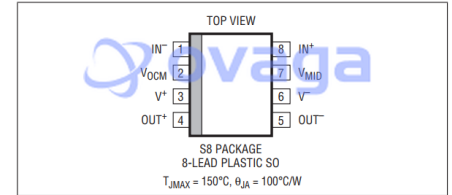


Differential Amplifier, Low Noise, 1 Amplifiers, 35 mV, 12.6 dB, 20 MHz, -40 °C, 85 °C

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	SOP-8
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	

## PIN CONFIGURATION



Images are for reference only

Please submit RFQ for LT6600IS8-20#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LT6600-20 combines a fully differential amplifier with a 4th order 20MHz lowpass filter approximating a Chebyshev frequency response. Most differential amplifiers require many precision external components to tailor gain and bandwidth. In contrast, with the LT6600-20, two external resistors program differential gain, and the filter's 20MHz cutoff frequency and passband ripple are internally set. The LT6600-20 also provides the necessary level shifting to set its output common mode voltage to accommodate the reference voltage requirements of A/Ds.

Using a proprietary internal architecture, the LT6600-20 integrates an antialiasing filter and a differential amplifier/ driver without compromising distortion or low noise performance. At unity gain the measured in band signal-to-noise ratio is an impressive 76dB. At higher gains the input referred noise decreases so the part can process smaller input differential signals without significantly degrading the output signal-to-noise ratio.

The LT6600-20 also features low voltage operation. The differential design provides outstanding performance for a 2VP-P signal level while the part operates with a single 3V supply.

The LT6600-20 is packaged in an SO-8 and is pin compatible with stand alone differential amplifiers.

## Features

Programmable Differential Gain via Two External Resistors

Adjustable Output Common Mode Voltage

Operates and Specified with 3V, 5V,  $\pm 5V$  Supplies

0.5dB Ripple 4th Order Lowpass Filter with 20MHz Drop-in Replacement for Differential Amplifiers Cutoff

76dB S/N with 3V Supply and 2VP-P Output

Low Distortion, 2VP-P, 800 $\Omega$  Load

2.5MHz: 83dBc 2nd, 88dBc 3rd

20MHz: 63dBc 2nd, 64dBc 3rd

Fully Differential Inputs and Outputs

SO-8 Package

Compatible with Popular Differential Amplifier Pinouts

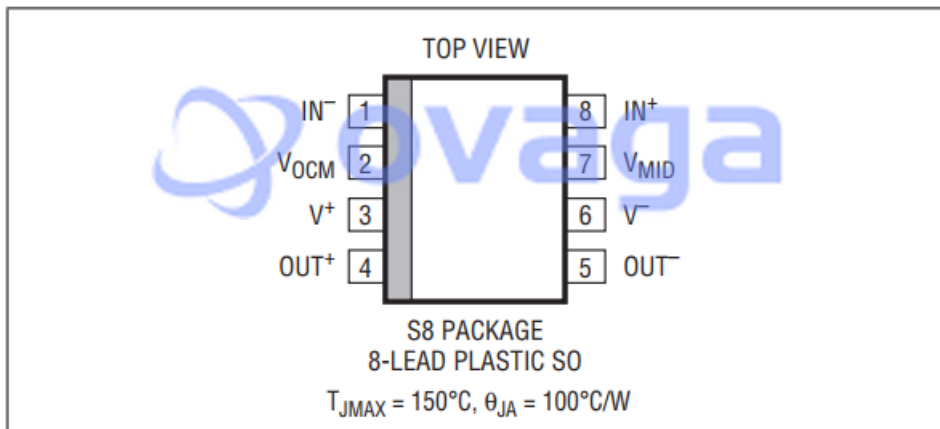
## Application

High Speed ADC Antialiasing and DAC Smoothing in Networking or Cellular Base Station Applications

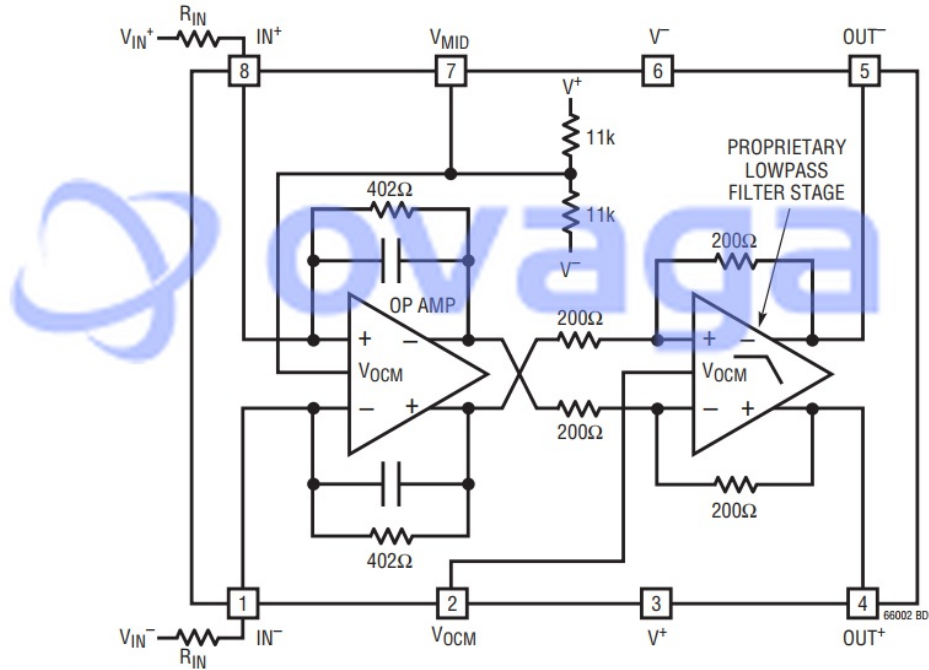
High Speed Test and Measurement Equipment

Medical Imaging

## PIN CONFIGURATION



# BLOCK DIAGRAM

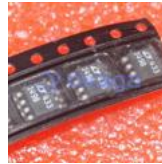


## Related Products



[LTC1151CSW#PBF](#)

Analog Devices, Inc  
SOIC-16



[LT1498CS8](#)

Analog Devices, Inc  
SOP-8



[LTC2053CMS8](#)

Analog Devices, Inc  
MSOP8



[LTC1150CN8](#)

Analog Devices, Inc  
DIP8



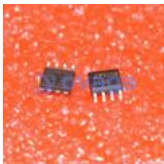
[LT1491ACS](#)

Analog Devices, Inc  
SOP14



[LT6105IMS8](#)

Analog Devices, Inc  
MSOP-8



[LTC1150CS8](#)

Analog Devices, Inc  
SOP8



[LT1013CN8](#)

Analog Devices, Inc  
DIP-8