

LTC1760IFW#PBF

Data Sheet

Switching Battery Charger Li-Ion/Li-Pol/NiCD/NiMH 4000mA 48-Pin TSSOP Tube

Manufacturers Analog Devices, Inc

Package/Case TSSOP-48

Product Type Power Management ICs

RoHS Pb-free Halide free

Please submit RFQ for LTC1760IFW#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

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Images are for reference only

<u>RFQ</u>

General Description

Lifecycle

The LTC1760 Smart Battery System Manager is a highly-integrated SMBus Level 3 battery charger and selector intended for products using dual smart batteries. Three SMBus interfaces allow the LTC1760 to servo to the internal voltage and currents measured by the batteries while allowing an SMBus Host device to monitor either battery's status. Charging accuracy is determined by the battery's internal voltage and current measurements, typically better than $\pm 0.2\%$.

A proprietary PowerPath architecture supports simultaneous charging or discharging of both batteries. Typical battery run times are extended by up to 10%, while charging times are reduced by up to 50%. The LTC1760 automatically switches between power sources in less than 10μ s to prevent power interruption upon battery or wall adapter removal.

The LTC1760 implements all elements of a version 1.1 "Smart Battery System Manager" except for the generation of composite battery information. An internal multiplexer cleanly switches the SMBus Host to either of the two attached Smart Batteries without generating partial messages to batteries or SMBus Host. Thermistors on both batteries are automatically monitored for temperature and disconnection information (SafetySignal).

Features

SMBus Charger/Selector for Two Smart Batteries*

Voltage and Current Accuracy within 0.2% of Value Reported by Battery

Simplifies Construction of "Smart Battery System Manager"

Includes All SMBus Charger V1.1 Safety Features

Supports Autonomous Operation without a Host

Allows Both Batteries to Discharge Simultaneously into Single Load with Low Loss (Ideal Diode)

SMBus Switching for Dual Batteries with Alarm Monitoring for Charging Battery at All Times

Pin Programmable Limits for Maximum Charge Current and Voltage Improve Safety

Fast Autonomous Power PathTM Switching (<10µs)

Low Loss Simultaneous Charging of Two Batteries

AC Adapter Current Limiting* Maximizes Charge Rate

SMBus Accelerator Improves SMBus Timing**

Available in 48-Lead TSSOP Package

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

Application

Portable Computers and Instruments

Standalone Dual Smart Battery Chargers

Battery Backup Systems



Analog Devices, Inc TO-3



LTC3440EMS

Analog Devices, Inc MSOP10



LTC2990IMS#PBF

Analog Devices, Inc 10MSOP



LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN