



Configurable Six-Channel Supervisor Includes Individual Comparator Outputs & Selectable Supply Tolerances

MILPITAS, CA – February 13, 2008 – Linear Technology Corporation introduces the LTC2932, a six-channel supply monitor that includes separate open-drain voltage comparator outputs for individual supply monitoring. The LTC2932 is designed for monitoring network servers, telecom and industrial equipment with numerous supply voltage rails.

An external resistive divider between a bandgap reference output, an ADC input, and ground determines which of the six channels are set to preset or adjustable voltage monitor inputs, as shown in the voltage threshold selection table below. The preset voltage thresholds are digitally configurable for 5%, 7.5%, 10% or 12.5% supply tolerances below the nominal operating voltage. The LTC2932 can also be configured to monitor up to four adjustable supplies, with the option for negative voltage monitoring by connecting a resistive divider between the negative supply and buffered reference instead of ground. All six preset or adjustable channels feature +/-1.5% (max) threshold accuracy over the entire temperature range.

With guaranteed specifications across the -40°C to +125°C temperature range, the LTC2932 can be used in automotive and military applications. The LTC2932's reset timeout period can be adjusted using an external capacitor and the reset output is guaranteed to be in the correct state for V_{CC} as low as 1V. The LTC2932 also includes a reset disable pin for margining applications.

The LTC2932 is releasing alongside two new six-channel configurable supervisors. The LTC2931 offers similar functionality and performance, while including a watchdog input, adjustable watchdog timer, and a fixed 5% monitor threshold. The LTC2932 and LTC2931 are both offered in 20-pin TSSOP packages. The LTC2930 includes a push-button manual reset input and uses only a single reset output for voltage monitoring, and is available in a tiny 3mm x 3mm DFN-12 package. All three six-channel supervisors draw only 52uA of supply current.

The LTC2930, LTC2931, and LTC2932 are available today in commercial, industrial, and automotive temperature grades, with 1,000-piece pricing beginning at \$2.56 each.

Voltage Threshold Configuration Table

V1 (V)	V2 (V)	V3 (V)	V4 (V)	V5 (V)	V6 (V)
5.0	3.3	2.5	1.8	ADJ	ADJ
5.0	3.3	2.5	1.5	ADJ	ADJ
5.0	3.3	2.5	ADJ	ADJ	ADJ
5.0	3.3	1.8	ADJ	ADJ	ADJ
5.0	3.3	1.8	–ADJ	ADJ	ADJ
5.0	3.3	ADJ	ADJ	ADJ	ADJ
5.0	3.3	ADJ	–ADJ	ADJ	ADJ
5.0	3.0	2.5	ADJ	ADJ	ADJ
5.0	3.0	1.8	ADJ	ADJ	ADJ
5.0	3.0	ADJ	ADJ	ADJ	ADJ
3.3	2.5	1.8	1.5	ADJ	ADJ
3.3	2.5	1.8	ADJ	ADJ	ADJ
3.3	2.5	1.8	–ADJ	ADJ	ADJ
3.3	2.5	1.5	ADJ	ADJ	ADJ
3.3	2.5	ADJ	ADJ	ADJ	ADJ
3.3	2.5	ADJ	–ADJ	ADJ	ADJ


Photo Caption: Configurable Six Supply Monitor Features Selectable Supply Tolerances

Summary of Features: LTC2930/LTC2931/LTC2932

- Simultaneously Monitors Six Supplies
- 16 Selectable Combinations of 5V, 3.3V, 3V, 2.5V, 1.8V, 1.5V and +/-ADJ Thresholds
- Guaranteed Threshold Accuracy: $\pm 1.5\%$
- Selectable Supply Tolerances: 5%, 7.5%, 10%, 12.5% (LTC2932)
- Reset Disable for Margining Applications (LTC2932)
- Watchdog Input and Output, Adjustable Watchdog Timeout (LTC2931)
- Buffered Reference Output for Adjustable, Negative Monitoring
- Low Quiescent Current: 52uA
- Guaranteed Operation to 125°C
- Adjustable Reset Timeout Period
- Tiny 3mm x 3mm DFN-12 Package (LTC2930)
- Small TSSOP-20 Packages (LTC2931, LTC2932)

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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