

LTC4006EGN-6#PBF

Data Sheet

Switching Battery Charger Li-Ion 4000mA 8.4V 16-Pin SSOP N Tube

Manufacturers Analog Devices, Inc

Package/Case SSOP16

Product Type Power Management ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for LTC4006EGN-6#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The LTC4006 is a complete constant-current/constant voltage charger controller for 2-, 3- or 4-cell lithium batteries in a small package using few external components. The PWM controller is a synchronous, quasi-constant frequency, constant off-time architecture that will not generate audible noise even when using ceramic capacitors.

The LTC4006 is available in 8.4V, 12.6V and 16.8V versions with $\pm 0.8\%$ voltage accuracy. Charging current is programmable with a single sense resistor to $\pm 4\%$ typical accuracy. Charging current can be monitored as a representative voltage at the IMON pin. A timer, programmed by an external resistor, sets the total charge time or is reset to 25% of total charge time after C/10 charging current is reached. Charging automatically resumes when the cell voltage falls below 3.9V/cell.

Fully discharged cells are automatically trickle charged at 10% of the programmed current until the cell voltage exceeds 2.5V/cell. Charging terminates if the low-battery condition persists for more than 25% of the total charge time.

The LTC4006 includes a thermistor sensor input that suspends charging if an unsafe temperature condition is detected and automatically resumes charging when the battery temperature returns to within safe limits.

Features

Complete Charger Controller for 2-, 3- or 4-Cell Lithium-Ion Batteries

High Conversion Efficiency: Up to 96%

Output Currents Exceeding 4A

Built-In Charge Termination with Automatic Restart

AC Adapter Current Limiting Maximizes Charge Rate*

Automatic Conditioning of Deeply Discharged Batteries

Thermistor Input for Temperature Qualified Charging

Wide Input Voltage Range: 6V to 28V

0.5V Dropout Voltage; Maximum Duty Cycle: 98%

Programmable Charge Current: ±4% Accuracy

Indicator Outputs for Charging, C/10 Current Detection and AC Adapter Present

Charging Current Monitor Output

16-Pin Narrow SSOP 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



Notebook Computers

Portable Instruments

Battery-Backup Systems

Standalone Li-Ion Chargers



LT1038CK
Analog Devices, Inc
TO-3



LTC3440EMS
Analog Devices, Inc
MSOP10



LTC2990IMS#PBF
Analog Devices, Inc
10MSOP



LT4295IUFD#PBF
Analog Devices, Inc
28-WFQFN