

LTC3350EUHF#TRPBF

Data Sheet

High Current Supercapacitor Backup Controller and System Monitor

Manufacturers <u>Analog Devices, Inc</u>

Package/Case 38-Lead QFN (5mm x 7mm w/ EP)

Product Type Power Management ICs

RoHS

Lifecycle

Please submit RFQ for LTC3350EUHF#TRPBF or Email to us; sales@ovaga.com We will contact you in 12 hours.



Images are for reference only

RFO

General Description

The LTC3350 is a backup power controller that can charge and monitor a series stack of one to four supercapacitors. The LTC3350's synchronous step-down controller drives N-channel MOSFETs for constant current/constant voltage charging with programmable input current limit. In addition, the step-down converter can run in reverse as a step-up converter to deliver power from the supercapacitor stack to the backup supply rail. Internal balancers eliminate the need for external balance resistors and each capacitor has a shunt regulator for overvoltage protection.

The LTC3350 monitors system voltages, currents, stack capacitance and stack ESR which can all be read over the I2C/SMBus. The dual ideal diode controller uses N-channel MOSFETs for low loss power paths from the input and supercapacitors to the backup system supply. The LTC3350 is available in a low profile 38-lead $5 \text{mm} \times 7 \text{mm} \times 0.75 \text{mm}$ QFN surface mount package.

Features

High Efficiency Synchronous Step-Down CC/CV Charging of One to Four Series Supercapacitors

Step-Up Mode in Backup Provides Greater Utilization of Stored Energy in Supercapacitors

14-Bit ADC for Monitoring System Voltages/Currents, Capacitance and ESR

Active Overvoltage Protection Shunts

Internal Active Balancers—No Balance Resistors

VIN: 4.5V to 35V, VCAP(n): Up to 5V per Capacitor, Charge/Backup Current: 10+A

Programmable Input Current Limit Prioritizes System Load Over Capacitor Charge Current

Dual Ideal Diode PowerPathTM Controller

All N-FET Charger Controller and PowerPath Controller

Compact 38-Lead 5mm × 7mm QFN Package

Application

High Current 12V Ride-Through UPS

Servers/Mass Storage/High Availability Systems

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



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Analog Devices, Inc 28-WFQFN