LTC News for Immediate Release

For more information, tel. 408-432-1900
Doug Dickinson, Media Relations Mgr., ext. 2233
John Hamburger, Dir., Mkting Comm., ext. 2419
www.linear.com

Industrial Grade, 100mA VLDO Guarantees Performance from -40°C to +125°C

MILPITAS, CA – October 25, 2005 – Linear Technology Corporation announces a new I-grade version of the LT3020 LDO for industrial and automotive applications. The new LT3020 is a 100mA VLDO™ (very low dropout voltage regulator) with input voltage capability down to 0.9V and a very low dropout voltage of only 150mV at full load. Output voltages include 1.2V, 1.5V and 1.8V fixed, and an adjustable option ranging from 0.2V to 9.5V. The I-grade guarantees operation from -40°C to +125°C, enabling a variety of applications in automotive, industrial, and instrumentation markets. In handheld products, the LT3020's minimum input voltage of 0.9V enables it to operate across the entire voltage range of both single cell alkaline and NiMH (1.4V to 0.9V) batteries and to drive low-voltage microcontroller and microprocessor cores. Furthermore, its 150mV dropout voltage optimizes battery run time in single cell applications with a low V_{IN} to V_{OUT} differential. Additionally, the LT3020 offers micropower operation with only 120uA of quiescent current and less than 3uA in shutdown, maximizing run time in battery powered applications.

The LT3020 regulator optimizes stability and transient response with low ESR ceramic output capacitors as small as 2.2uF. Other LT3020 features include flat typical line regulation and 0.2% typical load regulation from 1mA to 100mA of load. Internal protection circuitry includes reverse-battery protection, current limiting, thermal limiting with hysteresis, and reverse-current protection. The LT3020 regulator is available in a low profile (0.75mm) 8-lead DFN (3mm x 3mm) package with an exposed pad and an 8-lead MSOP package.

Both the LT3020IDD/-1.x (8-lead DFN) and the LT3020IMS8/-1.x (MSOP-8) are available from stock. 1,000-piece pricing starts at $1.60 each for both package options.

(more...)

Summary of Features: LT3020

- V_{IN} Range: 0.9V to 10V
- Guaranteed Performance from -40°C to +125°C
- Dropout Voltage: 150mV Typical
- Output Current: 100mA
- Stable with Low ESR, Ceramic Output Capacitors (2.2uF Minimum)
- Adjustable Output from 0.2V to 9.5V
- Fixed Output Voltage Options: 1.2V, 1.5V. 1.8V
- 0.2% Load Regulation from 0mA to 100mA
- Quiescent Current: 120uA (Typ), I_{SD} < 3uA
- Current Limit Protection
- Reverse-Battery Protection, No Reverse Current
- Thermal Limiting with Hysteresis
- 8-Lead DFN (3mm x 3mm) Package
- 8-Lead MSOP Package

About Linear Technology Corporation

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

Contact:
Doug Dickinson, Media Relations Manager
Linear Technology Corporation
1630 McCarthy Boulevard
Milpitas, CA 95035-7417

ddickinson@linear.com

408-432-1900

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