

# LTC3850EUF#PBF

Data Sheet

DC/DC Cntrlr Dual-OUT Step Down 860kHz Automotive 28-Pin QFN EP Tube

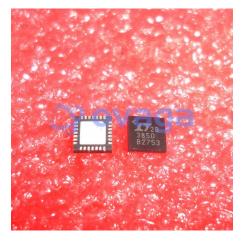
Manufacturers <u>Analog Devices, Inc</u>

Package/Case QFN-28

Product Type Power Management ICs

**RoHS** 

Lifecycle



Images are for reference only

Please submit RFQ for LTC3850EUF#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The LTC3850 is a high performance dual synchronous step-down switching regulator controller that drives all N-channel power MOSFET stages. A constant-frequency current mode architecture allows a phase-lockable frequency of up to 780kHz. Power loss and supply noise are minimized by operating the two controller output stages out of phase.

OPTI-LOOP® compensation allows the transient response to be optimized over a wide range of output capacitance and ESR values. The LTC3850 features a precision 0.8V reference and a power good output indicator. A wide 4V to 24V (28V maximum/30V for LTC3850I) input supply range encompasses most battery chemistries and intermediate bus voltages.

Independent TK/SS pins for each controller ramp the output voltages during start-up. Current foldback limits MOSFET heat dissipation during short-circuit conditions. The MODE/PLLIN pin selects among Burst Mode® operation, pulse-skipping mode, or continuous inductor current mode and allows the IC to be synchronized to an external clock.

The LTC3850 is available in low profile 28-pin 4mm x 4mm, 4mm x 5mm QFN and narrow SSOP packages.

Features LTC3850SSOP-28 and QFN-28 PackagesLTC3850-1 ILIM function replaced with an EXTVCC function, SSOP-28 package onlyLTC3850-2 The LTC3850-2 is identical to the LTC3850-1 SSOP-28, except they have different pin-outs

#### **Features**

Dual, 180° Phased Controllers Reduce Required

Input Capacitance and Power Supply Induced Noise

High Efficiency: Up to 95%

RSENSE or DCR Current Sensing

Phase-Lockable Fixed Frequency 250kHz to 780kHz

Supports Pre-Biased Output

Dual N-Channel MOSFET Synchronous Drive

Wide VIN Range: 4V to 24V (30V for LTC3850I) Operation

Adjustable Soft-Start Current Ramping or Tracking

Foldback Output Current Limiting

Output Overvoltage Protection

Power Good Output Voltage Monitor

28-Pin 4mm  $\times$  4mm, 4mm  $\times$  5mm QFN and Narrow SSOP Packages

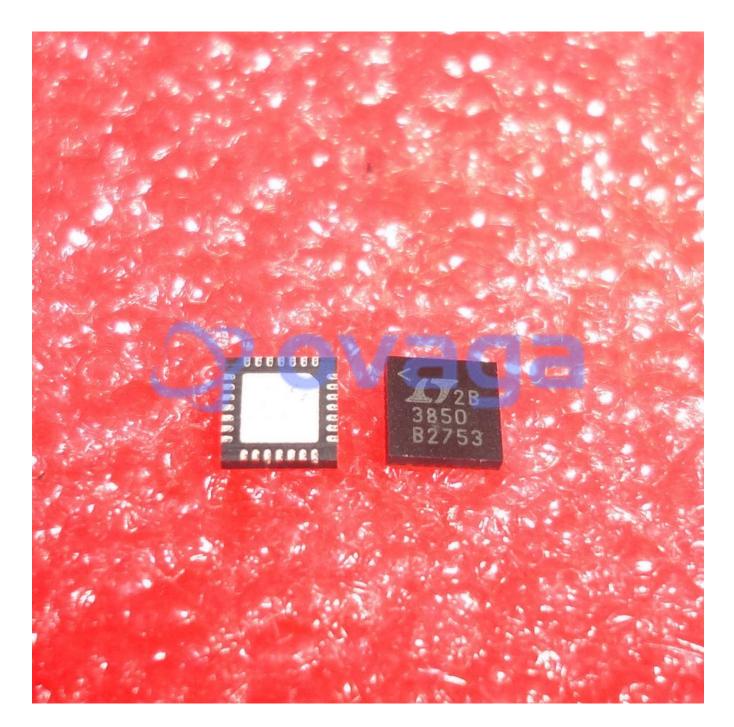
# **Application**

Notebook and Palmtop Computers

Portable Instruments

Battery-Operated Digital Devices

DC Power Distribution Systems



### **Related Products**



LT3763EFE
Analog Devices, Inc
TSSOP28



LTC4417IUF

Analog Devices, Inc

QFN-24



LT1038CK
Analog Devices, Inc
TO-3



LTC3440EMS
Analog Devices, Inc
MSOP10



LTC1966CMS8#PBF
Analog Devices, Inc
MSOP-8P



Analog Devices, Inc 10MSOP

LTC2990IMS#PBF



LTM8045EY#PBF
Analog Devices, Inc
BGA40



LT4295IUFD#PBF
Analog Devices, Inc
28-WFQFN