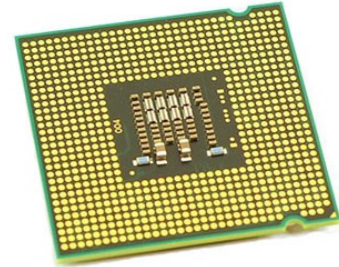


Microwave Wideband Synthesizer with Integrated VCO

Manufacturers	Analog Devices, Inc
Package/Case	48-Terminal Land Grid Array [LGA]
Product Type	RF Integrated Circuits
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for ADF4372BCCZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADF4372 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. The wideband microwave voltage controlled oscillator (VCO) design allows frequencies from 62.5 MHz to 16 GHz to be generated.

The ADF4372 has an integrated VCO with a fundamental output frequency ranging from 4000 MHz to 8000 MHz. In addition, the VCO frequency is connected to a divide by 1, 2, 4, 8, 16, 32, or 64 circuit that allows the user to generate radio frequency (RF) output frequencies as low as 62.5 MHz at RF8x. A frequency multiplier at RF16x generates from 8 GHz to 16 GHz. RFAUX8x duplicates the frequency range of RF8x or permits direct access to the VCO output. To suppress the unwanted products of frequency multiplication, a harmonic filter exists between the multiplier and the output stage of RF16x.

Control of all on-chip registers is through a 3-wire interface. The ADF4372 operates with analog and digital power supplies ranging from 3.15 V to 3.45 V, and 5 V for the VCO power supply. The ADF4372 also contains hardware and software power-down modes.

Features

RF output frequency range: 62.5 MHz to 16,000 MHz
Fractional-N synthesizer and integer-N synthesizer
High resolution 39-bit fractional modulus
Typical spurious fPFd: -90 dBc
Integrated rms jitter: 38 fs (1 kHz to 100 MHz)
Normalized phase noise floor: -234 dBc/Hz
fPFd operation to 250 MHz
Reference input frequency operation to 600 MHz
Programmable divide by 1, 2, 4, 8, 16, 32, or 64 output
62.5 MHz to 8,000 MHz output at RF8x and RFAUX8x
8,000 MHz to 16,000 MHz output at RF16x
Lock time approximately 3 ms with automatic calibration
Lock time <30 μ s with autocalibration bypassed, typical
Analog and digital power supplies: 3.3 V typical
VCO supply voltage: 3.3 V and 5 V
RF output mute function
7mm \times 7mm, 48-terminal LGA package

Application

Wireless infrastructure (multicarrier global system for mobile communication (MC-GSM), 5 G)
Test equipment and instrumentation
Clock generation
Aerospace and defense

Related Products



[ADL5330ACPZ](#)

Analog Devices, Inc
LFCSP24



[ADL5240ACPZ-R7](#)

Analog Devices, Inc
LFCSP-32



[AD630SD](#)

Analog Devices, Inc
20 ld Side-BrazedCerDIP



[ADRF5040BCPZ](#)

Analog Devices, Inc
HIGH ISOLATION, SP4T, 9KHZ - 12G



AD607ARSZ-REEL

Analog Devices, Inc
SSOP-20



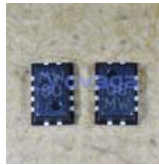
ADG901BRM

Analog Devices, Inc
MSOP-8



AD831AP

Analog Devices, Inc
20 ld PLCC



ADL5350ACPZ

Analog Devices, Inc
LFCSP-8