

12 Channel Multicell Battery Monitor with Addressable Interface, Generation 4

Manufacturers	Analog Devices, Inc
Package/Case	48-Lead SSOP
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTC6811IG-2#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC6811 is a 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 LTC6811 suitable for most battery chemistries. All 12 cells can be measured in 290µs, and lower data acquisition rates can be selected for high noise reduction.

Multiple LTC6811 devices can be connected in series, permitting simultaneous cell monitoring of long, high voltage battery strings. Each LTC6811 has an isoSPI interface for high speed, RF-immune, long distance communications. Using the LTC6811-1, multiple devices are connected in a daisy chain with one host processor connection for all devices. Using the LTC6811-2, multiple devices are connected in parallel to the host processor, with each device individually addressed.

The LTC6811 can be powered directly from the battery stack or from an isolated supply. The LTC6811 includes passive balancing for each cell, with individual PWM duty cycle control for each cell. Other features include an onboard 5V regulator, five general purpose I/O lines and a sleep mode, where current consumption is reduced to 4µA.

Features

Pin-Compatible Upgrade from the LTC6804

Measures Up to 12 Battery Cells in Series

1.2mV Maximum Total Measurement Error

Stackable Architecture for High Voltage Systems

Built-in isoSPI™ Interface

1Mb Isolated Serial Communications

Uses a Single Twisted Pair, up to 100 Meters

Low EMI Susceptibility and Emissions

290µs to Measure All Cells in a System

Synchronized Voltage and Current Measurement

16-Bit ADC with Programmable Noise Filter

Engineered for ISO 26262-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

AEC-Q100 Qualified for Automotive Applications

Application

Electric and Hybrid Electric Vehicles

Backup Battery Systems

Grid Energy Storage

High Power Portable Equipment

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



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Analog Devices, Inc
10MSOP



[LTM8045EY#PBF](#)

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BGA40



[LT4295IUFD#PBF](#)

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