



Tiny 3.2 MHz Dual Micropower Comparator Operates Below 2 Volts with 60uA I_q

MILPITAS, CA – September 26, 2007 – Linear Technology Corporation announces the LTC6702, a fast, micropower dual comparator in a 2mm x 2mm DFN package. With operation down to 1.7V and less than 60uA of maximum current consumption, this tiny device is ideal for portable and battery operated equipment. Low voltage operation is supported by the LTC6702's input common mode range, which extends 100mV below ground. Despite its low power consumption, the LTC6702 can switch with a toggle rate of 3.2MHz and offers a guaranteed propagation delay of less than 500ns.

The LTC6702 offers excellent precision; input bias current is typically 1pA and the offset voltage is guaranteed to be less than 3.5mV. The built-in comparator hysteresis and guaranteed specifications from –40°C to 125°C ensure reliable operation in electrically noisy and high temperature environments. In addition, the LTC6702 offers a robust output drive of ±15mA and can drive capacitive loads up to 10,000pF.

“The LTC6702 offers a great combination of speed, power, size and output drive,” says Brendan Whelan, Design Manager for Linear Technology. “The versatility of this part is an ideal match for low voltage and battery-operated electronics.”

The LTC6702 is in full production, with prices starting at \$0.96 each in 1,000-piece quantities.


Photo Caption: Dual 3.2MHz Micropower Comparator

Summary of Features: LTC6702

- Low Supply Operation: 1.7V to 5.5V
- Low Supply Current: 30uA/Comparator Maximum
- Propagation Delay: 500ns Maximum (-40°C to 125°C)
- 3.2MHz Toggle Frequency
- Input Voltage Range Extends 100mV Below Ground
- Internal Hysteresis: 4mV
- High Output Drive: TTL and CMOS Compatible
 - Specified at $\pm 15\text{mA}$ (-40°C to 125°C)
 - Capacitive Load Handling to 10,000pF
- Specified for -40°C to 125°C Temperature Range
- Available in SOT-23 and 2mm x 2mm DFN Package

About Linear Technology

Linear Technology Corporation, a manufacturer of high performance linear integrated circuits, was founded in 1981, became a public company in 1986 and joined the S&P 500 index of major public companies in 2000. Linear Technology products include high performance amplifiers, comparators, voltage references, monolithic filters, linear regulators, DC-DC converters, battery chargers, data converters, communications interface circuits, RF signal conditioning circuits, and many other analog functions. Applications for Linear Technology's high performance circuits include telecommunications, cellular telephones, networking products such as optical switches, notebook and desktop computers, computer peripherals, video/multimedia, industrial instrumentation, security monitoring devices, high-end consumer products such as digital cameras and MP3 players, complex medical devices, automotive electronics, factory automation, process control, and military and space systems. For more information, visit www.linear.com

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