


Audio Amp Speaker 2-CH Stereo Class-AB Automotive 16-Pin SOIC Tube



Images are for reference only

[Inquiry](#)

Manufacturer:	Texas Instruments, Inc
Package/Case:	SOP16
Product Type:	Amplifier ICs
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active

General Description

The TLV277x CMOS operational amplifier family combines high slew rate and bandwidth, rail-to-rail output swing, high output drive, and excellent dc precision. The device provides 10.5 V/ μ s of slew rate and 5.1 MHz of bandwidth while only consuming 1 mA of supply current per channel. This ac performance is much higher than current competitive CMOS amplifiers. The rail-to-rail output swing and high output drive make these devices a good choice for driving the analog input or reference of analog-to-digital converters. These devices also have low distortion while driving a 600- Ω load for use in telecom systems.

These amplifiers have a 360- μ V input offset voltage, a 17 nV/ $\sqrt{\text{Hz}}$ input noise voltage, and a 2-pA input bias current for measurement, medical, and industrial applications. The TLV277x family is also specified across an extended temperature range (-40°C to 125°C), making it useful for automotive systems, and the military temperature range (-55°C to 125°C), for military systems.

These devices operate from a 2.5-V to 5.5-V single supply voltage and are characterized at 2.7 V and 5 V. The single-supply operation and low power consumption make these devices a good solution for portable applications. The following table lists the packages available.

Key Features

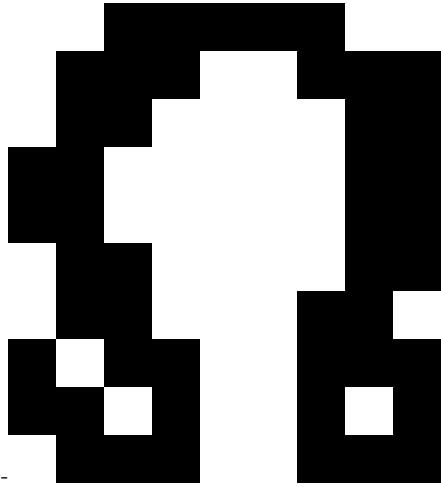
High Slew Rate...10.5 V/ μ s Typ

High-Gain Bandwidth...5.1 MHz Typ

Supply Voltage Range 2.5 V to 5.5 V

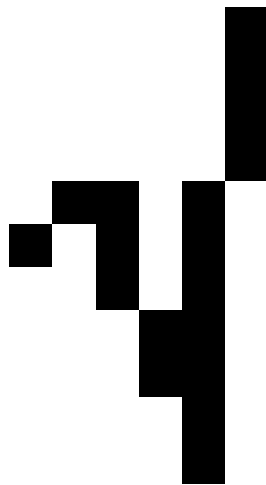
Rail-to-Rail Output

360 μ V Input Offset Voltage



Low Distortion Driving 600- 0.005% THD+N

1 mA Supply Current (Per Channel)



17 nV/ Hz Input Noise Voltage

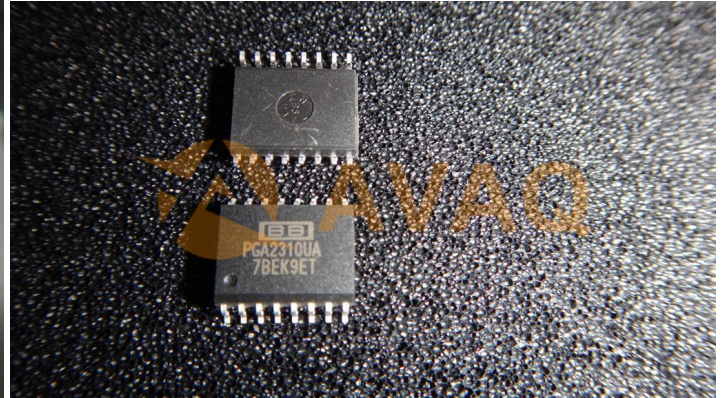
2 pA Input Bias Current

Characterized From TA = -55°C to 125°C

Available in MSOP and SOT-23 Packages

Micropower Shutdown Mode...IDD < 1 μA

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



Recommended For You

PGA2311U

Texas Instruments, Inc
SOP16

PGA2320IDW

Texas Instruments, Inc
SOP16

PGA2310PA

Texas Instruments, Inc
DIP16

PGA4311UA

Texas Instruments, Inc
SOP28

PGA4311U

Texas Instruments, Inc
SOP28

PGA2500IDBR

Texas Instruments, Inc
SSOP28

PGA2310UA/1K

Texas Instruments, Inc
SOP16

PCMI798DB

Texas Instruments, Inc
SSOP28

PCMI681PWPR

Texas Instruments, Inc
HTSSOP28

PCMI863DBT

Texas Instruments, Inc
TSSOP30

TAS5142DKD

Texas Instruments, Inc
HSSOP36

PCMI789PW

Texas Instruments, Inc
TSSOP24

LM833DR

Texas Instruments, Inc
SOP-8

DRV134UA

Texas Instruments, Inc
SOP16

TAS5717PHPR

Texas Instruments, Inc
HTQFP48