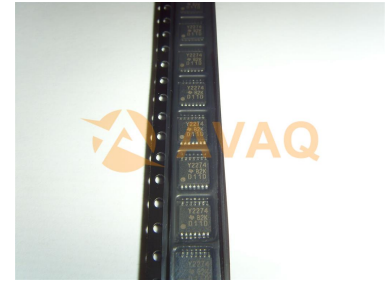



**Op Amp Quad Low Noise Amplifier R-R O/P $\pm 8V/16V$ 14-Pin
TSSOP T/R**



Images are for reference only

[Inquiry](#)

Manufacturer:	<u>Texas Instruments, Inc</u>
Package/Case:	TSSOP14
Product Type:	Amplifier ICs
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active

General Description

The TLC2272 and TLC2274 are dual and quadruple operational amplifiers from Texas Instruments. Both devices exhibit rail-to-rail output performance for increased dynamic range in single- or split-supply applications. The TLC227x family offers 2 MHz of bandwidth and 3 V/ μ s of slew rate for higher-speed applications. These devices offer comparable AC performance while having better noise, input offset voltage, and power dissipation than existing CMOS operational amplifiers. The TLC227x has a noise voltage of 9 nV/ $\sqrt{\text{Hz}}$, two times lower than competitive solutions.

The TLC227x family of devices, exhibiting high input impedance and low noise, is excellent for small-signal conditioning for high-impedance sources such as piezoelectric transducers. Because of the micropower dissipation levels, 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 TLC227xA family is available with a maximum input offset voltage of 950 μ V. This family is fully characterized at 5 V and ± 5 V.

The TLC227x also make great upgrades to the TLC27x 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 the design requires single amplifiers, see the TLV2211, TLV2221 and TLV2231 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: $9 \text{ nV}/\sqrt{\text{Hz}}$ Typical at $f = 1 \text{ kHz}$

Low-Input Bias Current: 1-pA Typical

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

Common-Mode Input Voltage Range Includes Negative Rail

High-Gain Bandwidth: 2.2-MHz Typical

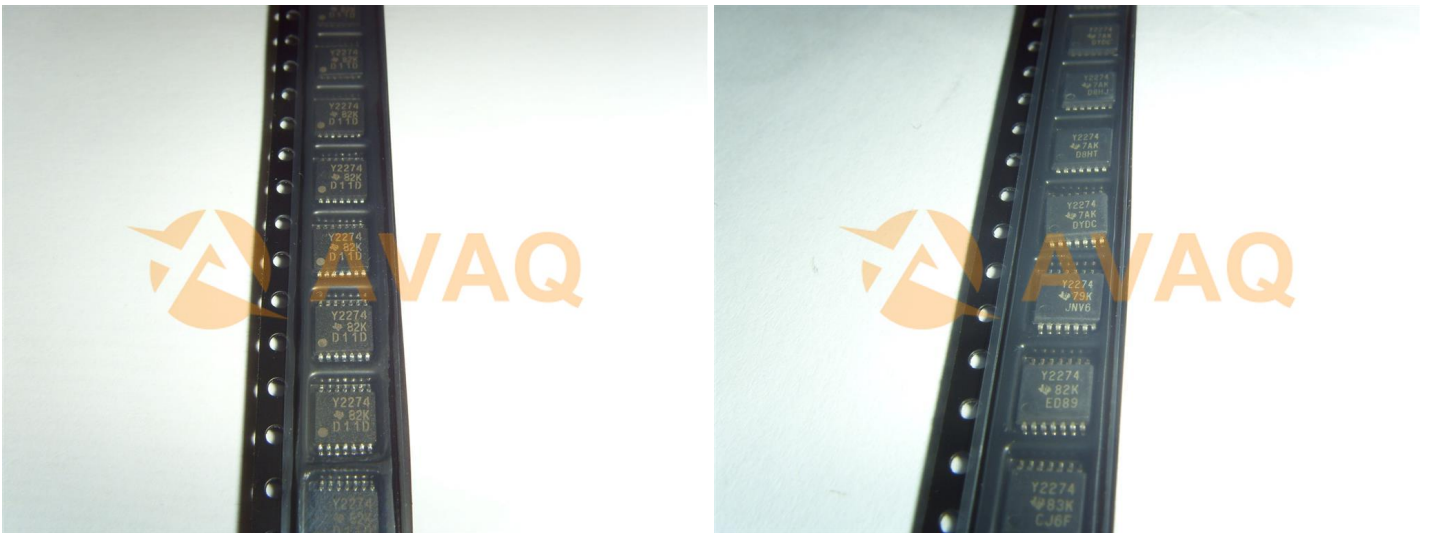
High Slew Rate: $3.6\text{-V}/\mu\text{s}$ Typical

Low Input Offset Voltage: $950 \mu\text{V}$ Maximum at $T_A = 25^\circ\text{C}$

Macromodel Included

Performance Upgrades for the TLC272 and TLC274

Available in Q-Temp Automotive



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

TLV2381IDBVR

Texas Instruments, Inc
SOT23-5