

Operational Amplifier, Single, 1 Amplifier, 2.5 MHz, 4 V/ μ s, 4.75V to 16V, DIP, 8 Pins

Manufacturers	Analog Devices, Inc
Package/Case	DIP-8
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC1050CN8#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC1050 is a high performance, low cost zero-drift operational amplifier. The unique achievement of the LTC1050 is that it integrates on-chip the two sample-and-hold capacitors usually required externally by other chopper amplifiers. Further, the LTC1050 offers better combined overall DC and AC performance than is available from other chopper stabilized amplifiers with or without internal sample-and-hold capacitors.

The LTC1050 has an offset voltage of 0.5 μ V, drift of 0.01 μ V/ $^{\circ}$ C, DC to 10Hz, input noise voltage of 1.6 μ VP-P and a typical voltage gain of 160dB. The slew rate of 4V/ μ s and a gain bandwidth product of 2.5MHz are achieved with only 1mA of supply current.

Overload recovery times from positive and negative saturation conditions are 1.5ms and 3ms respectively, which represents an improvement of about 100 times over chopper amplifiers using external capacitors. Pin 5 is an optional external clock input, useful for synchronization purposes.

The LTC1050 is available in standard 8-pin metal can, plastic and ceramic dual-in-line packages as well as an SO-8 package. The LTC1050 can be an improved plug-in replacement for most standard op amps.

Features

No External Components Required

Noise Tested and Guaranteed

Low Aliasing Errors

Maximum Offset Voltage: 5 μ V

Maximum Offset Voltage Drift: 0.5 μ V/ $^{\circ}$ C

Low Noise: 1.6 μ Vp-p (0.1Hz to 10Hz)

Minimum Voltage Gain: 130dB

Minimum PSRR: 125dB

Minimum CMRR: 120dB

Low Supply Current: 1mA

Single Supply Operation: 4.75V to 16V

Input Common Mode Range Includes Ground

Output Swings to Ground

Typical Overload Recovery Time: 3ms

Application

Thermocouple Amplifiers

Electronic Scales

Medical Instrumentation

Strain Gauge Amplifiers

High Resolution Data Acquisition

DC Accurate R, C Active Filters



Related Products



[LTC1151CSW#PBF](#)

Analog Devices, Inc
SOIC-16



[LT1498CS8](#)

Analog Devices, Inc
SOP-8



[LTC2053CMS8](#)

Analog Devices, Inc
MSOP8



[LTC1150CN8](#)

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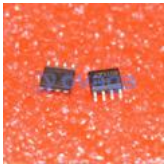
[LT1491ACS](#)

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SOP14



[LT6105IMS8](#)

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[LTC1150CS8](#)

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