

# LTC1878EMS8#PBF

Data Sheet

Step Down DC-DC Converter 8-Pin, MSOP

Manufacturers	Analog Devices, Inc	
Package/Case	MSOP8	
Product Type	Power Management ICs	ST.
RoHS		
Lifecycle		Images are for reference only

Please submit RFQ for LTC1878EMS8#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

<u>RFQ</u>

## **General Description**

The LTC1878 is 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 6V input voltage range makes the LTC1878 ideally suited for single 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 LTC1878 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 LTC1878 is available in a space saving 8-lead MSOP package.

For higher input voltage (11V abs max) applications, refer to the LTC1877 data sheet.

## Features

High Efficiency: Up to 95%

Very Low Quiescent Current: Only 10µA During Operation

600mA Output Current at>

- 2.65V to 6V Input Voltage Range
- 550kHz Constant Frequency Operation
- Synchronizable from 400kHz to 700kHz

Selectable Burst Mode<sup>™</sup> Operation orPulse Skipping Mode

- No Schottky Diode Required
- Low Dropout Operation: 100% Duty Cycle
- 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

### **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



Wireless Modems

Personal Information Appliances

Portable Instruments

Distributed Power Systems

Battery-Powered Equipment





Analog Devices, Inc TO-3

#### **LTC3440EMS**



#### LTC2990IMS#PBF

Analog Devices, Inc 10MSOP

### LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN