

LTC2942IDCB#TRMPBF

Data Sheet

Gas Gauge Li-Ion Automotive 6-Pin DFN EP T/R

Manufacturers Analog Devices, Inc

Package/Case 6-WFDFN

Product Type Power Management ICs

RoHS Pb-free Halide free



Images are for reference only

Please submit RFQ for LTC2942IDCB#TRMPBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Lifecycle

The LTC2942 measures battery charge state, battery voltage and chip temperature in handheld PC and portable product applications. Its operating range is perfectly suited for single-cell Li-Ion batteries. A precision coulomb counter integrates current through a sense resistor between the battery's positive terminal and the load or charger. Battery voltage and on-chip temperature are measured with an internal 14-bit No Latency $\Delta\Sigma^{TM}$ ADC. The three measured quantities (charge, voltage and temperature) are stored in internal registers accessible via the on-board SMBus/I2C interface.

The LTC2942 features programmable high and low thresholds for all three 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 LTC2942 requires only a single low value sense resistor to set the measured current range.

Integrated Sense ResistorLTC2942NoLTC2942-1Yes

Features

Indicates Accumulated Battery Charge and Discharge

High Accuracy Analog Integration

ADC Measures Battery Voltage and Temperature

Integrated Temperature Sensor

High Side Sense

1% Voltage and Charge Accuracy

SMBus/I2C Interface

Configurable Alert Output/Charge Complete Input

2.7V to 5.5V Operating Range

Quiescent Current Less than 100µA

Small 6-Pin 2mm × 3mm DFN package

Application

Low Power Handheld Products

Cellular Phones

MP3 Players

Cameras

GPS

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