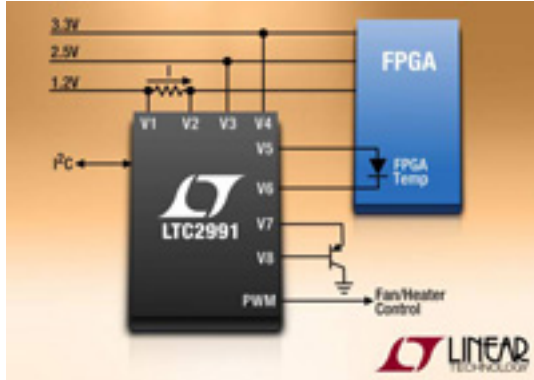


IC Monitors Internal and Remote Voltage, Current and Temperature



Linear Technology introduced the LTC2991, an eight-channel I²C temperature, voltage and current monitor for 3-V and 5-V systems. This monitoring solution incorporates a 14-bit ADC, 10ppm/°C voltage reference and I²C digital interface to provide submillivolt voltage resolution and 1 percent current measurement, as well as $\pm 0.7^{\circ}\text{C}$ remote accuracy and $\pm 1^{\circ}\text{C}$ internal accuracy, when making temperature measurements. Eight single-ended voltage inputs can be configured to measure any combination of internal temperature, remote temperature, remote voltage and internal VCC for single or repeated measurements. The LTC2991 caters to a variety of applications, including supply voltage monitoring and remote diode temperature measurement, particularly in industrial or computing systems where thermal management is crucial. When making differential measurements of diode or transistor voltages to calculate temperature, the chip allows for cancellation of error due to sensor series resistance and limits temperature noise to 0.07RMS (Celsius or Kelvin).

Linear Technology

800-454-6327, www.linear.com

[1]

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[1] <http://www.linear.com>