

LTC2207IUK#PBF

Data Sheet

16-Bit, 105Msps ADC; Package: QFN; No of Pins: 48; Temperature Range: -40°C to $+85^{\circ}\mathrm{C}$

Manufacturers Analog Devices, Inc

Package/Case 48-WFQFN

Product Type Data Conversion ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for LTC2207IUK#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The LTC2207-14/LTC2206-14 are 105Msps/80Msps, sampling 14-bit A/D converters designed for digitizing high frequency, wide dynamic range signals up to input frequencies of 700MHz. The input range of the ADC can be optimized with the PGA front end.

The LTC2207-14/LTC2206-14 are perfect for demanding communications applications, with AC performance that includes 77.3dB SNR and 98dB spurious free dynamic range (SFDR). Ultralow jitter of 80fsRMS allows undersampling of high input frequencies with excellent noise performance. Maximum DC specs include ± 1.5 LSB INL, ± 1 LSB DNL (no missing codes) over temperature.

A separate output power supply allows the CMOS output swing to range from 0.5V to 3.6V.

The ENC+ and ENC- inputs may be driven differentially or single-ended 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.

BitsLTC2207-1414LTC2207-1616

Features

Sample Rate: 105Msps/80Msps

77.3dBFS Noise Floor

98dB SFDR

SFDR >82dB at 250MHz (1.5VP-P Input Range)

PGA Front End (2.25VP-P or 1.5VP-P Input Range)

700MHz Full Power Bandwidth S/H

Optional Internal Dither

Optional Data Output Randomizer

Single 3.3V Supply

Power Dissipation: 947mW/762mW

Optional Clock Duty Cycle Stabilizer

Out-of-Range Indicator

Pin-Compatible Family

105Msps: LTC2207 (16-Bit), LTC2207-14 (14-Bit)

80Msps: LTC2206 (16-Bit), LTC2206-14 (14-Bit)

65Msps: LTC2205 (16-Bit), LTC2205-14 (14-Bit)

40Msps: LTC2204 (16-Bit)

25Msps: LTC2203 (16-Bit) Single-Ended Clock

 $10 Msps: LTC 2202 \ (16\mbox{-Bit}) \ Single-Ended \ Clock$

48-Pin 7mm \times 7mm QFN Package

Application

Telecommunications

Receivers

Cellular Base Stations

Spectrum Analysis

Imaging Systems

ATE





Related Products



LTC1860IMS8#PBF

Analog Devices, Inc MSOP-8



LT1171CQ

Analog Devices, Inc TO-263



LTC2485IDD#PBF

Analog Devices, Inc DFN-10



LTC2418IGN#PBF

Analog Devices, Inc SSOP28



LTC2351IUH-14#PBF

Analog Devices, Inc QFN-32



LTC2600CGN#PBF

Analog Devices, Inc SSOP16



LTC2642CMS-16#PBF

Analog Devices, Inc 10MSOP



LTC1865AIMS#PBF

Analog Devices, Inc MSOP-1