

## THS4531AID

# Op Amp Single Low Power Amplifier R-R O/P $\pm 2.75$ V/5.5V 8-Pin SOIC Tube

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



## **General Description**

The THS4531A device is a low-power, fully differential amplifier with input common-mode range below the negative rail and rail-to-rail output. The device is designed for low-power data acquisition systems and high-density applications where power consumption and dissipation is critical. The device features accurate output common-mode control that allows for DC coupling when driving analog-to-digital converters (ADCs). This control, coupled with the input common-mode range below the negative rail and rail-to-rail output, allows for easy interface from single-ended ground-referenced signal sources to successive-approximation registers (SARs), and delta-sigma ( $\Delta\Sigma$ ) ADCs using only single-supply 2.5-V to 5-V power. The THS4531A is also a valuable tool for general-purpose, low-power differential signal conditioning applications.

#### **Key Features**

UltraLow-Power: Voltage: 2.5 V to 5.5 V

Current: 250µA

Power-Down Mode: 0.5 µA(Typical)

Fully DifferentialArchitecture

Bandwidth: 36 MHz (Av = 1 V/V)

Slew Rate: 200V/µs

THD: -120 dBc at 1 kHz (1 VRMS,RL= 2 k?)

Input VoltageNoise: 10 nV/ $\sqrt{\text{Hz}}$  (f = 1 kHz)

High DCAccuracy: VOS:  $\pm 100 \mu V$ 

VOS Drift: ±3 µV/?C (-40°C to+125°C)

AOL: 114dB

Rail-to-Rail Output(RRO)

Negative Rail Input (NRI)

Output Common-Mode Control

8-Pin SOIC (D) and VSSOP (DGK)

10-Pin WQFN (RUN)

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## **Recommended For You**

THS3092D	THS7316DR	THS41311DGNR
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
SOP-8	SOP-8	MSOP8
THS4011CD	THS7374IPW	THS6184RHFR
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
SOP	TSSOP14	QFN

#### THS4503IDGN

Texas Instruments, Inc

MSOP8

#### THS4130IDGK

Texas Instruments, Inc

MSOP8

## THS4281D

Texas Instruments, Inc

SOIC-8

#### THS7376IPWR

Texas Instruments, Inc

TSSOP14

### THS7353PW

Texas Instruments, Inc TSSOP20

## THS4631D

Texas Instruments, Inc SOP-8

#### **THS7314D**

Texas Instruments, Inc SOP8

### THS4551IRGIR

Texas Instruments, Inc VQFN16

## THS3061DGN

Texas Instruments, Inc MSOP8