LTC6803IG-3#PBF

Data Sheet

Battery Monitoring Li-Ion Automotive 44-Pin SSOP Tube

Manufacturers	Analog Devices, Inc
Package/Case	44-FSOP (0.209", 5.30mm Width)
Product Type	Power Management ICs
RoHS	Pb-free Halide free
Lifecycle	

Images are for reference only

Please submit RFQ for LTC6803IG-3#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The LTC6803 is a 2nd generation, complete battery monitoring IC that includes a 12-bit ADC, a precision voltage reference, a high voltage input multiplexer and a serial interface. Each LTC6803 can measure up to 12 series-connected battery cells or supercapacitors. Using a unique level shifting serial interface, multiple LTC6803-1/LTC6803-3 devices can be connected in series, without opto-couplers or isolators, allowing for monitoring of every cell in a long string of series-connected batteries. Each cell input has an associated MOSFET switch for discharging overcharged cells. The LTC6803-1 connects the bottom of the stack to V– internally. It is pin compatible with the LTC6802-1, providing a drop-in upgrade. The LTC6803-3 separates the bottom of the stack from V–, improving cell 1 measurement accuracy.

The LTC6803 provides a standby mode to reduce supply current to 12µA. Furthermore, the LTC6803 can be powered from an isolated supply, providing a technique to reduce battery stack current draw to zero.

For applications requiring individually addressable serial communications, see the LTC6803-2/LTC6803-4.

SPI InterfaceIsolated V–LTC6802 Pin CompatibleLTC6803-1Daisy ChainNoYesLTC6803-2AddressableNoYesLTC6803-3Daisy ChainYesNoLTC6803-4 AddressableYesNo

Features

Measures Up to 12 Battery Cells in Series

Stackable Architecture

Supports Multiple Battery Chemistries and Supercapacitors

Serial Interface Daisy Chains to Adjacent Devices

0.25% Maximum Total Measurement Error

Engineered for ISO26262 Compliant Systems

13ms to Measure All Cells in a System

Passive Cell Balancing:

Integrated Cell Balancing MOSFETs

Ability to Drive External Balancing MOSFETs

On-board Temperature Sensor and Thermistor Inputs

1MHz Serial Interface with Packet Error Checking

Safe with Random Connection of Cells

Built-In Self Tests

Delta-Sigma Converter With Built-In Noise Filter

Open-Wire Connection Fault Detection

12µA Standby Mode Supply Current

High EMI Immunity

44-Lead SSOP Package

Application

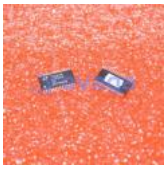
Electric and Hybrid Electric Vehicles

High Power Portable Equipment

Backup Battery Systems

Electric Bicycles, Motorcycles, Scooters

Related Products



LT3763EFE

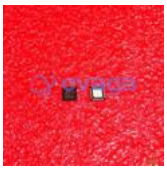
Analog Devices, Inc

TSSOP28

LT1038CK

Analog Devices, Inc

TO-3



LTC4417IUF

Analog Devices, Inc

QFN-24

LTC3440EMS

Analog Devices, Inc

MSOP10

[LTC1966CMS8#PBF]

Analog Devices, Inc

MSOP-8P

[LTC2990IMS#PBF]

Analog Devices, Inc

10MSOP

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BGA40

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28-WFQFN