Tel: 886-2-29162151 Fax: 886-2-29174598

URL: http://www.princeton.com.tw

8-Bit D/A Converter IC

**Preliminary** 

PT8214

#### DESCRIPTION

PT8214 is an 8-bit D/A Converter IC with operational amplifier output buffers. It supports up to a maximum of 36 channels and provides two reference voltages which enable its 36 channels to be used as 12 and 24 independent channels. Digital data are inputted in serially and is controlled by the CLK and STB Pins making a cascading connection between devices. Available in 48 pins, LQFP package, PT8214 is capable of large current drive since each channel has an operational amplifier output buffer. Pin assignments and application circuit are optimized for easy PCB Layout and cost saving advantages.

### **FEATURES**

- CMOS Technology
- Very Low Power Consumption: Type 1.1mW/channel
- Max. 2.5 MHz Serial Data Input
- Separate Supply Voltages for Digital and Analog Blocks
- R-2R Resistor Ladder Conversion Method
- On-Chip Operational Amplifier Output Buffers: Max. +1.0/-1.0mA Analog Output Sink/Source Current Capability
- Analog Data Output Range: 0 to Vcc (V)
- Two Analog Output Reference Voltage
- Analog Data can be outputted in Different Reference Voltages
- Available in 48 pins, LQFP Package

### **APPLICATIONS**

- Digital Equipment
- V8
- CD ROM/VCD
- MPEG
- Sound Card
- Replacement for Potentiometers

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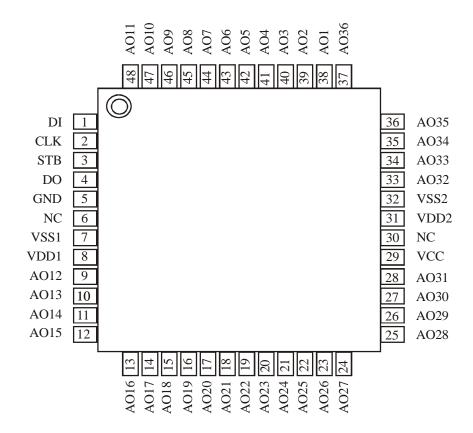
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## **PIN CONFIGURATION**



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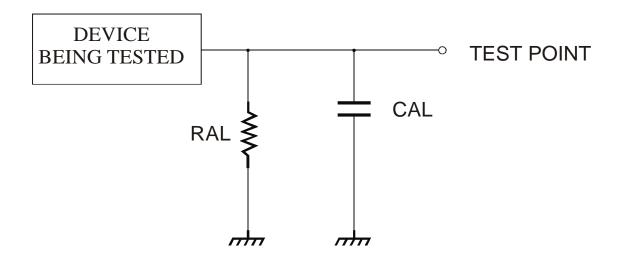
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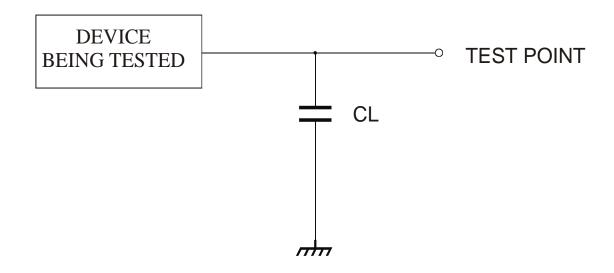
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## **AC TEST CONDITIONS**

# **DAC Output Setting Time**



## DAC Output Delay Time



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