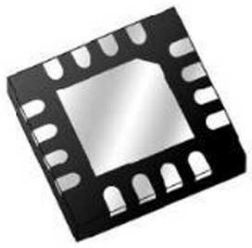
THS4520RGTR

SP Amp DIFF AMP Single R-R O/P ±2.625V/5.25V 16-Pin VQFN EP T/R

Manufacturer:	Texas Instruments, Inc
Package/Case:	QFN16
Product Type:	Amplifier ICs
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active



Images are for reference only

Inquiry

General Description

The THS4520 is a wideband, fully differential operational amplifier designed for 5-V data acquisition systems. It has very low noise at 2 nV/ load. The slew rate is 570 V/µs, andwith a settling time of 7 ns to 0.1% (2-V step), it is ideal for data acquisition applications. It is designed for unity gain stability.

To allow for dc coupling to ADCs, its unique output common-mode control circuit maintains the output common-mode voltage within 0.25 mV offset (typical) from the set voltage. The common-mode set point defaults to mid-supply by internal circuitry, which may be over-driven from an external source. The input and output are optimized for best performance with their common-mode voltages set to mid-supply. Along with high performance at low power supply voltage, this makes for extremely high performance single supply 5-V and 3.3-V data acquisition systems.

The THS4520 is offered in a Quad 16-pin leadless QFN package (RGT), and is characterized for operation over the full industrial temperature range from –40°C to 85°C.

Key Features

Fully Differential Architecture With Rail-to-Rail Outputs

Centered Input Common-mode Range

Minimum Gain of 1 V/V (0 dB)

Bandwidth: 620 MHz

Slew Rate: 570 V/µs

0.1% Settling Time: 7 ns

HD2: –115 dBc at 100 kHz, VOD = 8 VPP

HD3: –123 dBc at 100 kHz, VOD = 8 VPP

Input Voltage Noise: 2 nV/Hz (f >10 kHz)

Output Common-Mode Control

Power Supply:

Voltage: 3.3 V (±1.65 V) to 5 V (±2.5 V)

Current: 14.2 mA

Power-Down Capability: 15 µA

APPLICATIONS

5-V and 3.3-V Data Acquisition Systems

Wireless Communication

Test and Measurement

Voice Processing Systems

Recommended For You

THS3092D

Texas Instruments, Inc

SOP-8

THS7316DR

Texas Instruments, Inc

SOP-8

THS4131IDGNR

Texas Instruments, Inc

MSOP8

THS4011CD

Texas Instruments, Inc

SOP

THS7374IPW

Texas Instruments, Inc

TSSOP14

THS6184RHFR

Texas Instruments, Inc

QFN

THS4503IDGN

Texas Instruments, Inc

MSOP8

THS7376IPWR

Texas Instruments, Inc

TSSOP14

THS7314D

Texas Instruments, Inc

SOP8

THS4130IDGK

Texas Instruments, Inc

MSOP8

THS7353PW

Texas Instruments, Inc

TSSOP20

THS45511RGTR

Texas Instruments, Inc

VQFN16

THS4281D

Texas Instruments, Inc

SOIC-8

THS4631D

Texas Instruments, Inc

SOP-8

THS3061DGN

Texas Instruments, Inc

MSOP8