

Conv DC-DC 2.25V to 5.5V Synchronous Step Down Single-Out 0.8V to 5V 4A  
Automotive 20-Pin TSSOP EP Tube

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	TSSOP-20
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTC3414EFE#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LTC3414 is a high efficiency monolithic synchronous, step-down DC/DC converter utilizing a constant frequency, current mode architecture. It operates from an input voltage range of 2.25V to 5.5V and provides a regulated output voltage from 0.8V to 5V while delivering up to 4A of output current. The internal synchronous power switch with 67mΩ on-resistance increases efficiency and eliminates the need for an external Schottky diode. Switching frequency is set by an external resistor or can be synchronized to an external clock. 100% duty cycle provides low dropout operation extending battery life in portable systems. OPTI-LOOP® compensation allows the transient response to be optimized over a wide range of loads and output capacitors.

The LTC3414 can be configured for either Burst Mode operation or forced continuous operation. Forced continuous operation reduces noise and RF interference while Burst Mode operation provides high efficiency by reducing gate charge losses at light loads. In Burst Mode operation, external control of the burst clamp level allows the output voltage ripple to be adjusted according to the requirements of the application.

## Features

High Efficiency: Up to 95%

4A Output Current

Low Quiescent Current: 64 $\mu$ A

Low RDS(ON) Internal Switch: 67m $\Omega$

Programmable Frequency: 300KHz to 4MHz

2.25V to 5.5V Input Voltage Range

0.8V Reference Allows Low Output Voltage

Selectable Forced Continuous/Burst Mode<sup>®</sup> Operation with Adjustable Burst Clamp

Synchronizable Switching Frequency

Low Dropout Operation: 100% Duty Cycle

Power Good Output Voltage Monitor

Overtemperature Protected

Available in 20-Lead Exposed TSSOP Package

## Application

Point-of-Load Regulation

Notebook Computers

Portable Instruments

Distributed Power Systems

## 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



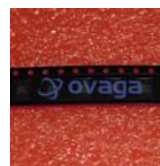
### [LTC3440EMS](#)

Analog Devices, Inc  
MSOP10



### [LTC2990IMS#PBF](#)

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10MSOP



### [LT4295IUFD#PBF](#)

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28-WFQFN