

LTC1865AIMS#PBF

Data Sheet

2-Channel Single ADC SAR 250ksps 16-bit Serial Automotive 10-Pin MSOP Tube

Manufacturers <u>Analog Devices, Inc</u>

Package/Case MSOP-1

Product Type Data Conversion ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for LTC1865AIMS#PBF or <a href="mailto:Email

RFO

General Description

The LTC1864/LTC1865 are 16-bit A/D converters that are offered in MSOP and SO-8 packages and operate on a single 5V supply. At 250 ksps, the supply current is only $850 \mu A$. The supply current drops at lower speeds because the LTC1864/LTC1865 automatically power down between conversions. These 16-bit switched capacitor successive approximation ADCs include sample-and-holds. The LTC1864 has a differential analog input with an adjustable reference pin. The LTC1865 offers a software-selectable 2-channel MUX and an adjustable reference pin on the MSOP version.

The 3-wire, serial I/O, small MSOP or SO-8 package and extremely high sample rate-to-power ratio make these ADCs ideal choices for compact, low power, high speed systems.

These ADCs can be used in ratiometric applications or with external references. The high impedance analog inputs and the ability to operate with reduced spans down to 1V full scale, allow direct connection to signal sources in many applications, eliminating the need for external gain stages.

Features

16-Bit 250ksps ADCs in MSOP Package

Single 5V Supply

Low Supply Current: 850µA (Typ)

Auto Shutdown Reduces Supply Current to 2µA at 1ksps

True Differential Inputs

1-Channel (LTC1864) or 2-Channel (LTC1865) Versions

SPI/MICROWIRETM Compatible Serial I/O

16-Bit Upgrade to 12-Bit LTC1286/LTC1298

Pin Compatible with 12-Bit LTC1860/LTC1861

Guaranteed Operation to +125°C (MSOP Package)

Application

High Speed Data Acquisition

Portable or Compact Instrumentation

Low Power Battery-Operated Instrumentation

Isolated and/or Remote Data Acquisition



Related Products



LTC1860IMS8#PBF
Analog Devices, Inc
MSOP-8



LTC23511UH-14#PBF
Analog Devices, Inc
QFN-32



LT1171CQ

Analog Devices, Inc TO-263



LTC2485IDD#PBF

Analog Devices, Inc DFN-10



LTC2418IGN#PBF

Analog Devices, Inc SSOP28



LTC2600CGN#PBF

Analog Devices, Inc SSOP16



LTC2642CMS-16#PBF

Analog Devices, Inc 10MSOP



LTC2203IUK

Analog Devices, Inc QFN48