

#### Op Amp Dual GP R-R I/O ±8V/16V 8-Pin PDIP Tube

Manufacturer:	Texas Instruments, Inc.
Package/Case:	DIP-8
Product Type:	Amplifier ICs
RoHS:	RoHS Compliant/Lead free Works
Lifecycle:	Active



Images are for reference only

**General Description** 

The TLV237x single-supply operational amplifiers provide rail-to-rail input and output capability. The TLV237x takes the minimum operating supply voltage down to 2.7 V over the extended industrial temperature range while adding the rail-to-rail output swing feature. The TLV237x also provides 3-MHz bandwidth from only 550  $\mu$ A. The maximum recommended supply voltage is 16 V, which allows the devices to be operated from (±8-V supplies down to ±1.35 V) a variety of rechargeable cells.

The CMOS inputs enable use in high-impedance sensor interfaces, with the lower voltage operation making an ideal alternative for the TLC227x in batterypowered applications. The rail-to-rail input stage further increases its versatility. The TLV237x is the seventh member of a rapidly growing number of RRIO products available from TI, and it is the first to allow operation up to 16-V rails with good ac performance.

All members are available in PDIP and SOIC with the singles in the small SOT-23 package, duals in the MSOP, and quads in the TSSOP package. The 2.7-V operation makes the TLV237x compatible with Li-Ion powered systems and the operating supply voltage range of many micro-power microcontrollers available today including TI's MSP430.

#### **Key Features**

Rail-to-Rail Input and Output

Wide Bandwidth: 3 MHz

High Slew Rate: 2.4 V/µs

Supply Voltage Range: 2.7 V to 16 V

Supply Current: 550 µA/Channel

Low-Power Shutdown Mode IDD(SHDN): 25 µA/Channel

Input Noise Voltage: 39 nV/√Hz

Input Bias Current: 1 pA

Specified Temperature Range: ?40°C to +125°C (Industrial Grade)

Ultra-Small Packaging: 5- or 6-Pin SOT-23 (TLV2370, TLV2371)

8- or 10-Pin MSOP (TLV2372, TLV2373)

#### Description

The TLV237x single-supply operational amplifiers provide rail-to-rail input and output capability. The TLV237x takes the minimum operating supply voltage down to 2.7 V over the extended industrial temperature range while adding the rail-to-rail output swing feature. The TLV237x also provides 3-MHz bandwidth from only 550  $\mu$ A. The maximum recommended supply voltage is 16 V, which allows the devices to be operated from (±8-V supplies down to ±1.35 V) a variety of rechargeable cells.

The CMOS inputs enable use in high-impedance sensor interfaces, with the lower voltage operation making an ideal alternative for the TLC227x in batterypowered applications. The rail-to-rail input stage further increases its versatility. The TLV237x is the seventh member of a rapidly growing number of RRIO products available from TI, and it is the first to allow operation up to 16-V rails with good ac performance.

All members are available in PDIP and SOIC with the singles in the small SOT-23 package, duals in the MSOP, and quads in the TSSOP package. The 2.7-V operation makes the TLV237x compatible with Li-Ion powered systems and the operating supply voltage range of many micro-power microcontrollers available today including TI's MSP430.

## **Recommended For You**

TLC27M2CP	TLV3501AIDR	TL071ACP
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
DIP8	SOP8	DIP-8
TL062CDR	TLE2142IP	TLC272AID
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
SOP8	DIP8	SOP-8
TLV3502AQDCNRQ1	TL084CD	TLV2711DBVR
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
SOT23-8	SOP14	SOT23-5

## AVAQ SEMICONDUCTOR CO., LIMITED

#### TLC074CD

Texas Instruments, Inc

SOP14

### **TLV2462ID**

Texas Instruments, Inc

SOP-8

### TLC2272ACD

Texas Instruments, Inc

SOP-8

# TLV2471QDBVRQ1

Texas Instruments, Inc SOT23-5

## TLC2272AIDR

Texas Instruments, Inc SOP8

### TLV2381IDBVR

Texas Instruments, Inc SOT23-5