

## Fuel Gauge Lead-Acid/Li-FePO4/Li-Ion/Li-Pol/NiCd/NiMH Automotive 8-Pin DFN EP Tube



Images are for reference only

**Manufacturer:** [Analog Devices, Inc](#)

**Package/Case:** DFN-8

**Product Type:** Power Management ICs

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

[Inquiry](#)

### 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  $\Delta\Sigma^{\text{TM}}$  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.

### Key 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 $\mu$ A

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

### Application

Power Tools

Electric Bicycles

Portable Medical Equipment

Video Cameras

### Recommended For You

**LTC4412ES6**

Analog Devices, Inc

SOT23-6

**LTC4259ACGW-1**

Analog Devices, Inc

SSOP36

**LTC4259ACGW**

Analog Devices, Inc

SSOP36

**LTC1530IS8**

Analog Devices, Inc

SOP8

**LTC4252-2IMS**

Analog Devices, Inc

MSOP10

**LTC4412ES6#PBF**

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SOT23-6

**LTC4412ES6#TRPBF**

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SOT23-6

**LTC2942CDCB#TRMPBF**

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DFN-6

**LT1054IN8**

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DIP-8

**LTC4416EMS#PBF**

Analog Devices, Inc

MSOP10

**LTC4357IMS8**

Analog Devices, Inc

MSOP8

**LTC4414IMS8#PBF**

Analog Devices, Inc

MSOP8

**LTC4413EDD**

Analog Devices, Inc

DFN10

**LT3469EIS8#TRMPBF**

Analog Devices, Inc

SOT23-8

**LTC4412HVIS6**

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SOT23-6