

LT8620HMSE#PBF

Images are for reference only

Data Sheet

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

Manufacturers

Analog Devices, Inc

Package/Case

16-Lead MSOP w/ EP

Product Type

Power Management ICs

RoHS

Please submit RFQ for LT8620HMSE#PBF or <u>Emailto:sales@ovaga.com</u> We will contact you in 12 hours.

RFO

General Description

Lifecycle

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 $\pm 9\%$ of the programmed output voltage as well as fault conditions. The LT8620 is available in small 16-Lead MSOP and $3mm \times 5mm$ 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

Analog Devices, Inc

QFN-24



LTC1966CMS8#PBF

Analog Devices, Inc

MSOP-8P



Automotive and Industrial Supplies

General Purpose Step-Down

GSM Power Supplies



LT1038CK

Analog Devices, Inc TO-3



LTC3440EMS

Analog Devices, Inc

MSOP10



LTC2990IMS#PBF

Analog Devices, Inc 10MSOP



LTM8045EY#PBF
Analog Devices, Inc
BGA40



LT4295IUFD#PBF
Analog Devices, Inc
28-WFQFN