


Op Amp Quad Low Power Amplifier R-R O/P $\pm 4V/8V$ 14-Pin PDIP Tube

Manufacturer:	Texas Instruments, Inc
Package/Case:	DIP-14
Product Type:	Amplifier ICs
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

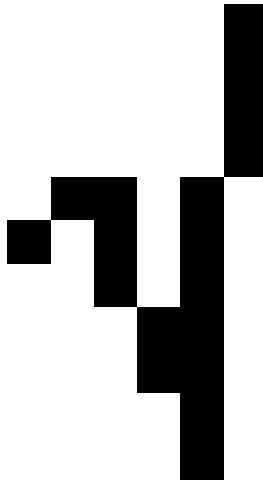
The TLV2252 and TLV2254 are dual and quadruple low-voltage operational amplifiers from Texas Instruments. Both devices exhibit rail-to-rail output performance for increased dynamic range in single- or split-supply applications. The TLV225x family consumes only 34 μA of supply current per channel. This micropower operation makes them good choices for battery-powered applications. This family is fully characterized at 3 V and 5 V and is optimized for low-voltage applications. The noise performance has been dramatically improved over previous generations of CMOS amplifiers. The TLV225x has a noise level of 19 $\text{nV}/\sqrt{\text{Hz}}$ at 1kHz, four times lower than competitive micropower solutions.

The TLV225x, exhibiting high input impedance and low noise, are excellent for small-signal conditioning for high-impedance sources, such as piezoelectric transducers. Because of the micropower dissipation levels combined with 3-V operation, these devices work well in hand-held monitoring and remote-sensing applications. In addition, the rail-to-rail output feature with single or split supplies makes this family a great choice when interfacing with analog-to-digital converters (ADCs). For precision applications, the TLV225xA family is available and has a maximum input offset voltage of 850 μV .

The TLV2252/4 also make great upgrades to the TLV2322/4 in standard designs. They offer increased output dynamic range, lower noise voltage, and lower input offset voltage. This enhanced feature set allows them to be used in a wider range of applications. For applications that require higher output drive and wider input voltage range, see the TLV2432 and TLV2442 devices. If your design requires single amplifiers, please see the TLV2211/21/31 family. These devices are single rail-to-rail operational amplifiers in the SOT-23 package. Their small size and low power consumption, make them ideal for high density, battery-powered equipment.

Key Features

Output Swing Includes Both Supply Rails



Low Noise...19 nV/

$\overline{\text{Hz}}$ Typ at $f = 1 \text{ kHz}$

Low Input Bias Current...1 pA Typ

Fully Specified for Both Single-Supply and Split-Supply Operation

Very Low Power...34 μA Per Channel Typ

Common-Mode Input Voltage Range Includes Negative Rail

Low Input Offset Voltage
850 μV Max at $T_A = 25^\circ\text{C}$

Wide Supply Voltage Range
2.7 V to 8 V

Macromodel Included

Available in Q-Temp Automotive
HighRel Automotive Applications
Configuration Control / Print Support
Qualification to Automotive Standards

Advanced LinCMOS is a trademark of Texas Instruments.



Recommended For You

TLC27M2CP

Texas Instruments, Inc

DIP8

TLV3501AIDR

Texas Instruments, Inc

SOP8

TL071ACP

Texas Instruments, Inc

DIP-8

TL062CDR

Texas Instruments, Inc

SOP8

TLE2142IP

Texas Instruments, Inc

DIP8

TLC272AID

Texas Instruments, Inc

SOP-8

TLV3502AQDCNRQ1

Texas Instruments, Inc

SOT23-8

TL084CD

Texas Instruments, Inc

SOP14

TLV2711DBVR

Texas Instruments, Inc

SOT23-5

TLC074CD

Texas Instruments, Inc

SOP14

TLC2272ACD

Texas Instruments, Inc

SOP-8

TLC2272AIDR

Texas Instruments, Inc

SOP8

TLV2462ID

Texas Instruments, Inc

SOP-8

TLV2471QDBVRQ1

Texas Instruments, Inc

SOT23-5

TLV23811DBVR

Texas Instruments, Inc

SOT23-5