



Ultralow Supply Current Monitors Ideal for Portable Electronics

MILPITAS, CA – May 27, 2008 – Linear Technology Corporation introduces the LTC2934 and LTC2935, ultralow power supply monitors that only draw 500nA of quiescent current. Battery life is of the utmost importance in portable applications, where it is essential to reduce the amount of supply current the device draws during normal and standby operation. It is important to minimize quiescent current in supporting power components like voltage monitors in an effort to prolong battery life. These LTC2934 and LTC2935 single-channel voltage monitors fulfill these functions in tiny 2mm x 2mm DFN or ThinSOT™ packages, making them ideal for compact, single-cell applications.

The unique features of the LTC2934 and LTC2935 differentiate them in the low power monitor market and make them excellent choices for single Li+ coin cell, AA, AAA and other compact battery-powered or “green” applications. The LTC2935 has three binary inputs that allow selection of one of eight integrated reset thresholds, from 3.3V down to 2.25V in 150mV increments. The device’s internal precision attenuators allow the part to maintain only 500nA of supply current and accuracy. The LTC2934 allows an external resistive divider to finely set the reset threshold anywhere from 1.6V to 6V. The reset thresholds in both devices are +/-1.5% accurate over temperature which helps to minimize supply overdesign. An early warning of a threatening low voltage condition is provided via a power-fail output. The supervisory circuits monitor V_{CC} and pull the reset output low if the supply voltage drops below the configured reset threshold. The LTC2934 includes two reset timeout-periods of 15ms or 200ms, settable via a time-out selection pin, while the LTC2935 offers a fixed 200ms timeout. A manual reset pin is also provided on both devices for optional use of a pushbutton switch to force a system reset.

The LTC2934 and LTC2935 have a variety of ordering options. Reset and power-fail outputs are available with open drain or active pull-up circuits. Commercial and industrial versions offer different operating temperature ranges, from 0°C to 70°C and -40°C to 85°C, respectively. Both devices can be ordered in either an 8-pin 2mm x 2mm DFN or an 8-lead ThinSOT™ package, both of which are RoHS compliant. Pricing starts at \$1.15 each for the

LTC2934 and \$1.22 each for the LTC2935 in 1,000 piece quantities and are available today in production quantities. Visit www.linear.com for more product selection information.


Photo Caption: Compact Supply Monitors with Low Quiescent Current and Power-Fail Output

Summary of Features: LTC2934 & LTC2935

- 500nA Quiescent Current
- +/-1.5% (Max) Accuracy over Temperature
- Integrated Precision Attenuators (LTC2935)
- Operates Down to 1.6V (LTC2934)
- Eight Pin-Selectable (LTC2935) or Adj. (LTC2934) Reset Thresholds
- Eight Pin-Selectable (LTC2935) or Adj. (LTC2934) Power-Fail Thresholds
- Early Warning Power-Fail Output
- Selectable 15ms or 200ms Reset Timeout (fixed 200ms for LTC2935)
- Manual Reset Input
- Compact 8-Lead, 2mm x 2mm DFN and TSOT-23 (ThinSOT™) Packages

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, uModule™ products, 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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