

## LT8631HFE#PBF

Data Sheet

100V, 1A Synchronous Micropower Step-Down Regulator

Manufacturers Analog Devices, Inc

Package/Case 20-Lead TSSOP w/ EP

Product Type Power Management ICs

RoHS

Lifecycle

Images are for reference only

Please submit RFQ for LT8631HFE#PBF or <a href="mailto:sales@ovaga.com"><u>Emailto:sales@ovaga.com</u></a> We will contact you in 12 hours.

**RFO** 

## **General Description**

The LT8631 is a current mode PWM step-down DC/DC converter with internal synchronous switches that provide current for output loads up to 1A. The wide input range of 3V to 100V makes the LT8631 suitable for regulating power from a wide variety of sources, including automotive and industrial systems and 36V to 72V telecom supplies. Low ripple Burst Mode operation enables high efficiency operation down to very low output currents while keeping the output ripple below 10mVP-P. Resistor programmable 100kHz to 1MHz frequency range and synchronization capability enable optimization between efficiency and external component size. The soft-start feature controls the ramp rate of the output voltage, eliminating input current surge during start-up, while also providing output tracking. A power good flag signals when the output voltage is within  $\pm 7.5\%$  of the regulated output. Undervoltage lockout can be programmed using the EN/UV pin. Shutdown mode reduces the total quiescent current to  $< 5\mu$ A. The LT8631 is available in a 20-lead TSSOP package with exposed pad for low thermal resistance and high voltage lead spacing.

**Features** 

Ultrawide Input Voltage Range: 3V to 100V

Output Voltage Range: 0.8V to 60V

Internal Synchronous Switches

Low Ripple Burst Mode® Operation:

16μA IQ at 12VIN to 5VOUT Output Ripple <10mVP-P

Low Dropout: 99% Maximum Duty Cycle

Peak Current Mode Control

Fixed Frequency Operation: 100kHz to 1MHz

Synchronization Input

Programmable Undervoltage Lockout

Power Good Flag

Flexible Output Voltage Tracking

Short-Circuit Protection

Low Shutdown Current:  $5\mu A$ 

Tolerates Pin Open/Short Faults

Thermally Enhanced 20-Lead TSSOP with High Voltage Lead Spacing

## **Related Products**



LT3763EFE
Analog Devices, Inc
TSSOP28



LTC4417IUF

Analog Devices, Inc

QFN-24



LTC1966CMS8#PBF
Analog Devices, Inc
MSOP-8P



Automotive Supplies

Telecom Supplies

Distributed Supply Regulation



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