



Precision Triple Supervisor Monitors Positive or Negative Supplies for Overvoltage & Undervoltage Conditions

MILPITAS, CA – February 26, 2008 – Linear Technology Corporation introduces the LTC2919, a versatile triple supervisor that monitors its own supply voltage and two adjustable inputs. Polarity selection and a buffered reference output allow the LTC2919 to monitor a combination of two positive or negative supplies for undervoltage (UV) and overvoltage (OV) conditions. The two inputs have a nominal 0.5V threshold and tight $\pm 1.5\%$ accuracy over the full temperature range. In addition to monitoring the two adjustable inputs for UV or OV, the LTC2919 monitors the supply voltage at 2.5V, 3.3V or 5V at a fixed -10% UV. The adjustable trip thresholds are set with an external resistive divider network, giving users complete control over the trip point. Offered in the tiny MSOP-10 and 3mm x 2mm DFN-10 packages, this supervisor draws only 50uA. With guaranteed specifications across the -40°C to +125°C temperature range, the LTC2919 can be used in a wide variety of designs, including network servers and multirail systems.

The LTC2919 includes a common open-drain reset output and two open-drain comparator outputs that indicate the status of the adjustable inputs. The individual comparator outputs simplify sequencing positive and negative supplies. The reset timeout period can be set to a fixed 400us, fixed 200ms, an adjustable period, or disabled for fast response. Glitch filtering ensures reliable reset operation without false triggering and the LTC2919 guarantees the reset output once V_{CC} rises above 0.5V. In addition to monitoring low voltages, the LTC2919's V_{CC} supply includes a 6.5V shunt regulator, which when connected to an external current limiting resistor, allows a high voltage supply to power the device. This makes the LTC2919 a good fit for multichannel low voltage designs and high voltage positive or negative monitoring.

The LTC2919 is available today in commercial, industrial, and automotive temperature grades, with pricing beginning at \$1.75 each, in 1,000-piece quantities.


Photo Caption: Triple Supply Supervisor Monitors Positive or Negative Supplies

Summary of Features: LTC2919

- Two Low Voltage Adjustable Inputs Monitor Overvoltage or Undervoltage Conditions
- Accurate V_{CC} UVLO for 2.5V, 3.3V and 5V Systems
- Open-Drain RST, OUT1, OUT2 Comparator Outputs
- Pin-Selectable Input Polarity Allows Negative, UV or OV Monitoring
- Guaranteed Operation to 125°C
- Guaranteed Threshold Accuracy: $\pm 1.5\%$
- 6.5V Shunt Regulator for High Voltage Operation
- Buffered 1V Reference Output for Negative Monitoring
- Low Quiescent Current: 50uA
- Adjustable Reset Timeout Period
- Tiny MSOP-10 and (3mm x 2mm) DFN-10 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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