
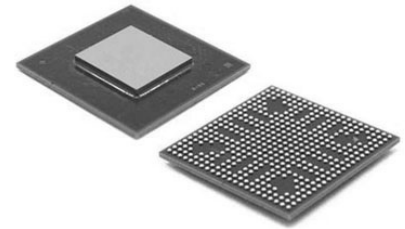


6Bit 0.5dBStep 31.5dB 3GHz 16-Pin LFCSP EP T/R

Manufacturer:	Analog Devices, Inc
Package/Case:	LFCSP-16
Product Type:	RF Integrated Circuits
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The HMC8073 is a 6-bit digital step attenuator (DSA), operating from 0.6 GHz to 3.0 GHz, that features 31.5 dB of attenuation range with 0.5 dB steps. The HMC8073 is implemented in a silicon process, offering a fast settling time, low power consumption, and high electrostatic discharge (ESD) robustness. The device features safe state transitions, allowing attenuation state changes without overshooting, and is optimized for excellent step accuracy and high power and high linearity over frequency and temperature range. The radio frequency (RF) input and output are internally matched to 50 Ω and do not require any external matching components. The design is bidirectional, and the RF input and output are interchangeable.

The external address feature of the HMC8073 allows users to control up to eight DSAs using a single bus. The DSA has an on-chip regulator that supports a wide supply operating range from 3.3 V to 5.0 V with no performance change in electrical characteristics. The HMC8073 incorporates a complementary metal-oxide semiconductor (CMOS)- and transistor transitory logic (TTL)- compatible interface that supports serial (3-wire) control of the attenuator.

The HMC8073 comes in an RoHS compliant, compact, 3 mm × 3 mm LFCSP package.

Key Features

Attenuation range: 0.5 dB LSB steps to 31.5 dB

Low insertion loss

1.1 dB to 1.0 GHz

1.5 dB to 2.0 GHz

Tight attenuation accuracy

Less than ± 0.25 dB (plus 3% of attenuation state)

Low phase shift error: 4° phase shift to 1.0 GHz

Bidirectional use: 30 dBm high power handling

Internal dc block on the RFIN/RFOUT pins

High linearity

P1dB: 31 dBm typical

Input IP3: 52 dBm typical

Safe state transitions

Serial interface with TTL/CMOS

Up to 8 devices on a single data bus

Single-supply operation: 3.3 V to 5.0 V

ESD sensitivity rating: Class 1C (1 kV human body model)

16-lead, 3 mm × 3 mm LFCSP package: 9 mm²

Application

Cellular infrastructure

Microwave radios

Very small aperture terminals

Test equipment and sensors

Recommended For You

HMC624ALP4E

Analog Devices, Inc

QFN24

HMC952ALP5GE

Analog Devices, Inc

QFN

HMC361S8GE

Analog Devices, Inc

SOP-8

HMC253AQS24E

Analog Devices, Inc

QFN

HMC346MS8G

Analog Devices, Inc

MSOP8

HMC1119LP4ME

Analog Devices, Inc

QFN

HMC659LC5

Analog Devices, Inc

QFN

HMC909LP4E

Analog Devices, Inc

QFN

HMC564LC4

Analog Devices, Inc

QFN

HMC1021LP4E

Analog Devices, Inc

QFN

HMC241AQS16E

Analog Devices, Inc

SSOP16

HMC424LP3E

Analog Devices, Inc

QFN

HMC662LP3E

Analog Devices, Inc

QFN

HMC8038LP4CE

Analog Devices, Inc

QFN16

HMC363S8G

Analog Devices, Inc

SOP8