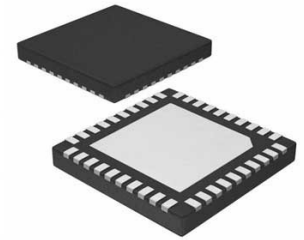



**Clock Generator MHz to 350MHz-IN 3000MHz-OUT 40-Pin
LFCSP EP Cut Tape**



Images are for reference only

Inquiry

Manufacturer:	Analog Devices, Inc
Package/Case:	QFN40
Product Type:	Discrete Semiconductor Modules
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Obsolete

General Description

The HMC830LP6GE is a low noise, wideband, 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 together allow the HMC830LP6GE to generate 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 with excellent spectral performance.

The HMC830LP6GE features industry leading phase noise and spurious performance, across all frequencies, that enable it to minimize blocker effects, and improve receiver sensitivity and transmitter spectral purity. Its superior performance makes it the ideal device for multi channel multi standard wide band transceivers. HMC830LP6GE can be used as an LO for RF mixers, a clock source for high-frequency data-converters, or a tunable reference source for ultra-low spurious applications.

Additional features of the HMC830LP6GE include RF output power control from 0 to 9 dB (3 dB steps), output Mute function, and a delta-sigma modulator Exact Frequency Mode which enables users to generate output frequencies with 0 Hz frequency error.

For theory of operation and register map refer to the "PLLs with Integrated VCOs - RF VCOs Operating Guide" Operating Guide.

Key Features

- RF Bandwidth: 25 - 3000 MHz
- Maximum Phase Detector Rate 100 MHz
- Ultra Low Phase Noise -110 dBc/Hz in Band Typ.
- Figure of Merit (FOM) -230 dBc/Hz Integer
- 40 Lead 6 x 6 mm SMT Package: 36 mm²

Application

- Cellular/4G Infrastructure
- Repeaters and Femtocells
- Communications Test Equipment
- CATV Equipment
- Phased Array Applications
- Very High Data Rate Radios
- Tunable Reference Source for Spurious-Free Performance

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