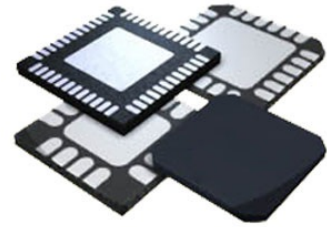


Active Filter Dual Low Pass 6th Order 72MHz 32-Pin QFN EP T/R

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	QFN
Product Type	Tunable Filters ; Baseband Programmable VGA-Filters
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for HMC1023LP5E or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The HMC1023 is a 6th order, programmable bandwidth, fully calibrated, dual low pass filter. It features programmable 0 or 10 dB gain and supports arbitrary bandwidths from 5 MHz to 72 MHz. When calibrated, the bandwidth is accurate to +/-2.5%. Built-in filter bypass option enables wider bandwidths while maintaining programmed gain and common mode control settings.

Integrated ADC driver, programmable input impedance, and adjustable output common mode voltage from 0.9 V to 3 V with 2 Vppd signal, or lower than 0.9 V common mode with lower signal swing enables simple interface while achieving maximum performance. Programmable bias settings enable performance/power dissipation trade-off optimized for each application.

Filter calibration is accomplished with any reference clock rate from 20 to 80 MHz. One time programmable (OTP) memory offers unsurpassed flexibility allowing the user “set and forget” parameters like gain and bandwidth setting.

Housed in a compact 5x5 mm SMT QFN package, the HMC1023 is pin and register compatible to the existing HMC900 programmable bandwidth Low Pass Filter. It requires minimal external components and provides a low cost alternative to more complicated switched discrete filter architectures.

The 6th order Butterworth transfer function delivers superior stop band rejection while maintaining both a flat passband and minimal group delay variation.

## Features

Low Noise Figure: 10 dB

High linearity: In-Band Output IP3 > +30 dBm In-Band Output IP2 > +60 dBm

Pre-programmed and / or Programmable Bandwidth: 5 MHz to 72 MHz.  
(Please see HMC1023LP5E Ordering Information)

Exceptional 3 dB Bandwidth Accuracy:  $\pm 2.5\%$

Programmable Gain: 0 or 10 dB

Integrated ADC Driver Amplifier

Automatic Filter Calibration

Externally Controlled Common Mode Output Level

Filter Bypass Option

Pin & Register Compatible to HMC900LP5E

Read/Write Serial Port Interface (SPI)

32 Lead 5x5 mm SMT Package 25 mm<sup>2</sup>

## Application

Baseband filtering before or after data converters for point-to-point fixed wireless and cellular infrastructure transceivers

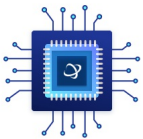
Software defined radio applications

Anti-aliasing and reconstruction filters

Test and measurement equipment

ADC driver applications

## Related Products



### [HMC1023LP5ETR](#)

Analog Devices, Inc  
LP5



### [MAX7400ESA](#)

Analog Devices, Inc  
SOIC-8



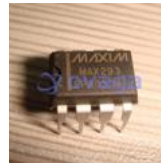
### [MAX260AENG](#)

Analog Devices, Inc  
PDIP-24



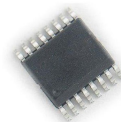
### [MAX291EPA](#)

Analog Devices, Inc  
PDIP N-8



### [MAX293EPA](#)

Analog Devices, Inc  
PDIP-8



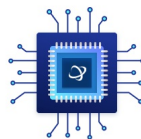
### [LTC1564CG](#)

Analog Devices, Inc  
SSOP-16



### [MAX7491EEE](#)

Analog Devices, Inc  
QSOP-16



### [MAX7411CUA](#)

Analog Devices, Inc  
uMAX-8