

LTC6804IG-2#PBF

Data Sheet

Battery Stack Monitor 5.6V Automotive 48-Pin SSOP Tube

Manufacturers Analog Devices, Inc

Package/Case SSOP-48

Product Type Power Management ICs

RoHS Pb-free Halide free

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Images are for reference only

Please submit RFQ for LTC6804IG-2#PBF or <a href="mailto:Email

RFO

General Description

Lifecycle

The LTC6804 is a 3rd generation multicell battery stack monitor that measures up to 12 series connected battery cells with a total measurement error of less than 1.2mV. The cell measurement range of 0V to 5V makes the LTC6804 suitable for most battery chemistries. All 12 cell voltages can be captured in 290µs, and lower data acquisition rates can be selected for high noise reduction.

Multiple LTC6804 devices can be connected in series, permitting simultaneous cell monitoring of long, high voltage battery strings. Each LTC6804 has an isoSPI interface for high speed, RF-immune, local area communications. Using the LTC6804-1, multiple devices are connected in a daisy-chain with one host processor connection for all devices. Using the LTC6804-2, multiple devices are connected in parallel to the host processor, with each device individually addressed.

Additional features include passive balancing for each cell, an onboard 5V regulator, and 5 general purpose I/O lines. In sleep mode, current consumption is reduced to 4μ A. The LTC6804 can be powered directly from the battery, or from an isolated supply.

Features

Measures Up to 12 Battery Cells in Series

Stackable Architecture Supports 100s of Cells

Built-In isoSPITM Interface:

1Mbps Isolated Serial Communications

Uses a Single Twisted Pair, Up to 100 Meters

Low EMI Susceptibility and Emissions

1.2mV Maximum Total Measurement Error

290µs to Measure All Cells in a System

Synchronized Voltage and Current Measurement

16-Bit Delta-Sigma ADC with Frequency Programmable 3rd Order Noise Filter

Engineered for ISO26262 Compliant Systems

Passive Cell Balancing with Programmable Timer

5 General Purpose Digital I/O or Analog Inputs:

Temperature or other Sensor Inputs

Configurable as an I2C or SPI Master

4µA Sleep Mode Supply Current

48-Lead SSOP Package

Application

Electric and Hybrid Electric Vehicles

Backup Battery Systems

Grid Energy Storage

High Power Portable Equipment

Related Products



LT3763EFE
Analog Devices, Inc
TSSOP28



LTC4417IUF

Analog Devices, Inc

QFN-24



LTC1966CMS8#PBF

Analog Devices, Inc

MSOP-8P



LT1038CK
Analog Devices, Inc
TO-3



LTC3440EMS

Analog Devices, Inc
MSOP10



LTC2990IMS#PBF
Analog Devices, Inc
10MSOP



LTM8045EY#PBF
Analog Devices, Inc
BGA40



LT4295IUFD#PBF
Analog Devices, Inc
28-WFQFN