

## MAX274ACNG+

# Active Filter Single Continuous Time Low Pass/Band Pass 8th Order 150kHz 24-Pin PDIP N

Manufacturer:	Maxim Integrated	
Package/Case:	DIP24	
Product Type:	Active Filter	
RoHS:	RoHS Compliant/Lead free W	
Lifecycle:	Active	



Images are for reference only

#### **General Description**

The MAX274 and MAX275 are continuous-time active filters consisting of independent cascadable 2nd-order sections. Each section can implement any allpole bandpass or lowpass filter response, such as Butterworth, Bessel, Chebyshev, and is programmed by four external resistors. The MAX274/MAX275 provide lower noise that switched-capacitor filters, as well as superior dynamic performance—both due to the continuous-time design. Since continuous-time filters do not require a clock, aliased and clock noise are eliminated with the MAX274/MAX275. The MAX274 comprises of four 2nd-order sections, permitting 8th-order filters to be realized. Center frequencies range up to 150kHZ, and are accurate to within  $\pm 1\%$  over the full operating temperature range. Total harmonic distortion (THD) is typically better than -86dB. The MAX275 comprises of two 2nd-order sections, permitting 4th-order filters to be realized. Center frequencies range up to 300kHZ, and are accurate to within  $\pm 0.9\%$  over the full operating temperature range. Total harmonic distortion (THD) is typically better than -86dB. Both filters operate from a single +5V supply or from dual  $\pm 5V$  supplies.

#### **Key Features**

Continuous-TIme Filter - No Clock, No Clock Noise		
Implement Butterworth, Chebyshev, Bessel and Other Filter Responses		
Lowpass, Bandpass Outputs		
Operate from a Single +5V Supply or Dual $\pm$ 5V Supplies		
Design Software Available		
MAX274 Evaluation Kit Available		
8th-Order-Four 2nd-Order Sections (MAX274)		
4th-Order-Two 2nd-Order Sections (MAX275)		
Center-Frequency Range:		
150kHz for MAX274		
300kHz for MAX275		
Low Noise:		
Center-Frequency Accurate Over Temp:		
within $\pm 1\%$ for MAX274		
within $\pm 0.9\%$ for MAX275		

#### Application

Audio/Sonar/Avionics Frequency Filtering

DAC Output-Smoothing Filters

Low-Distortion Anti-Aliasing Filters

Modems

Vibration Analysis

### Recommended For You

MAX293CPA	MAX291ESA+	MAX7400CSA+
Maxim Integrated	Maxim Integrated	Maxim Integrated
DIP8	SOP-8	SOIC(N)
MAX295EPA+	MAX7409EUA+	MAX7427CUA
Maxim Integrated	Maxim Integrated	Maxim Integrated
PDIP8	MSOP8	MSOP8
MAX7400ESA+	MAX293CPA+	MAX7410EUA+
Maxim Integrated	Maxim Integrated	Maxim Integrated
SOP-8	DIP8	MSOP8
MAX280CPA+	MAX274AENG+	MAX274AEWI+
Maxim Integrated	Maxim Integrated	Maxim Integrated
DIP-8	DIP	SOP28

#### MAX267BCNG+

Maxim Integrated

Correctoriginal

### MAX296ESA

Maxim Integrated

MAX7415CUA+

Maxim Integrated

SOP-8

SMDSMT