

AD8348ARUZ

Quadrature Dmod 75MHz 28-Pin TSSOP Tube

Manufacturer:	Analog Devices, Inc
Package/Case:	TSSOP28
Product Type:	RF Integrated Circuits
RoHS:	RoHS Compliant/Lead free Works
Lifecycle:	Active



Images are for reference only

General Description

The AD8348 is a broadband quadrature demodulator with an integrated intermediate frequency (IF), variable gain amplifier (VGA), and integrated baseband amplifiers. It is suitable for use in communications receivers, performing quadrature demodulation from IF directly to baseband frequencies. The baseband amplifiers are designed to interface directly with dual-channel ADCs, such as the AD9201, AD9283, and AD9218, for digitizing and post-processing. The IF input signal is fed into two Gilbert cell mixers through an X-AMP® VGA. The IF VGA provides 44 dB of gain control. A precision gain control circuit sets a linear-in-decibel gain characteristic for the VGA and provides temperature compensation. The LO quadrature phase splitter employs a divide-by-2 frequency divider to achieve high quadrature accuracy and amplitude balance over the entire operating frequency range.

The AD8348 is fabricated on an advanced bipolar process, operating on a single 3 or 5 volt supply, packaged in space saving 28 lead thin shrunk small outline (TSSOP) package and fully specified over the -40 to +85 C temperature range

Samples AD8348ARU and evaluation boards AD8348-EVAL are available

Other Modulator/Demodulator products AD8345250MHz – 1GHz RF/IF Modulator AD8346800MHz – 2.5GHz Modulator AD8347800MHz – 2.7GHz Demodulator AD8349700MHz – 2.7GHz Modulator

Key Features

50 MHz - 1000 MHz RF input range

- Integrated 45 dB linear-in-dB VGA IF amplifier
- Integrated baseband output amplifiers
- Demodulation bandwidth 75 MHz

Quadrature phase accuracy 0.5°

Amplitude balance 0.25 dB

Third order intercept IIP3 +28 dBm (min gain)

Noise figure 11 dB (max gain)

Low LO drive -10 dBm

Single supply 2.7 V to 5.5 V with power down





Recommended For You

ADF4153BCPZ	ADF5355BCPZ	AD8318ACPZ
Analog Devices, Inc	Analog Devices, Inc	Analog Devices, Inc
QFN	LFCSP32	LFCSP
AD6620ASZ	ADF4107BCPZ	ADL5513ACPZ-R7
Analog Devices, Inc	Analog Devices, Inc	Analog Devices, Inc
QFP	QFN	LFCSP-16
AD8319ACPZ	ADRF6755ACPZ	ADL5535ARKZ-R7
Analog Devices, Inc	Analog Devices, Inc	Analog Devices, Inc
LFCSP	QFN	SOT89
AD608AR	ADF4107BRUZ-REFL7	ADRF6780ACPZN
Analog Devices, Inc	Analog Devices, Inc	Analog Devices, Inc
SOP16	TSSOP16	QFN
AD8317ACPZ	AD608ARZ	AD8318ACPZ-REEL7

Analog Devices, Inc

SOP16

Analog Devices, Inc

Analog Devices, Inc

LFCSP