

# LT3973EMSE-5#TRPBF

Data Sheet

#### IC REG BUCK 5V 0.75A 10MSOP

Manufacturers	Analog Devices, Inc
Package/Case	MSOP10
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LT3973EMSE-5#TRPBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

<u>RFQ</u>

# **General Description**

The LT3973 is an adjustable frequency monolithic buck switching regulator that accepts a wide input voltage range up to 42V, and consumes only  $2.5\mu$ A of quiescent current. A high efficiency switch is included on the die along with the catch diode, boost diode, and the necessary oscillator, control and logic circuitry. Low ripple Burst Mode operation maintains high efficiency at low output currents while keeping the output ripple below 10mV in a typical application. A minimum dropout voltage of 530mV is maintained when the input voltage drops below the programmed output voltage, such as during automotive cold crank. Current mode topology is used for fast transient response and good loop stability. A catch diode current limit provides protection against shorted outputs and overvoltage conditions, with thermal shutdown providing additional fault protection. An accurate programmable undervoltage lockout feature is available, producing a low shutdown current of 0.75 $\mu$ A. A power good flag signals when VOUT reaches 90% of the programmed output voltage. The LT3973 is available in small, thermally enhanced 10-lead MSOP and 3mm × 3mm DFN packages.

# Features

Ultralow Quiescent Current2.5 $\mu A$  IQ at 12VIN to 3.3VOUT

Wide Input Voltage Range: 4.2V to 42V Operating

Adjustable Switching Frequency: 200kHz to 2.2MHz

Integrated Boost and Catch Diodes

750mA Output Current

Excellent Start-Up and Dropout Performance

Fixed Output Voltages: 3.3V, 5V

 $1.9 \mu A \, IQ$  at 12 VIN

Accurate Programmable Undervoltage Lockout

Low Shutdown Current:>

Internal Catch Diode Current Limit

Power Good Flag

Thermal Shutdown

Small, Thermally Enhanced 10-Lead MSOP and ( $3mm \times 3mm$ ) DFN Packages

# Application

Automotive Battery Regulation

Power for Portable Products

Industrial Supplies

Gate Drive Bias



## **Related Products**



Analog Devices, Inc TSSOP28

LT3763EFE



TSSOP28

Analog Devices, Inc QFN-24





# LT1038CK

Analog Devices, Inc TO-3

## LTC3440EMS

Analog Devices, Inc MSOP10



#### LTC1966CMS8#PBF

Analog Devices, Inc MSOP-8P



### LTC2990IMS#PBF

Analog Devices, Inc 10MSOP



#### LTM8045EY#PBF

Analog Devices, Inc BGA40



## LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN