

# LT8620EMSE#PBF

Data Sheet

65V, 2A Synchronous Step-Down Regulator with 2.5µA Quiescent Current

Manufacturers	Analog Devices, Inc	
Package/Case	16-Lead MSOP w/ EP	SSR S
Product Type	Power Management ICs	
RoHS		
Lifecycle		Images are for reference only
Please submit RFQ for LT8620EMSE#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.		

# **General Description**

The LT8620 is a compact, high efficiency, high speed synchronous monolithic step-down switching regulator that accepts a wide input voltage range up to 65V, and consumes only  $2.5\mu$ A of quiescent current. Top and bottom power switches are included with all necessary circuitry to minimize the need for external components. Low ripple Burst Mode operation enables high efficiency down to very low output currents while keeping the output ripple below 10mVP-P. A SYNC pin allows synchronization to an external clock. Internal compensation with peak current mode topology allows the use of small inductors and results in fast transient response and good loop stability. The EN/UV pin has an accurate 1V threshold and can be used to program VIN undervoltage lockout or to shut down the LT8620 reducing the input supply current to  $1\mu$ A. A capacitor on the TR/SS pin programs the output voltage ramp rate during start-up. The PG flag signals when VOUT is within ±9% of the programmed output voltage as well as fault conditions. The LT8620 is available in small 16-Lead MSOP and 3mm × 5mm QFN packages with exposed pads for low thermal resistance.

# Features

Wide Input Voltage Range: 3.4V to 65V

Ultralow Quiescent Current Burst Mode® Operation:

2.5µA IQ Regulating 12VIN to 3.3VOUT

High Efficiency Synchronous Operation:

94% Efficiency at 1A, 12VIN to 5VOUT

92% Efficiency at 1A, 12VIN to 3.3VOUT

Fast 30ns Minimum Switch-On Time

Low Dropout Under All Conditions: 250mV at 1A

Safely Tolerates Inductor Saturation in Overload

Low EMI

Adjustable and Synchronizable: 200kHz to 2.2MHz

Accurate 1V Enable Pin Threshold

Internal Compensation

Output Soft-Start and Tracking

Small Thermally Enhanced 16-Lead MSOP and 24-Lead 3mm × 5mm QFN Packages

### **Related Products**



**LT3763EFE** 



Analog Devices, Inc TSSOP28

**LTC4417IUF** 





LTC1966CMS8#PBF Analog Devices, Inc MSOP-8P





General Purpose Step-Down

**GSM** Power Supplies

Automotive and Industrial Supplies

**Application** 

LTC3440EMS Analog Devices, Inc MSOP10

Analog Devices, Inc

LT1038CK

TO-3

LTC2990IMS#PBF

Analog Devices, Inc 10MSOP

**Ovaga Technologies Limited** 



## LTM8045EY#PBF

Analog Devices, Inc BGA40



LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN