

HMC832LP6GE

Data Sheet

PLL Single 25MHz to 30	000MHz 40Pin QFN Bulk	
Manufacturers	Analog Devices, Inc	
Package/Case	QFN-40	Harris Ha
Product Type	Clock Generators	CHARLES STREET
RoHS	Green	
Lifecycle		Images are for reference only

Please submit RFQ for HMC832LP6GE or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The HMC832LP6GE is a 3.3 V, high performance, wide-band, Fractional-N Phase-Locked-Loop (PLL) that features an integrated Voltage Controlled Oscillator (VCO) with a fundamental frequency of 1500 MHz - 3000 MHz, and an integrated VCO Output Divider (divide by 1/2/4/6.../60/62), that enables the HMC832LP6GE to generate continuous frequencies from 25 MHz to 3000 MHz. The integrated Phase Detector (PD) and delta-sigma modulator, capable of operating at up to 100 MHz, permit wider loop-bandwidths and faster frequency tuning, with excellent spectral performance.

Industry leading phase noise and spurious performance, across all frequencies, enable the HMC832LP6GE to minimize blocker effects, improve receiver sensitivity and transmitter spectral purity. Low noise floor (-160 dBc/Hz) eliminates any contribution to modulator/mixer noise floor in transmitter applications.

The HMC832LP6GE features all 3.3 V supply and an innovative Programmable Performance technology that enables the HMC832LP6GE to tailor current consumption and corresponding noise floor performance to each individual application by selecting either a low current consumption mode, or a high performance mode for an improved noise floor performance.

Additional features of the HMC832LP6GE include 12 dB of RF output gain control in 1 dB steps; Output Mute function to automatically mute the output during frequency changes when the device is not locked; Selectable resistance for better output return loss; Programmable differential or single-ended outputs, with the ability to select either output in single-ended mode; and a delta-sigma modulator Exact Frequency Mode which enables users to generate output frequencies with 0 Hz frequency error.

Features

RF Bandwidth: 25 - 3000 MHz

Maximum Phase Detector Rate 100 MHz

3.3 V Supply

Ultra Low Phase Noise -110 dBc/Hz in Band Typ.

Figure of Merit (FOM) -226 dBc/Hz

24-bit Step Size, Resolution 3 Hz typ

Exact Frequency Mode with 0 Hz frequency error

Fast Frequency Hopping

40 Lead 6x6 mm SMT Package: 36 mm2

Application

Cellular Infrastructure

Microwave Radio

WiMax, WiFi

Communications Test Equipment

CATV Equipment

DDS Replacement

Military

Tunable Reference Source for Spurious- Free Performance

Related Products



LTC6957HMS-3#PBF

Analog Devices, Inc MSOP-12



HMC987LP5E

Analog Devices, Inc 32-VFQFN



HMC703LP4E

Analog Devices, Inc QFN-24



HMC1031MS8E

Analog Devices, Inc 8-MS8E



HMC769LP6CE

Analog Devices, Inc 40-QFN



HMC838LP6CE

Analog Devices, Inc QFN-40



HMC807LP6CETR

Analog Devices, Inc QFN40



HMC835LP6GE

Analog Devices, Inc QFN40