

IC SMART BATTERY CHARGER 24-SSOP

Manufacturers	Analog Devices, Inc
Package/Case	24-SSOP (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 LTC4100EG#TRPBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC4100 Smart Battery Charger is a single chip charging solution that dramatically simplifies construction of an SBS compliant system. The LTC4100 implements a Level 2 charger function whereby the charger can be programmed by the battery or by the host. A SafetySignal on the battery being charged is monitored for temperature, connectivity and battery type information. The SMBus interface remains alive when the AC power adapter is removed and responds to all SMBus activity directed to it, including SafetySignal status (via the ChargerStatus command). The charger also provides an interrupt to the host whenever a status change is detected (e.g., battery removal, AC adapter connection).

Charging current and voltage are restricted to chemistry specific limits for improved system safety and reliability. Limits are programmable by two external resistors. Additionally, the maximum average current from the AC adapter is programmable to avoid overloading the adapter when simultaneously supplying load current and charging current. When supplying system load current, charging current is automatically reduced to prevent adapter overload.

Features

Single Chip Smart Battery Charger Controller

100% Compliant (Rev. 1.1) SMBus Support Allows for Operation with or without Host

SMBus Accelerator Improves SMBus Timing

Wide Output Voltage Range: 3.5V to 26V

Hardware Interrupt and SMBAlert Response Eliminate Interrupt Polling

High Efficiency Synchronous Buck Charger

0.5V Dropout Voltage; Maximum Duty Cycle > 98%

AC Adapter Current Limit Maximizes Charge Rate

Up to 4A Charging Current Capability

10-Bit DAC for Charge Current Programming

11-Bit DAC for Charger Voltage Programming

User-Selectable Overvoltage and Overcurrent Limits

High Noise Immunity SafetySignal Sensor

Available in a 24-Pin SSOP Package

Application

Portable Instruments and Computers

Data Storage Systems and Battery Backup Servers

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



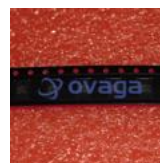
[LTC3440EMS](#)

Analog Devices, Inc
MSOP10



[LTC2990IMS#PBF](#)

Analog Devices, Inc
10MSOP



[LT4295IUFD#PBF](#)

Analog Devices, Inc
28-WFQFN