
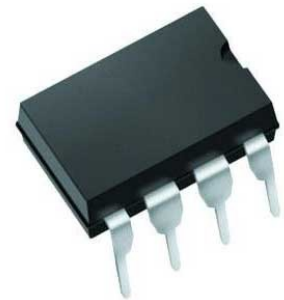


Op Amp Single Wideband Amplifier $\pm 8V/16V$ 8-Pin PDIP Tube

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



Images are for reference only

[Inquiry](#)

General Description

The first members of TI's new BiMOS general-purpose operational amplifier family are the TLC08x. The BiMOS family concept is simple: provide an upgrade path for BiFET users who are moving away from dual-supply to single-supply systems and demand higher ac and dc performance. With performance rated from 4.5 V to 16 V across commercial (0°C to 70°C) and an extended industrial temperature range (-40°C to 125°C), BiMOS suits a wide range of audio, automotive, industrial, and instrumentation applications. Familiar features like offset nulling pins, and new features like MSOP PowerPAD packages and shutdown modes, enable higher levels of performance in a variety of applications.

Developed in TI's patented LBC3 BiCMOS process, the new BiMOS amplifiers combine a very high input impedance, low-noise CMOS front end with a high-drive bipolar output stage, thus providing the optimum performance features of both. AC performance improvements over the TL08x BiFET predecessors include a bandwidth of 10 MHz (an increase of 300%) and voltage noise of 8.5 nV/ $\sqrt{\text{Hz}}$ (an improvement of 60%). DC improvements include an ensured V_{ICR} that includes ground, a factor of 4 reduction in input offset voltage down to 1.5 mV (maximum) in the standard grade, and a power supply rejection improvement of greater than 40 dB to 130 dB. Added to this list of impressive features is the ability to drive $\pm 50\text{-mA}$ loads comfortably from an ultrasmall-footprint MSOP PowerPAD package, which positions the TLC08x as the ideal high-performance general-purpose operational amplifier family.

For the most current package and ordering information, see the Package Option Addendum at the end of this data sheet, or see the TI web site at www.ti.com.

Key Features

Wide Bandwidth: 10 MHz

High Output Drive:
 I_{OH} : 57 mA at $V_{DD} - 1.5$ V

I_{OL} : 55 mA at 0.5 V

High Slew Rate:
 $SR+$: 16 V/ μ s

$SR-$: 19 V/ μ s

Wide Supply Range: 4.5 V to 16 V

Supply Current: 1.9 mA/Channel

Ultralow Power Shutdown Mode:
 I_{DD} : 125 μ A/Channel

Low Input Noise Voltage: 8.5 nV/ $\sqrt{\text{Hz}}$

Input Offset Voltage: 60 μ V

Ultra-Small Packages:
8- or 10-Pin MSOP (TLC080/1/2/3)

PowerPAD is a trademark of Texas Instruments.

All other trademarks are the property of their respective owners.

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