

## LTC1877EMS8#PBF

Data Sheet

SYNCHRONOUS STEP-DOWN REGULATOR, MSOP-8, Input Voltage Min:2.65V, Input Voltage Max:10V, No. of Outputs:1, DC / DC Converter IC Case:MSOP, No. of Pins:8, Output Current:600mA

Manufacturers

Analog Devices, Inc

Package/Case

MSOP8

Product Type Power Management ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for LTC1877EMS8#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The LTC1877 s a high efficiency monolithic synchronous buck regulator using a constant-frequency, current mode architecture. Supply current during operation is only  $10\mu A$  and drops to  $< 1\mu A$  in shutdown. The 2.65V to 10V input voltage range makes the LTC1877 ideally suited for both single and dual Li-Ion battery-powered applications. 100% duty cycle provides low dropout operation, extending battery life in portable systems.

Switching frequency is internally set at 550kHz, allowing the use of small surface mount inductors and capacitors. For noise sensitive applications the LTC1877 can be externally synchronized from 400kHz to 700kHz. Burst Mode operation is inhibited during synchronization or when the SYNC/MODE pin is pulled low, preventing low frequency ripple from interfering with audio circuitry.

The internal synchronous switch increases efficiency and eliminates the need for an external Schottky diode. Low output voltages are easily supported with the 0.8V feedback reference voltage. The LTC1877 is available in a space saving 8-lead MSOP package. Lower input voltage applications (less than 7V abs max) should refer to the LTC1878 data sheet.

**Features** 

High Efficiency: Up to 95%

Very Low Quiescent Current: Only 10µA During Operation

600mA Output Current at>

2.65V to 10V Input Voltage Range

550kHz Constant-Frequency Operation

No Schottky Diode Required

Low Dropout Operation: 100% Duty Cycle

Synchronizable from 400kHz to 700kHz

Selectable Burst Mode® Operation or Pulse-Skipping Mode

0.8V Reference Allows Low Output Voltages

Shutdown Mode Draws < 1µA Supply Current

Current Mode Control for Excellent Line and Load Transient Response

Overcurrent and Overtemperature Protected

Available in 8-Lead MSOP Package

## **Application**

Cellular Telephones

Wireless Modems

Personal Information Appliances

Portable Instruments

Distributed Power Systems

Battery-Powered Equipment

## **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



LT42951UFD#PBF
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28-WFQFN