

Multicell Battery Gas Gauge with Temperature, Voltage and Current Measurement

Manufacturers	Analog Devices, Inc
Package/Case	8-Lead DFN (3mm x 3mm x 0.75mm w/ EP)
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTC2943IDD#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC2943 measures battery charge state, battery voltage, battery current and its own temperature in portable product applications. The wide input voltage range allows use with multicell batteries up to 20V. A precision coulomb counter integrates current through a sense resistor between the battery's positive terminal and the load or charger. Voltage, current and temperature are measured with an internal 14-bit No Latency $\Delta\Sigma$ ™ ADC. The measurements are stored in internal registers accessible via the onboard I2C/SMBus Interface.

The LTC2943 features programmable high and low thresholds for all four measured quantities. If a programmed threshold is exceeded, the device communicates an alert using either the SMBus alert protocol or by setting a flag in the internal status register. The LTC2943 requires only a single low value sense resistor to set the measured current range.

Features

Measures Accumulated Battery Charge and Discharge

3.6V to 20V Operating Range for Multiple Cells Application

14-Bit ADC Measures Voltage, Current and Temperature

1% Voltage, Current and Charge Accuracy

High Side Sense

General Purpose Measurements for Any Battery Chemistry and Capacity

I2C/SMBus Interface

Configurable Alert Output/Charge Complete Input

Quiescent Current Less Than 120 μ A

Small 8-Lead 3mm \times 3mm DFN Package

Application

Power Tools

Electric Bicycles

Portable Medical Equipment

Video Cameras

Related Products



[LT3763EFE](#)

Analog Devices, Inc
TSSOP28



[LTC4417IUF](#)

Analog Devices, Inc
QFN-24



[LTC1966CMS8#PBF](#)

Analog Devices, Inc
MSOP-8P



[LTM8045EY#PBF](#)

Analog Devices, Inc
BGA40



[LT1038CK](#)

Analog Devices, Inc
TO-3



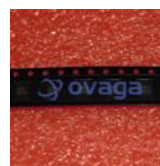
[LTC3440EMS](#)

Analog Devices, Inc
MSOP10



[LTC2990IMS#PBF](#)

Analog Devices, Inc
10MSOP



[LT4295IUFD#PBF](#)

Analog Devices, Inc
28-WFQFN