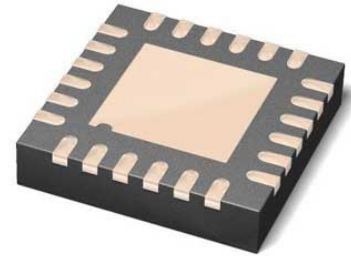


2.5A SUPERCAPACITOR BACKUP POWER

Manufacturers	Analog Devices, Inc
Package/Case	QFN-24
Product Type	Power Management ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC4041EUFD#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC4041 is a complete supercapacitor backup system for 2.9V to 5.5V supply rails. It contains a high current step-down DC/DC converter to charge a single supercapacitor or two supercapacitors in series. When input power is unavailable, the step-down regulator operates in reverse as a step-up regulator to backup the system output from the supercapacitor(s).

The LTC4041's adjustable input current limit function reduces charge current to protect the input supply from overload while an external disconnect switch isolates the input supply during backup. When the input supply drops below the adjustable PFI threshold, the 2.5A boost regulator delivers power from the supercapacitor to the system output.

An optional input overvoltage protection (OVP) circuit protects the LTC4041 from high voltage damage at the VIN pin. An internal supercapacitor balancing circuit maintains equal voltages across each supercapacitor and limits the maximum voltage of each supercapacitor to a pre-determined value. The LTC4041 is available in a low profile (0.75mm) 24-Lead 4mm × 5mm QFN package.

Features

2.5A Step-Down Supercapacitor Charger and 2.5A Step-Up Backup Supply

6.5A Switches for 2.5A Backup from One Supercapacitor or Two in Series

Input Current Limit Prioritizes Load over Charge Current

Input Disconnect Switch Isolates Input During Backup

Automatic Seamless Switch-Over to Backup Mode

Internal Supercapacitor Balancer (No External Resistors)

Programmable Charge Current and Charge Voltage

Input Power Fail Indicator

System Power Good Indicator

Optional OVP Circuitry Protects Device to >60V

Constant Frequency Operation

Thermally Enhanced 24-Lead 4mm × 5mm QFN Package

Application

Ride-Through “Dying Gasp” Supplies

High Current Ride-Through 3V to 5V UPS

Power Meters/Industrial Alarms

Servers/Solid State Drives

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



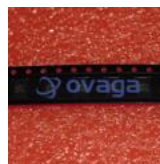
[LTC3440EMS](#)

Analog Devices, Inc
MSOP10



[LTC2990IMS#PBF](#)

Analog Devices, Inc
10MSOP



[LT4295IUFD#PBF](#)

Analog Devices, Inc
28-WFQFN