



## **Programmable Hex Voltage Supervisor Has 1% Threshold Accuracy & Built-In EEPROM**

MILPITAS, CA – April 22, 2014 – Linear Technology Corporation introduces the [LTC2933](#) programmable voltage supervisor with built-in EEPROM for simultaneous, accurate monitoring of up to six voltage rails from 0.2V to 13.9V. Requiring no external resistors to set thresholds, the LTC2933 provides an I<sup>2</sup>C/SMBus interface to access onboard EEPROM, so users can quickly configure the device and review faults or violation history through the easy-to-use [LTpowerPlay™](#) graphical user interface. Six voltage monitoring channels, including one high-voltage channel, offer a choice of input ranges, and 1% guaranteed threshold accuracy over temperature. The LTC2933's tight 1% power supply threshold accuracy reduces the required system voltage margin, compared to less accurate voltage supervisors.

Each channel of the LTC2933 can be programmed to one of 256 available overvoltage (OV) and undervoltage (UV) fault or warning thresholds, which can be disabled for margining purposes. This highly configurable device offers two general purpose inputs (GPIs) that can be configured as manual reset, UV disable, margin enable, or auxiliary comparator inputs. In addition, three general purpose inputs/outputs (GPIOs) can be mapped to respond to any combination of these user-defined inputs, power supply faults, as /ALERT outputs per the SMBus standard, or as interrupts to provide maximum design flexibility. The output type (open-drain or weak pull-up), polarity, and delay-on-release response time can be individually selected for all GPIO pins. A well-regulated 3.3V output can be used to monitor negative supplies. Three pin-selectable I<sup>2</sup>C addresses are also available.

The LTC2933 is designed to increase system reliability in applications including network servers, data storage, telecommunications equipment, industrial control, and high availability computer systems. The LTC2933 uses an EEPROM to store configuration data that has been tested over temperature and guarantees at least 10 years of data retention.

The LTC2933 is available today in commercial and industrial versions, supporting operating temperature ranges from 0°C to 70°C and -40°C to 85°C, respectively. The device is offered in a small RoHS-compliant 16-pin 5mm x 4mm DFN or narrow 16-lead SSOP package. Pricing starts at \$4.85 each in 1,000 piece quantities. For more information, visit [www.linear.com/product/LTC2933](http://www.linear.com/product/LTC2933)

**Photo Caption:** 1% Accurate Hex Voltage Supervisor with Programmable OV/UV Trip Thresholds

### **Summary of Features: LTC2933**

- Supervises 6 Power Supplies
- I<sup>2</sup>C Adjustable UV & OV Trip Points
- Guaranteed Threshold Accuracy: ±1%
- I<sup>2</sup>C/SMBus Interface
- Internal EEPROM
- 256 Programmable Thresholds per Channel
- Up to Three Range Settings per Channel
- Two General Purpose Inputs
- Three General Purpose Inputs/Outputs
- Programmable Output Delays
- Supply Voltage Range, 3.4V to 13.9V
- Supply Voltage Power Sharing from V1 to V4
- 5mm x 4mm 16-Pin DFN & Narrow SSOP-16 Packages

## About Linear Technology

Linear Technology Corporation, a member of the S&P 500, has been designing, manufacturing and marketing a broad line of high performance analog integrated circuits for major companies worldwide for over three decades. The Company's products provide an essential bridge between our analog world and the digital electronics in communications, networking, industrial, automotive, computer, medical, instrumentation, consumer, and military and aerospace systems. Linear Technology produces power management, data conversion, signal conditioning, RF and interface ICs,  $\mu$ Module<sup>®</sup> subsystems, and wireless sensor network products. For more information, visit [www.linear.com](http://www.linear.com)

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