

## HMC701LP6CE

## Clock Generator 0.1MHz to 220MHz-IN Automotive 40-Pin OFN EP T/R

Manufacturer: Analog Devices, Inc

Package/Case: QFN

**Product Type:** Clock & Timer ICs

RoHS: RoHS Compliant/Lead free

Lifecycle: Obsolete



Images are for reference only

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## **General Description**

The HMC701LP6CE is a SiGe BiCMOS fractional-N frequency synthesizer. The synthesizer includes a 8GHz 16-bit RF N-Divider, a 24-bit delta-sigma modulator, a very low noise digital phase frequency detector (PFD), and a precision controlled charge pump. In addition the synthesizer supports an external step tuned VCO.

The fractional synthesizer features an advanced delta-sigma modulator design that allows ultra-fine frequency step sizes. The synthesizer features the ability to alter both the phase-frequency detector (PFD) gain and the cycle slipping characteristics of the PFD. This feature can reduce the time to arrive at the new frequency by 50% vs. conventional PFDs. Ultra low in-close phase noise also allows wider loop bandwidths for faster frequency hopping.

The synthesizer contains a built-in linear sweeper function, which allows it to perform frequency chirps with a wide variety of sweep times, polarities and dwells, all with an external or automatic sweep trigger.

A General Purpose Output (GPO) bus supports the use of multiple VCOs. In addition the synthesizer has a number of auxiliary clock generation modes that can be accessed via the GPO.

Key Features	Application
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24-Bit Step Size Resolution, 3 Hz typ

Base Stations for Mobile Radio(GSM, PCS, DCS, CDMA, WCDMA)

Ultra Low Phase Noise
Wireless LANs, WiMax

Auto & Triggered Sweeper Functions

Communications Test Equipment

Cycle Slip Prevention (CSP) for Fast Settling

Autotune Support for External Step Tuned VCOs

Multi-VCO Support FMCW Sensors

40 Lead 6x6mm SMT Package: 36mm<sup>2</sup> Automotive Radar

Phased-Array Systems

## **Recommended For You**

HMC624ALP4E

HMC952ALP5GE

HMC361S8GE

SOP-8

Analog Devices, Inc

Analog Devices, Inc

Analog Devices, Inc

QFN24

QFN

HMC1119LP4ME

HMC253AQS24E
Analog Devices, Inc

Analog Devices, Inc

HMC346MS8G

Analog Devices, Inc

QFN

MSOP8

QFN

HMC659LC5

HMC909LP4E

HMC564LC4

Analog Devices, Inc

Analog Devices, Inc

Analog Devices, Inc

QFN

QFN

QFN

HMC1021LP4E

HMC241AQS16E

HMC424LP3E

Analog Devices, Inc

Analog Devices, Inc

Analog Devices, Inc

QFN

SSOP16

QFN

HMC662LP3E

HMC8038LP4CE

**HMC363S8G** 

Analog Devices, Inc

Analog Devices, Inc

Analog Devices, Inc

QFN

QFN16

SOP8