

AFE Modem 3 ADC 12bit 100-Pin MQFP

Manufacturer:	Analog Devices, Inc
Package/Case:	QFP
Product Type:	Data Conversion ICs
Lifecycle:	Obsolete



Images are for reference only

[Inquiry](#)

General Description

The transmit path interpolation filter provides upsampling factors of 12x or 16x with an output signal bandwidth as high as 8.4 MHz. The direct digital synthesizer (DDS) can generate carrier frequencies up to 65 MHz with 26 bits of frequency tuning resolution. The transmit DAC resolution is 12 bits and can run at sampling rates as high as 232 MSPS. Analog output scaling from 0 to 7.5 dB in 0.5 dB steps is available to preserve transmit path SNR when reduced output levels are required. The 12-bit ADC has excellent undersampling performance allowing it to deliver better than 10 ENOBs with IF inputs up to 75 MHz. The 12-bit IF ADC has a sampling rate of up to 33MHz, allowing it to process wideband signal inputs. Two programmable sigma delta DACs are available which can be used to control external components such as variable gain amplifiers (VGAs) or voltage-controlled tuners. The AD9877 integrates a CA port that enables a host processor to control the AD8321/AD8323 or AD8322/AD8327 programmable gain amplifier (PGA) cable drivers through the MxFE SPORT. The AD9877 is available in a 100-pin MQFP package. It offers enhanced receive path undersampling performance and lower cost, compared with the pin compatible AD9873. The AD9877 is specified over the extended industrial (-40oC to +85°C) temperature range.

Key Features

Low Cost 3.3 V CMOS MxFE

232 MHz Quadrature Digital Upconverter

12-Bit Direct IF DAC (TxDAC+)

Up to 65 MHz Carrier Frequency DDS

Programmable Sampling Clock Rates

Selectable Interpolation Filter

Analog Tx Output Level Adjust

12-Bit, 33 MSPS Direct IF ADC

Dual 8-Bit, 16.5 MSPS Sampling IQ ADCs

Two 12-Bit Sigma-Delta Auxiliary DACs

Direct Interface to AD8321/AD8325 or AD8322/AD8327

PGA Cable Driver



Recommended For You

AD7305BRZ

Analog Devices, Inc

SOP20

AD9910BSVZ

Analog Devices, Inc

TQFP100

AD9831ASTZ

Analog Devices, Inc

QFP

AD5447YRUZ

Analog Devices, Inc
TSSOP

AD5302BRMZ

Analog Devices, Inc
MSOP10

AD5531BRUZ

Analog Devices, Inc
TSSOP16

AD537JH

Analog Devices, Inc
CAN10

AD652AQ

Analog Devices, Inc
DIP

AD654JN

Analog Devices, Inc
DIP8

AD7740YRMZ

Analog Devices, Inc
MSOP8

AD9914BCPZ

Analog Devices, Inc
LFCSP

AD73311ARSZ

Analog Devices, Inc
SSOP20

AD7291BCPZ

Analog Devices, Inc
LFCSP20

AD9954YSVZ

Analog Devices, Inc
QFP

AD2S1205YSTZ

Analog Devices, Inc
LQFP44