

# LTC6406IMS8E#PBF

Data Sheet

SP Amp DIFF AMP Single R-R I/P 3.6V Automotive 8-Pin MSOP EP Tube

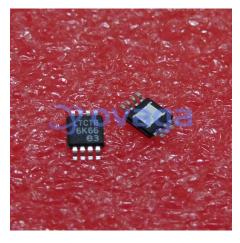
Manufacturers Analog Devices, Inc

Package/Case 8MSOP

Product Type Amplifier ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for LTC6406IMS8E#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The LTC6406 is a very low noise, low distortion, fully differential input/output amplifier optimized for 3V, single supply operation. The LTC6406 input common mode range is rail-to-rail, while the output common mode voltage is independently adjustable by applying a voltage on the VOCM pin. This makes the LTC6406 ideal for level shifting signals with a wide common mode range for driving 12-bit to 16-bit single supply, differential input ADCs.

A 3GHz gain-bandwidth product results in 70dB linearity for 50MHz input signals. The LTC6406 is unity gain stable and the closed-loop bandwidth extends from DC to 800MHz. The output voltage swing extends from near-ground to 2V, to be compatible with a wide range of ADC converter input requirements. The LTC6406 draws only 18mA, and has a hardware shutdown feature which reduces current consumption to  $300\mu$ A.

The LTC6406 is available in a compact 3mm x 3mm 16-pin leadless QFN package as well as an 8-lead MSOP package, and operates over a – 40°C to 85°C temperature range.

#### **Features**

Low Noise: 1.6nV/√Hz RTI

Low Power: 18mA at 3V

Low Distortion (HD2/HD3):

Rail-to-Rail Differential Input

2.7V to 3.5V Supply Voltage Range

Fully Differential Input and Output

Adjustable Output Common Mode Voltage

800MHz-3dB Bandwidth with>

Gain-Bandwidth Product: 3GHz

Low Power Shutdown

Available in 8-Lead MSOP and Tiny 16-Lead 3mm x 3mm x 0.75mm QFN Packages

# **Application**

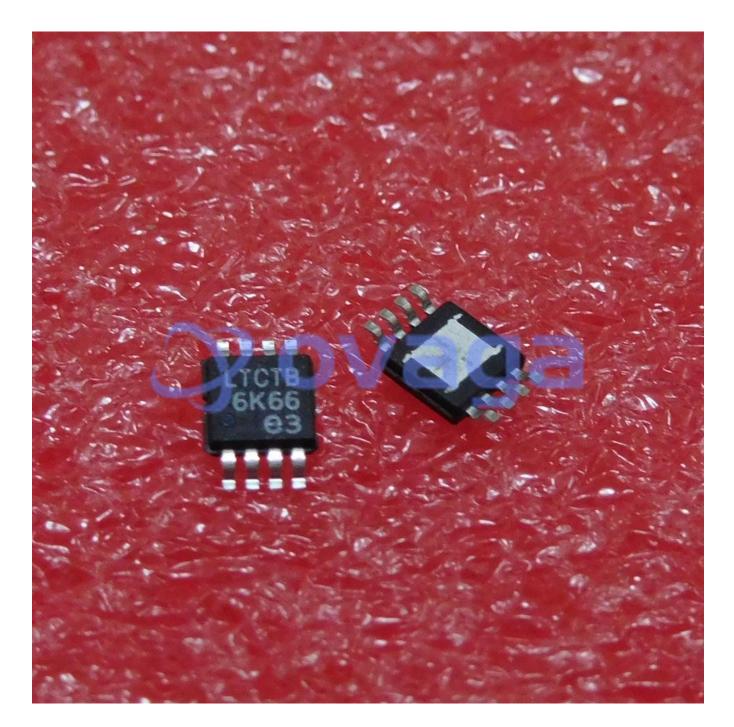
Differential Input ADC Driver

Single-Ended to Differential Conversion

Level-Shifting Ground-Referenced Signals

Level-Shifting VCC-Referenced Signals

High-Linearity Direct Conversion Receivers



### **Related Products**



LTC1151CSW#PBF
Analog Devices, Inc
SOIC-16



LTC2053CMS8

Analog Devices, Inc
MSOP8



Analog Devices, Inc SOP-8

LT1498CS8



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