

LTC4100EG#PBF

Data Sheet

Switching Battery Charger 4000mA 3.5V to 26V 24-Pin SSOP Tube

Manufacturers	Analog Devices, Inc	
Package/Case	SSOP-24	Bare.
Product Type	Power Management ICs	ALLER CONTRACTOR
RoHS	Pb-free Halide free	
Lifecvcle		
		intages are for reference only

Please submit RFQ for LTC4100EG#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

<u>RFQ</u>

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

Application

- 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

Related Products



<u>LT3763EFE</u> Analog Devices, Inc TSSOP28







LTC1966CMS8#PBF Analog Devices, Inc MSOP-8P



LTM8045EY#PBF

Analog Devices, Inc BGA40







Portable Instruments and Computers

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LT1038CK

LTC3440EMS

Analog Devices, Inc MSOP10

LTC2990IMS#PBF

Analog Devices, Inc 10MSOP

LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN