

## DESCRIPTION

The PT2338 is a stereo power amplifier designed for the audio equipment; it is possible to delivery up to 150mW power to the 16Ω loads. Overall voltage gain is determine by the external resistors, for some application needs higher common mode reject performance to canceling common mode noises, the input port of the PT2338 is configuration as differential input. Very low quiescent current and low voltage operation capability let it become a best choice for the portable audio application.

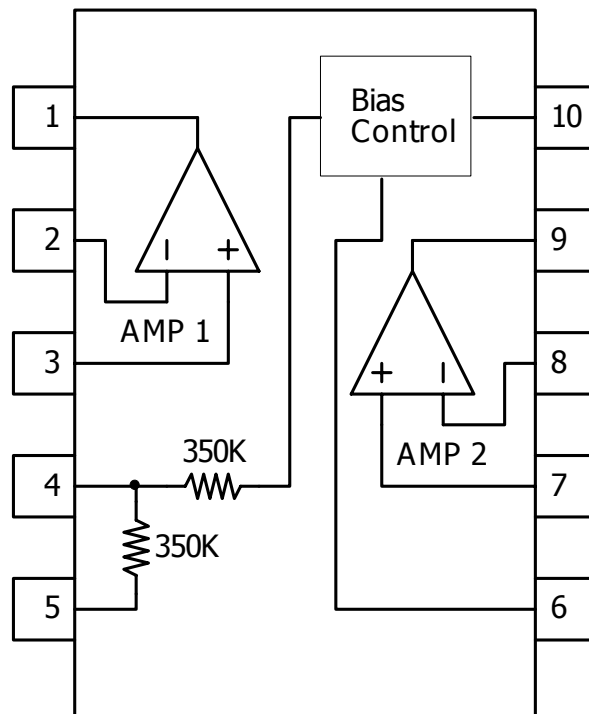
## FEATURES

- CMOS processing
- Stereo differential inputs
- Wide operation range: from 2.5V to 5.5V
- Driving capability up to 16Ω headphone
- Low quiescent current:1.5mA
- POP noise free circuitry
- Thermal and Short-Circuit protection
- Low Harmonic distortion and low residual noise
- Available in 10 Pins, MSOP small outline package

## APPLICATIONS

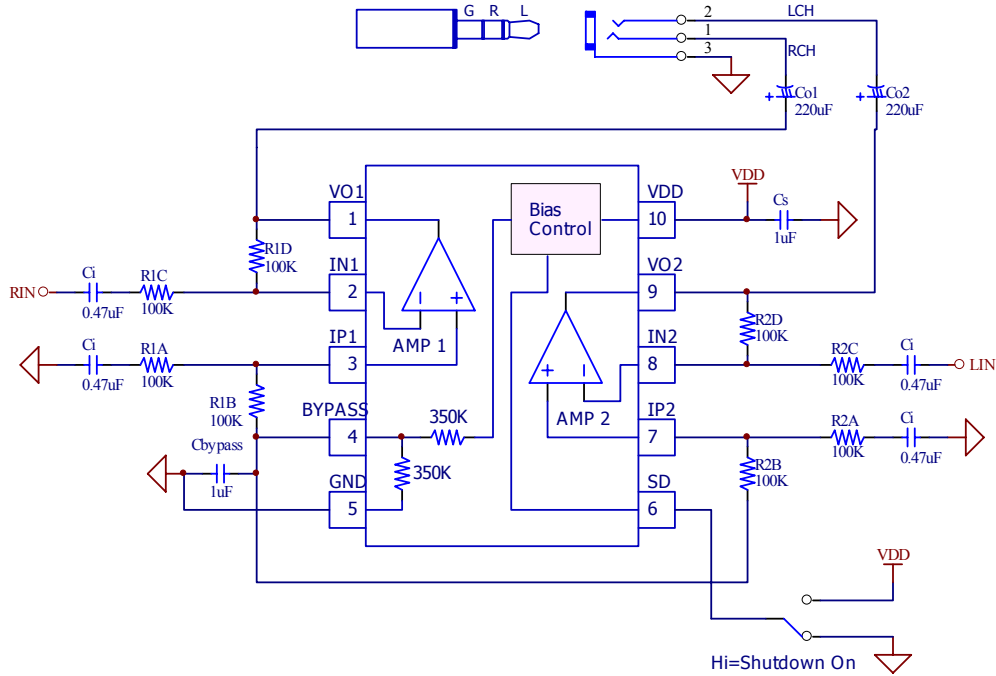
- Portable media player
- Wireless headset
- Mobile phone
- LCD TV
- Mini compo
- PC audio
- Other audio applications

## BLOCK DIAGRAM



# APPLICATION CIRCUIT DIAGRAM

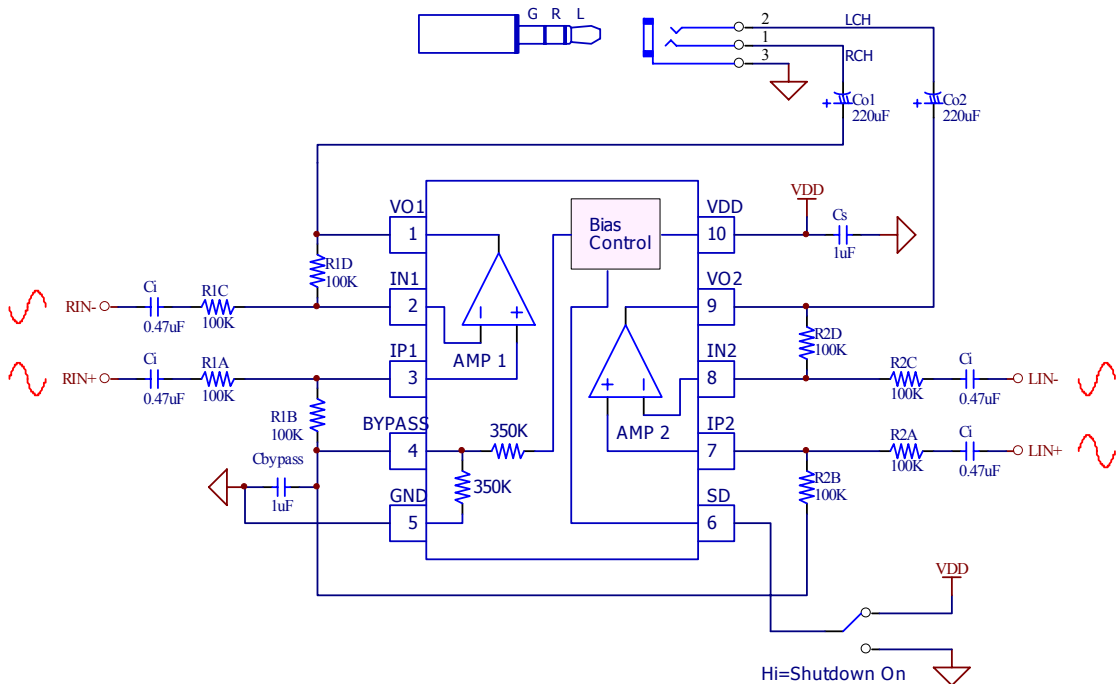
## SINGLE ENDED CONFIGURATION



Note :

1. Single-ended inverted amplifier configuration can get the better performance of the PSRR.
2. Increase the capacitance of the C<sub>bypass</sub> can improve the PSRR performance, but it also extends power on muting period.

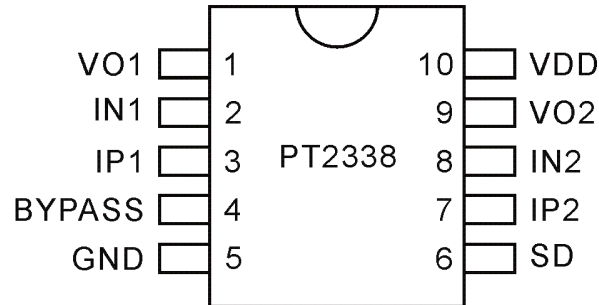
## DIFFERENTIAL INPUT CONFIGURATION



## ORDER INFORMATION

Valid Part Number	Package Type	Top Code
PT2338-MS	10 pins, MSOP	PT2338-MS

## PIN CONFIGURATION



## PIN DESCRIPTION

Pin Name	I/O	Description	Pin No.
VO1	O	Audio output for channel 1	1
IN1	I	Negative input for channel 1	2
IP1	I	Positive input for channel 1	3
BYPASS	I	Internal mid-supply voltage bypassing	4
GND	-	Ground	5
SD	I	Put the device in low quiescent current mode when held high	6
IP2	I	Positive input for channel 2	7
IN2	I	Negative input for channel 2	8
VO2	O	Audio output for channel	9
VDD	-	Supply voltage terminal	10