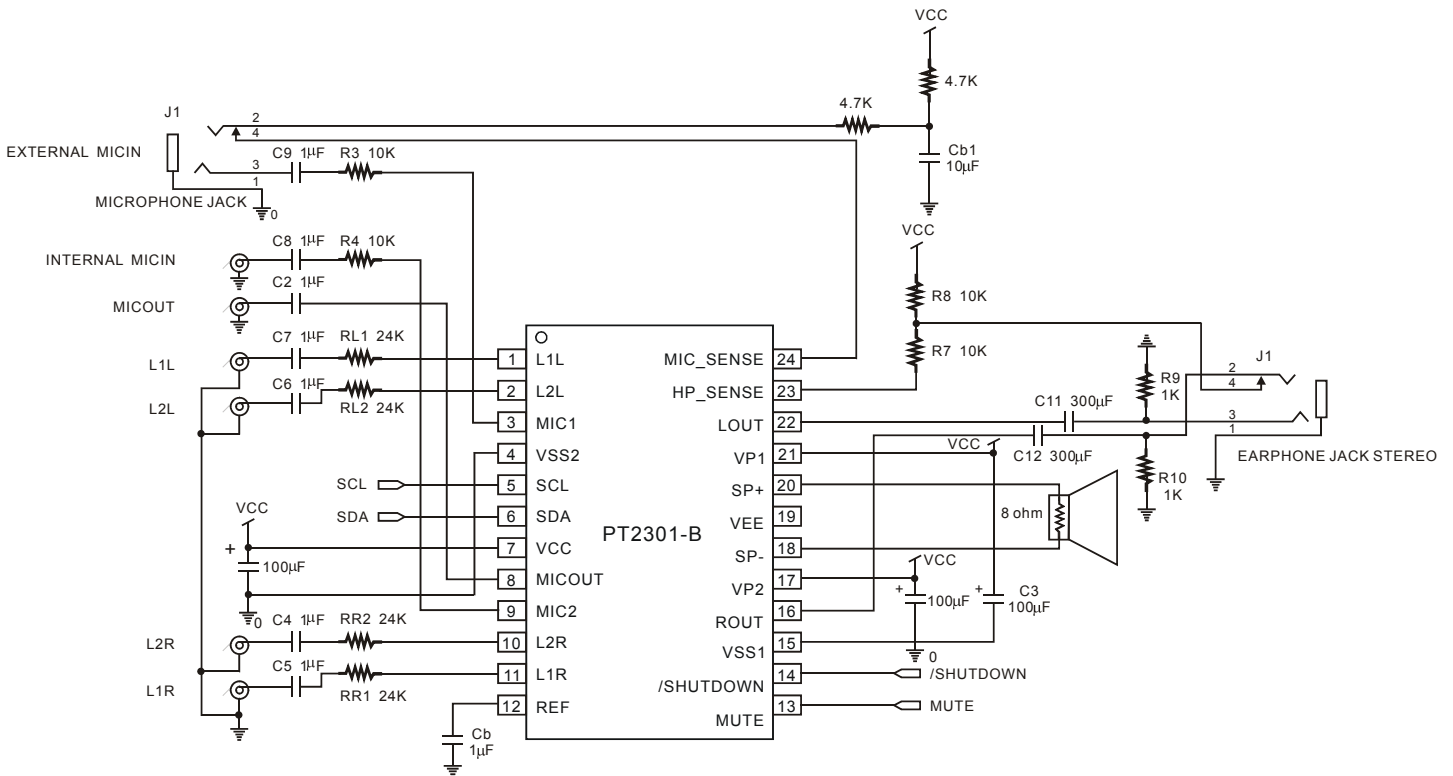
Note 2: Pin23 HP_SENSE should connect to Pin22 LOU T .

Note 3: When you layout, input resistors R3 、 R4 、 RL1 、 RL2 、 RR1 、 RR2 as far as possible near to PT2301.

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APPLICATION CIRCUIT II (PT2301-B)



Note 1: I/O capacitance's positive should face to high level.

Note 2: Pin23 HP_SENSE should connect to Pin22 LOUT ◦

Note 3: When you layout, input resistors R3、R4、RL1、RL2、RR1、RR2 as far as possible near to PT2301.

ORDER INFORMATION

Order Part Number	Package Information	Top Code
PT2301-A	24 Pins, TSSOP, 173 mil	PT2301-A
PT2301-B	24 Pins, TSSOP, 173 mil	PT2301-B
PT2301-A (L)	24 Pins, TSSOP, 173 mil	PT2301-A
PT2301-B (L)	24 Pins, TSSOP, 173 mil	PT2301-B

Notes:

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