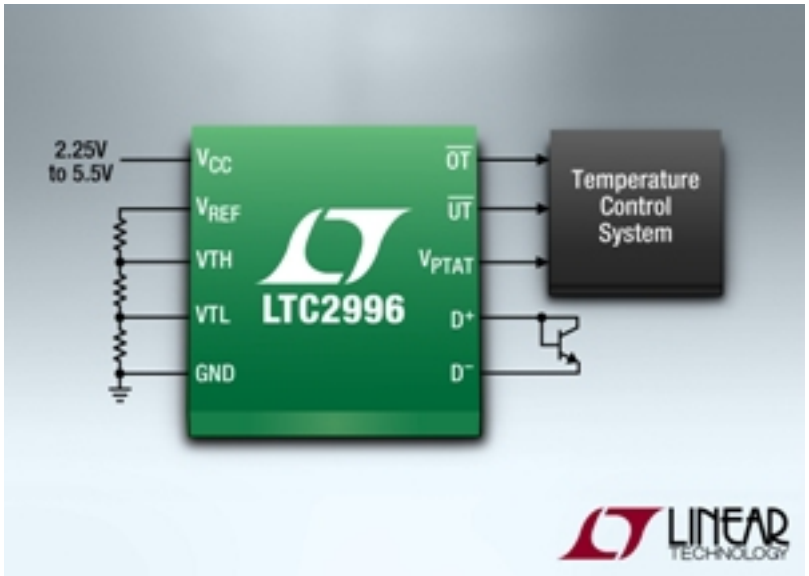
Temperature sensor caters to a wide variety of applications



Linear Technology Corporation introduces the LTC2996 high accuracy temperature sensor for 2.25V to 5.5V systems. The LTC2996 measures a remote diode's temperature with ±1°C accuracy and its own die temperature with ±2°C accuracy while rejecting errors due to noise and series resistance. The device provides a voltage-proportional-to-absolute-temperature (VPTAT) output, as well as individual undertemperature and overtemperature alert outputs, defined by user-adjustable thresholds. No code is required to configure the device. With a 200µA quiescent current, the LTC2996 simply provides a precise, space-saving, micropower temperature monitoring solution.

The LTC2996's accuracy, configurability and code-free operation caters to a wide variety of applications, including system thermal control, energy harvesting, desktop and notebook computers, network servers and environmental monitoring. Users can choose to measure internal or remote temperature and easily adjust the temperature thresholds with resistive dividers. Temperature conversions are updated every 3.5ms to provide systems with sufficient time to react to alerts. The device includes 1.8V voltage reference output to share with an external ADC or for generating temperature threshold voltages.

The LTC2996 is offered in commercial, industrial and automotive versions, supporting operating temperature ranges from 0°C to 70°C, -40°C to 85°C and -40°C to 125°C, respectively. The LTC2996 is available today in a RoHS compliant, 10-pin, 3mm x 3mm DFN package. Pricing starts at 1.95 each in 1,000-piece quantities.

Linear Technology Corporation
1-800-4-LINEAR
www.linear.com/product/LTC2996 [1]

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