

# LTC3630EMSE#PBF

Data Sheet

Conv DC-DC 4V to 65V Synchronous Step Down Single-Out 0.8V to 65V 0.5A Automotive 12-Pin MSOP EP Tube

Manufacturers

Analog Devices, Inc

Package/Case

MSOP16

Product Type

Power Management ICs

RoHS

TOP VIEW

SW 1 1 16 GND

Vin 3 1 17 14 GND

RUN 5 GND 11 IseT

VPRG 7 7 UP 10 SS
GND 8 VFB

Images are for reference only

Please submit RFQ for LTC3630EMSE#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

Lifecycle

The LTC3630 is a high efficiency step-down DC/DC converter with internal high side and synchronous power switches that draws only  $12\mu$ A typical DC supply current while maintaining a regulated output voltage at no load.

The LTC3630 can supply up to 500mA load current and features a programmable peak current limit that provides a simple method for optimizing efficiency and for reducing output ripple and component size. The LTC3630's combination of Burst Mode® operation, integrated power switches, low quiescent current, and programmable peak current limit provides high efficiency over a broad range of load currents.

With its wide input range of 4V to 65V, the LTC3630 is a robust converter suited for regulating a wide variety of power sources. Additionally, the LTC3630 includes a precise run threshold and soft-start feature to guarantee that the power system start-up is well-controlled in any environment. A feedback comparator output enables multiple LTC3630s to be paralleled in higher current applications.

The LTC3630 is available in the thermally-enhanced 3mm × 5mm DFN and the MSE16 packages.

Vin RangeLTC36304.5V to 65VLTC3630A4.5V to 76V

## **Features**

Wide Operating Input Voltage Range: 4V to 65V

Synchronous Operation for Highest Efficiency

Internal High Side and Low Side Power MOSFETs

No Compensation Required

Adjustable 50mA to 500mA Maximum Output Current

Low Dropout Operation: 100% Duty Cycle

Low Quiescent Current: 12µA

Wide Output Range: 0.8V to VIN

 $0.8V \pm 1\%$  Feedback Voltage Reference

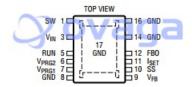
Precise RUN Pin Threshold

Internal and External Soft-Start

Programmable 1.8V, 3.3V, 5V or Adjustable Output

Few External Components Required

Low Profile (0.75mm) 3mm × 5mm DFN and Thermally-Enhanced MSE16 Packages



## **Application**

Industrial Control Supplies

Medical Devices

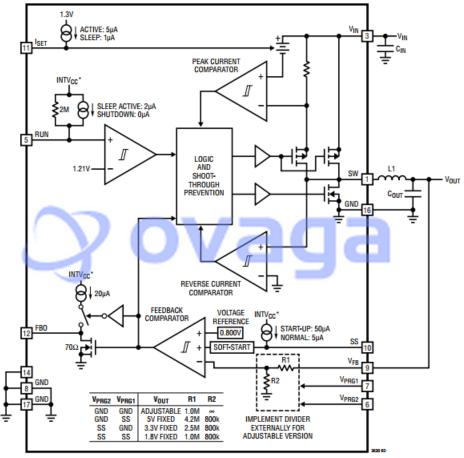
Distributed Power Systems

Portable Instruments

Battery-Operated Devices

Automotive

Avionics



\*WHEN  $V_{IN} > 5V$ ,  $INTV_{CC} = 5V$ WHEN  $V_{IN} \le 5V$ ,  $INTV_{CC}$  FOLLOWS  $V_{IN}$ 

#### **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



## LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN