

***LTC News for Immediate Release***

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**Ultralow Power 10kHz to 1MHz Silicon Oscillator  
Available in ThinSOT**

MILPITAS, CA – March 22, 2005 – Introducing Linear Technology's LTC6906 programmable silicon oscillator, with an ultra low operating current of 18uA at 100kHz. The LTC6906 is the ideal clock chip for portable equipment; the footprint is limited to the LTC6906's ThinSOT™ package and a single resistor. No bypass capacitor is required, and these oscillators can be programmed to any frequency between 10kHz and 1MHz.

Unlike crystal and ceramic resonators, the LTC6906 does not suffer from acceleration, shock or vibration issues. Clock startup is only 200usec, which is ideal for portable equipment where the clock speed may be reduced or even shut down to conserve power. The LTC6906 provides a user-settable divider for reducing the master clock by a factor of 1, 2 or 4. Furthermore, with the LTC6906, there is no worry about crystal startup delays, runt pulses or pulse slivers.

The closest alternative for such a versatile clock is the ubiquitous 555 timer which relies on an RC network. Accuracy and stability with an RC network is a challenge, to say the least. Not only does the LTC6906 have outstanding duty cycle control of 50% +/-2.5% with very low jitter, it offers guaranteed frequency accuracy of 0.65% from 0 to 70C, and can operate from -40 to 125°C.

"The LTC6906 bridges the gap between crystal oscillators and RC clocks" says Tim Regan, applications manager for Linear Technology. "The LTC6906 provides a solution to traditional crystal problems and offers performance that simply can't be beat with an RC-type solution"

The LTC6906 is in full production, with prices starting at \$1.25 each in 1,000-piece quantities.

(more...)

## Summary of Features: LTC6906

- Supply Current: 18uA Max at 100kHz
- Frequency Range: 10kHz to 1MHz
- Frequency Accuracy: 0.65% (from 0°C to 70°C)
- One Resistor Sets the Oscillator Frequency
- No Decoupling Capacitor Needed
- Operating Temperature Range: –40°C to 125°C
- Single Supply Operation: 2.25V to 5.5V
- Start-Up Time: Under 200µs at 1MHz
- First Cycle After Power-Up is Accurate
- 150Ohm CMOS Output Driver
- Low Profile SOT23 (ThinSOT) Package

**COMPANY BACKGROUND:** Linear Technology Corporation was founded in 1981 as a manufacturer of high performance linear integrated circuits. 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.

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**READER SERVICE:** Call toll-free 1-800-4-LINEAR (for literature only), or go to the company's web site: **<http://www.linear.com>**

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