



16 Bit Digital to Analog Converter

PT8211L

DESCRIPTION

PT8211L is a dual channel, 16 bit Digital-to-Analog Converter IC utilizing CMOS technology specially designed for the digital audio applications. The internal conversion architecture is based on a R-2R resistor ladder network, internal circuit is well matched and a 16 bit dynamic range is achieved even in low supply voltage. PT8211L also enhanced the performance of timing responsibility in digital serial bus, in a company with the fast switching R-2R network that make 8X oversampling audio signal is also supported.

PT8211L can be supported wide range of sample frequency, it is compatible with TDA1311 by functionally. It's digital input timing format is Least Significant Bit Justified (LSBJ), or so called Japanese input format. Digital code format is two's complement and MSB first. PT8211L is available in 8-pin SOP or DIP package.

PT8211L is designed for low voltage purpose, supply voltage can be down to 2V.

FEATURES

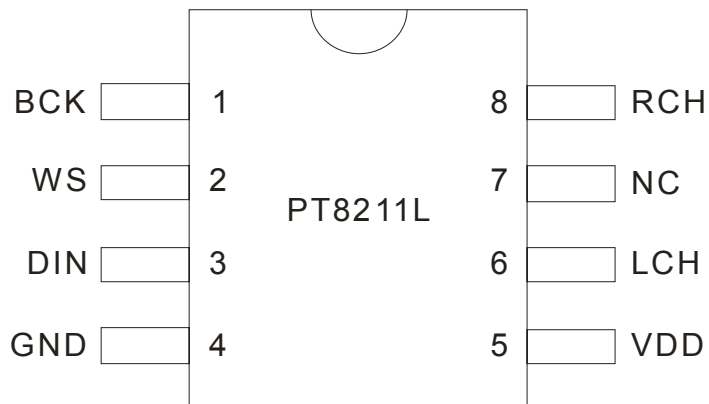
- CMOS technology
- Low supply voltage available ($V_{DD}=1.6V$)
- Support 3.3V bus input level or lower
- Low power consumption
- Two audio channel output in the same chip
- 16 bit dynamic range
- Low total harmonic distortion
- No phase shift between both output channel
- Available in 8 pins, SOP or DIP

APPLICATIONS

- Digital audio equipment
- CD ROM/VCD
- Multimedia sound card
- MPEG decoder card



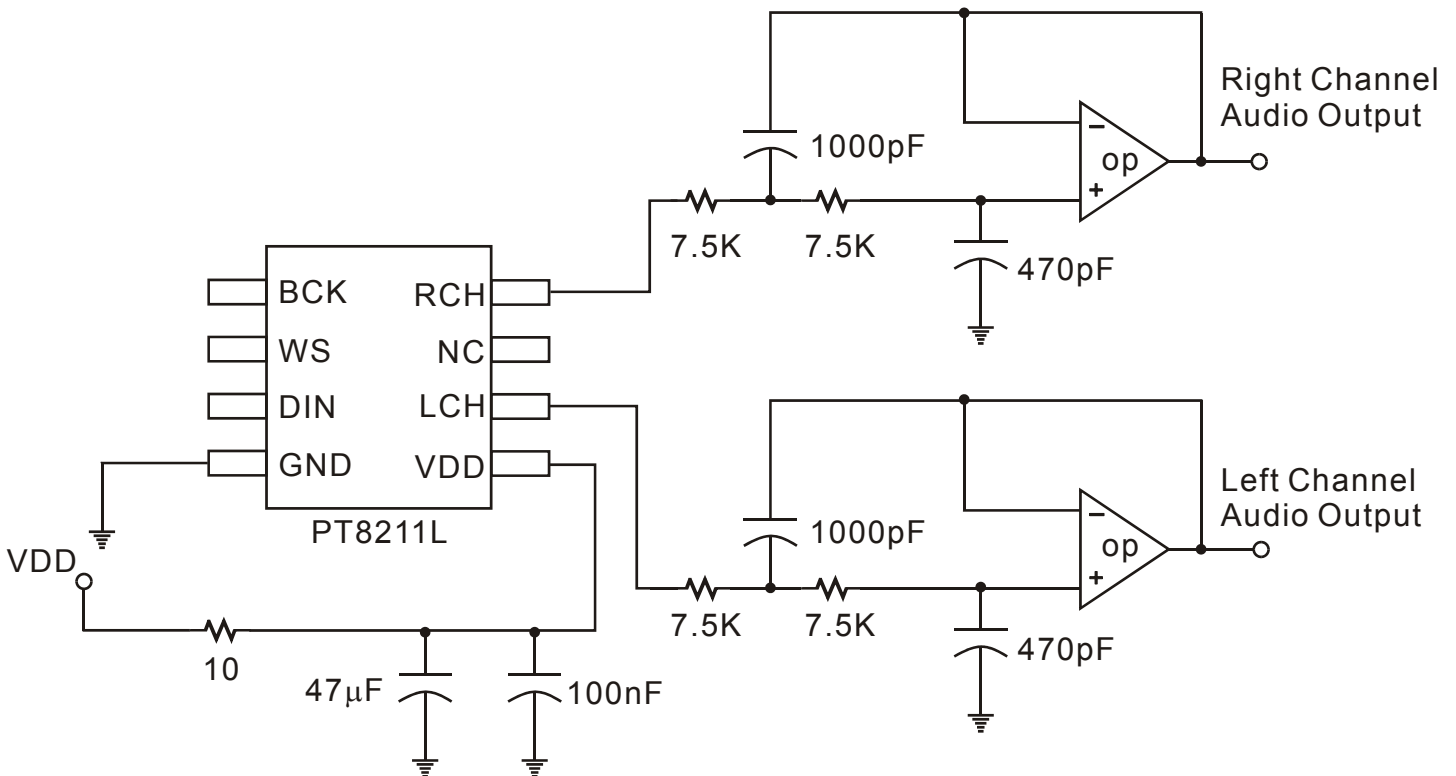
PIN CONFIGURATION





APPLICATION CIRCUIT AND NOTE

For further suppress residual noise, we suggestion place an additional low pass filter after the analog output of PT8211L. Please refer to circuit shown on below, this is a simple second-order analog post filter. If low noise output is very important for your circuit design we suggestion uses regulated power supply.





ORDER INFORMATION

Valid Part Number	Package Type	Top Code
PT8211L-S	8 Pins, SOP, 150mil	PT8211L-S
PT8211L	8 Pins, DIP, 300mil	PT8211L
PT8211L-S (L)	8 Pins, SOP, 150mil	PT8211L-S
PT8211L (L)	8 Pins, DIP, 300mil	PT8211L

Notes:

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