

LTC6811HG-1#TRPBF

Data Sheet

12 Channel Multicell Battery Monitor with Daisy Chain Interface, Generation 4

Manufacturers	Analog Devices, Inc	
Package/Case	48-Lead SSOP	
Product Type	Power Management ICs	IT COLLEGES IN COLLEGES
RoHS		
Lifecycle		Images are for reference only

Please submit RFQ for LTC6811HG-1#TRPBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

<u>RFO</u>

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 isoSPITM 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



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