

Switching Battery Charger Li-Ion/Li-Pol 1500mA 4.2V 28-Pin SSOP

Manufacturer:	Maxim Integrated	<input type="text" value="MAX1758EAI+ Image"/>
Package/Case:	SSOP28	Images are for reference only
Product Type:	Power Management ICs	<input type="button" value="Inquiry"/>
RoHS:	RoHS Compliant/Lead free 	
Lifecycle:	Active	

General Description

The MAX1758 is a switch-mode lithium-ion (Li+) battery charger that charges one-to-four cells. It provides a regulated charging current accurate to $\pm 10\%$ and a regulated voltage with only a $\pm 0.8\%$ total voltage error at the battery terminals. The internal high-side switch delivers a programmable current of up to 1.5A to charge the battery. The built-in safety timer automatically terminates charging once the adjustable time limit has been reached. The MAX1758 regulates the voltage set point and charging current using two loops that work together to transition smoothly between voltage and current regulation. An additional control loop monitors the total current drawn from the input source (charging + system), and automatically reduces battery-charging current, preventing overload of the input supply and allowing the use of a low-cost wall adapter. The per-cell battery regulation voltage is set between 4.0V and 4.4V using standard 1% resistors. The number of cells is set from 1-to-4 by pin strapping. Battery temperature is monitored by an external thermistor to prevent charging outside the acceptable temperature range. The MAX1758 is available in a space-saving 28-pin SSOP package. Use the MAX1758EVKIT to help reduce design time. For a stand-alone charger with a 14V switch, refer to the MAX1757 data sheet. For a charger controller capable of up to 4A charging current, refer to the MAX1737 data sheet.

Key Features

Stand-Alone Charger for Up to 4 Li+ Batteries

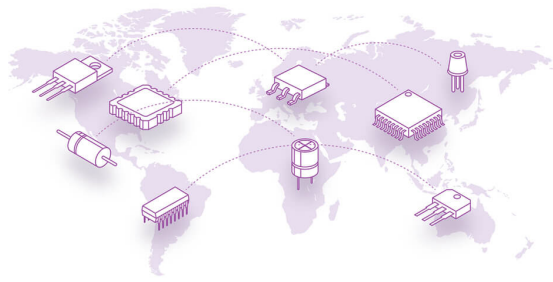
Application

Desktop Cradle Chargers

Handheld Instruments (PDAs, Palmtops)

Li+ Battery Packs

Notebook Computers



Recommended For You

MAX1636EAP

Maxim Integrated

SSOP20

MAX1673ESA+

Maxim Integrated

SOP8

MAX1682EUK+T

Maxim Integrated

SOT23-5

MAX1720EUT+T

Maxim Integrated

SOT23-6

MAX845ESA+T

Maxim Integrated

SOP-8

MAX1681ESA+

Maxim Integrated

SOP-8

MAX17113EIL+

Maxim Integrated

QFN

MAX690CPA+

Maxim Integrated

DIP8

MAX690MJA

Maxim Integrated

CDIP8

MAX6107EUR+T

Maxim Integrated

SOT23-3

MAX5920BESA+

Maxim Integrated

SOP-8

MAX5922AEUI+

Maxim Integrated

TSSOP28

MAX5900ABETT+T

Maxim Integrated

TDFN-6

MAX5903LBEUT

Maxim Integrated

SOT23-6

MAX860ESA+

Maxim Integrated

SOP8