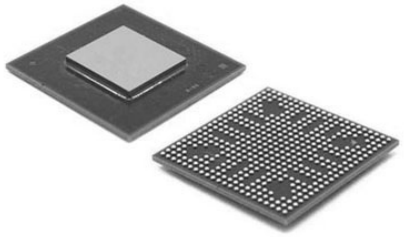
ADF4356BCPZ

Data Sheet

Clock Synthesizer / Jitter Cleaner 6.8GHz PLLVCO(upg ADF4355)

Manufacturers	Analog Devices, Inc
Package/Case	LFCSP32
Product Type	Clock Generators, PLLs, Frequency Synthesizers
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for ADF4356BCPZ or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The ADF4356 allows implementation of fractional-N or integer-N phase-locked loop (PLL) frequency synthesizers when used with an external loop filter and an external reference frequency. A series of frequency dividers at another frequency output permits operation from 53.125 MHz to 6800 MHz.

The ADF4356 has an integrated VCO with a fundamental output frequency ranging from 3400 MHz to 6800 MHz. In addition, the VCO frequency is connected to divide by 1, 2, 4, 8, 16, 32, or 64 circuits that allow the user to generate RF output frequencies as low as 53.125 MHz. For applications that require isolation, the RF output stage can be muted. The mute function is both pin- and software-controllable.

Control of all on-chip registers is through a simple 3-wire interface. The ADF4356 operates with analog and digital power supplies ranging from 3.15 V to 3.45 V, with charge pump and VCO supplies from 4.75 V to 5.25 V. The ADF4356 also contains hardware and software power-down modes.

Features

RF output frequency range: 53.125 MHz to 6800 MHz

Integer channel: −227 dBc/Hz

Fractional channel: −225 dBc/Hz

Integrated RMS jitter (1 kHz to 20 MHz): 97 fs for 6 GHz output

Fractional-N synthesizer and integer-N synthesizer

Pin compatible to the

High resolution, 52-bit modulus

Phase frequency detector (PFD) operation to 125 MHz

Reference input frequency operation to 600 MHz

Maintains frequency lock over −40°C to +85°C

Low phase noise, voltage controlled oscillator (VCO)

Programmable divide by 1, 2, 4, 8, 16, 32, or 64 output

Analog and digital power supplies: 3.3 V

Charge pump and VCO power supplies: 5.0 V typical

Logic compatibility: 1.8 V

Programmable output power level

RF output mute function

Supported in thedesign tool

Application

Wireless infrastructure (LTE, W-CDMA, TD-SCDMA, WiMAX, GSM, PCS, DCS)

Point to point/point to multipoint microwave links

Satellites/VSATs

Test equipment/instrumentation

Clock generation

Related Products

ADF4350BCPZ

Analog Devices, Inc

LFCSP-32

AD9516-4BCPZ

Analog Devices, Inc

LFCSP64

ADF4111BRUZ

Analog Devices, Inc

TSSOP-16

ADF4113BRUZ

Analog Devices, Inc

TSSOP-16

ADF4116BRUZ

Analog Devices, Inc

TSSOP-16

ADF4110BRUZ

Analog Devices, Inc

TSSOP-16

ADF4193BCPZ

Analog Devices, Inc

LFCSP-32

AD2S99BPZ

Analog Devices, Inc

PLCC-20