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## 16 Bits Digital-to-Analog Converter IC

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**PT8211**

# Description

PT8211 is a 16 bits Digital-to-Analog Converter IC utilizing CMOS Technology specially designed for stereo audio applications. PT 8211 converts the 16 bits serial data into an analog output voltage. The digital data is internally converted to floating point expression whose format consists of 10 bits mantissa and 7-step exponent. Using an R-string voltage divider, this floating point expression data is then converted to Analog Voltage. Thus, 16 bits dynamic range is achieved. The voltage of each output channel of PT 8211 is driven by an operational amplifier allowing easy analog output.

PT8211 has been tested on sound cards with the popular 44.1 KHz sampling rate and can be used at higher sampling rates. It is compatible with TDA1311 and can be used with the popular Japanese input formats time multiplexed, two's complement, MSB first TTL level serial input data. PT8211 is available in 8-pin SO or DIP Package.

# Features

- CMOS Technology
- Low Power Consumption
- Two Voltage Output Channels in the same chip
- 16-bits Dynamic Range
- Low Total Harmonic Distortion
- 5 Volts Single Power Supply
- Available in 8 pins, SO or DIP Package

# Applications

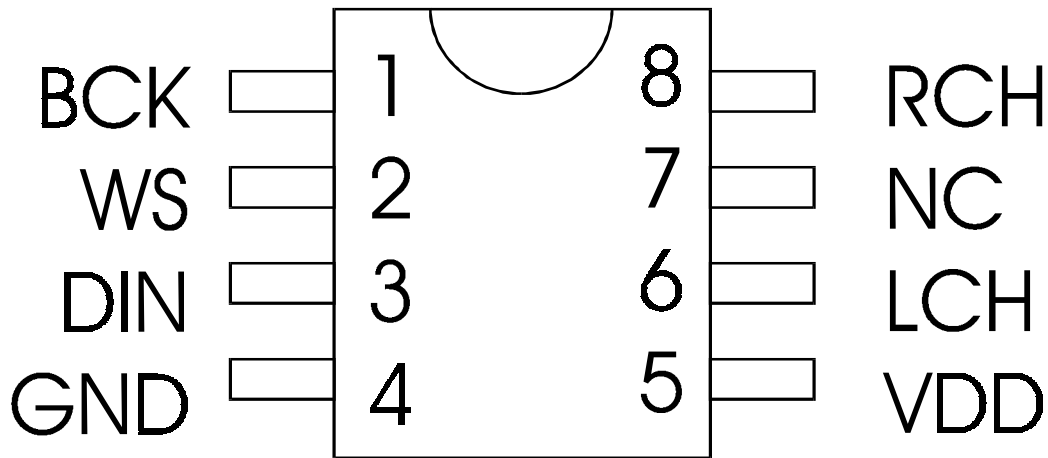
- Digital Audio Equipment
- CD ROM/VCD
- Sound Card
- MPEG Card



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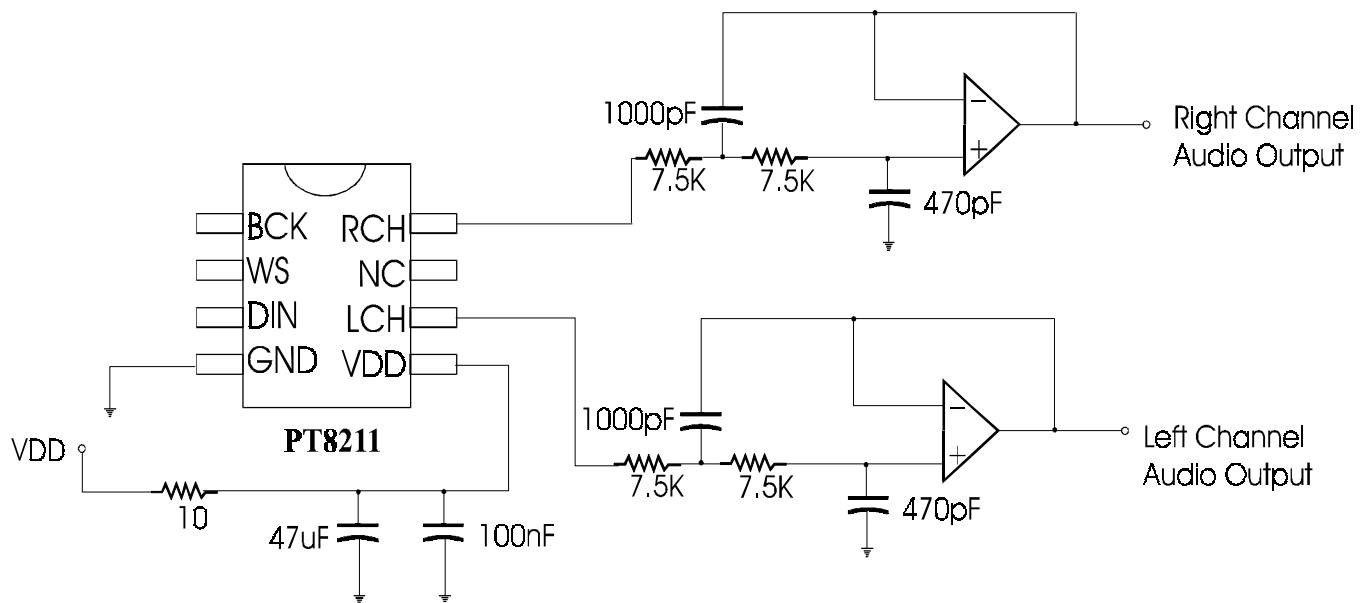
### Pin Configuration



### PT8211

### Application Circuit

This CD-ROM Application Circuit features typical decoupling components and a second-order analog post-filter stage which provides a line output.





## Ordering Information

Part Number	Package
PT8211-S	8 Pins, SO
PT8211	8 Pins, DIP

