

LTM9001IV-AA#PBF

Data Sheet

Ms-umodule, 16-bit, 130msps, 162mhz bpf, 50mhz bw, 20db gain umodule receiver

Manufacturers

Analog Devices, Inc

Package/Case

LGA81

Product Type

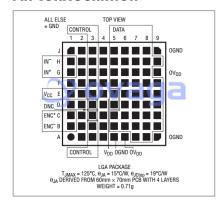
RF Receivers

RoHS

Pb-free Halide free

Lifecycle

PIN CONFIGURATION



Images are for reference only

Please submit RFQ for LTM9001IV-AA#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The LTM9001 is an integrated system in a package (SiP) that includes a high-speed 16-bit A/D converter, matching network, anti-aliasing filter and a low noise, differential amplifier with fixed gain. It is designed for digitizing wide dynamic range signals with an intermediate frequency (IF) range up to 300MHz. The amplifier allows either AC- or DC-coupled input drive. A lowpass or bandpass filter network can be implemented with various bandwidths. Contact Analog Devices regarding semi-custom configurations.

The LTM9001 is perfect for IF receivers in demanding communications applications, with AC performance that includes 72dBFS noise floor and 82dB spurious free dynamic range (SFDR) at 162.5MHz (LTM9001-AA).

The digital outputs can be either differential LVDS or single-ended CMOS. There are two format options for the CMOS outputs: a single bus running at the full data rate or two demultiplexed buses running at half data rate. A separate output power supply allows the CMOS output swing to range from 0.5V to 3.3V.

The differential ENC⁺ and ENC⁻ inputs may be driven with a sine wave, PECL, LVDS, TTL or CMOS inputs. An optional clock duty cycle stabilizer allows high performance at full speed with a wide range of clock duty cycles.

Applications

Features

Integrated 16-Bit, High-Speed ADC, Passive Filter and Fixed Gain Differential Amplifier

Up to 300MHz IF Range

Lowpass and Bandpass Filter Versions

Low Noise, Low Distortion Amplifiers

Fixed Gain: 8dB, 14dB, 20dB or 26dB

 $50\Omega,\,200\Omega$ or 400Ω Input Impedance

75dB SNR, 83dB SFDR (LTM9001-AD)

Integrated Bypass Capacitance, No External Components Required

Optional Internal Dither

Optional Data Output Randomizer

LVDS or CMOS Outputs

3.3V Single Supply

Power Dissipation: 1.65W

Clock Duty Cycle Stabilizer

11.25mm × 11.25mm × 2.32mm LGA Package

Lowpass and Bandpass Filter Versions

Fixed Gain: 8dB, 14dB, 20dB or 26dB

 50Ω , 200Ω or 400Ω Input Impedance

Application

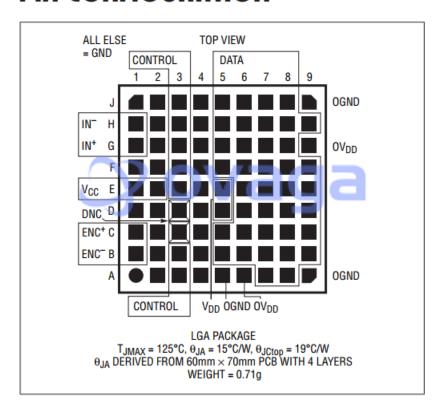
Telecommunications

High Sensitivity Receivers

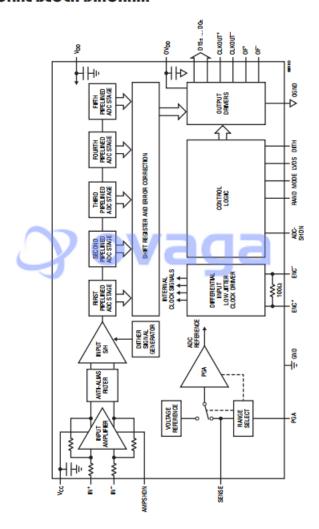
Cellular Base Stations

Spectrum Analyzers

PIN CONFIGURATION



FUNCTIONAL BLOCK DIAGRAM



Related Products



LTC5510IUF

Analog Devices, Inc QFN-16



LTC5510IUF#TRPBF

Analog Devices, Inc 16-WQFN



LT5538IDD

Analog Devices, Inc DFN8



LTP5902IPC-IPMA#PBF

Analog Devices, Inc SMD



LT5519EUF

Analog Devices, Inc QFN-16



LT5581IDDB

Analog Devices, Inc DFN8



LT5521EUF

Analog Devices, Inc QFN-16



LTP5901IPC-IPMA#PBF

Analog Devices, Inc **SMD**