
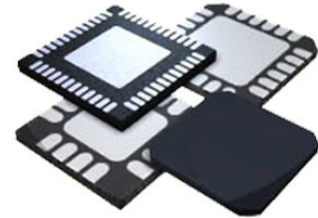


6Bit 0.5dBStep 31.5dB 40GHz 24-Pin LGA EP Cut Tape

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



Images are for reference only

[Inquiry](#)

General Description

The ADRF5730 is a silicon, 6-bit digital attenuator with 31.5 dB attenuation control range in 0.5 dB steps.

This device operates from 100 MHz to 40 GHz with better than 4.8 dB of insertion loss and excellent attenuation accuracy. The ADRF5730 has a radio frequency (RF) input power handling capability of 27 dBm average and 30 dBm peak for all states.

The ADRF5730 requires a dual supply voltage of +3.3 V and -3.3 V. The device features serial peripheral interface (SPI), parallel mode control, and complementary metal-oxide semiconductor (CMOS)-/low voltage transistor to transistor logic (LVTTL)-compatible controls.

The ADRF5730 is pin-compatible with the ADRF5720 low frequency cutoff version, which operates from 9 kHz to 40 GHz.

The ADRF5730 RF ports are designed to match a characteristic impedance of 50 Ω. For wideband applications, impedance matching on the RF transmission lines can further optimize high frequency insertion loss, return loss, and attenuation accuracy characteristics.

The ADRF5730 comes in a 24-terminal, 4 mm × 4 mm, RoHS-compliant, land grid array (LGA) package and operates from -40°C to +105°C.

Key Features

Ultrawideband frequency range: 100 MHz to 40 GHz

Attenuation range: 0.5 dB steps to 31.5 dB

Low insertion loss with impedance match

2.1 dB up to 18 GHz

2.9 dB up to 26 GHz

4.8 dB up to 40 GHz

Attenuation accuracy with impedance match

Typical step error with impedance match

High input linearity

P0.1dB insertion loss state: 30 dBm

P0.1dB other attenuation states: 27 dBm

IP3: 50 dBm typical

High RF input power handling: 27 dBm average, 30 dBm peak

Tight distribution in relative phase

No low frequency spurious signals

SPI and parallel mode control, CMOS/LVTTL compatible

RF settling time (0.1 dB of final RF output): 250 ns

24-terminal, 4 mm × 4 mm LGA package

Pin compatible with ADRF5720, low frequency cutoff version

Application

Industrial scanners

Test and instrumentation

Cellular infrastructure: 5G millimeter wave

Military radios, radars, electronic counter measures (ECMs)

Microwave radios and very small aperture terminals (VSATs)

Recommended For You

ADF4153BCPZ

Analog Devices, Inc
QFN

ADF5355BCPZ

Analog Devices, Inc
LFCSP32

AD8318ACPZ

Analog Devices, Inc
LFCSP

AD6620ASZ

Analog Devices, Inc
QFP

ADF4107BCPZ

Analog Devices, Inc
QFN

ADL5513ACPZ-R7

Analog Devices, Inc
LFCSP-16

AD8319ACPZ

Analog Devices, Inc
LFCSP

ADRF6755ACPZ

Analog Devices, Inc
QFN

ADL5535ARKZ-R7

Analog Devices, Inc
SOT89

AD608AR

Analog Devices, Inc

SOP16

ADF4107BRUZ-REEL7

Analog Devices, Inc

TSSOP16

ADRF6780ACPZN

Analog Devices, Inc

QFN

AD8317ACPZ

Analog Devices, Inc

LFCSP

AD608ARZ

Analog Devices, Inc

SOP16

AD8318ACPZ-REEL7

Analog Devices, Inc

LFCSP