

DC DC Cntrlr Dual-OUT Sync Step Down 4V to 24V Input Automotive

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	QFN-28
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTC3850EUF#TRPBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## 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 Packages LTC3850-1 ILIM function replaced with an EXTVCC function, SSOP-28 package only LTC3850-2 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 × 4mm, 4mm × 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



### [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