

Dual Synchronous 1.4A/800mA 4MHz Step-Down DC/DC Regulator; Package: TSSOP;  
No of Pins: 20; Temperature Range: -40°C to +125°C

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	20-TSSOP (0.173, 4.40mm Width)
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTC3417AEFE#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LTC3417A-1 is a dual constant frequency, synchronous step-down DC/DC converter. Intended for medium power applications, it operates from a 2.25V to 5.5V input voltage range and has a constant programmable switching frequency, allowing the use of tiny, low cost capacitors and inductors 2mm or less in height. Each output voltage is adjustable from 0.8V to 5V. Internal synchronous, low RDS(ON) power switches provide high efficiency without the need for external Schottky diodes.

The open drain POR pin goes low when either output voltage falls 6% below regulation. The output will remain low 150ms longer than the duration of the out of regulation condition.

A user selectable mode input allows the user to trade off ripple voltage for light load efficiency. Burst Mode operation provides high efficiency at light loads, while pulse skip mode provides low ripple noise at light loads. A phase mode pin allows the second channel to operate in-phase or 180° out-of-phase with respect to channel 1. Out-of-phase operation produces lower RMS current on VIN and thus lower stress on the input capacitor.

To further maximize battery life, the P-channel MOSFETs are turned on continuously in dropout (100% duty cycle) and both channels draw a total quiescent current of only 100µA. In shutdown, the device draws <1µA.

FeaturesNotesLTC3417--LTC3417AImproved Channel Matching-LTC3417A-1Power On ResetRecommended For New DesignsLTC3417A-2Power GoodRecommended For New Designs

## Features

High Efficiency: Up to 95%

1.5A/1A Guaranteed Minimum Output Current

Synchronizable to External Clock

Power-On-Reset Output

No Schottky Diodes Required

Programmable Frequency Operation: 1.5MHz or Adjustable From 0.6MHz to 4MHz

Low Ripple (< 35mVP-P) Burst Mode® Operation

Low RDS(ON) Internal Switches

Short-Circuit Protected

VIN: 2.25V to 5.5V

Current Mode Operation for Excellent Line and Load Transient Response

125µA Quiescent Current in Sleep Mode

Ultralow Shutdown Current: IQ < 1µA

Low Dropout Operation: 100% Duty Cycle

Phase Pin Selects 2nd Channel Phase Relationship with Respect to 1st Channel

Internal Soft-Start with Individual Run Pin Control

Available in Small Thermally Enhanced (3mm × 5mm) DFN and 20-Lead TSSOP Packages

## Application

GPS/Navigation Systems

Automotive Instrumentation

PC Cards

Industrial Power Supplies

General Purpose Point of Load DC/DC

## Related Products



### [LT3763EFE](#)

Analog Devices, Inc  
TSSOP28



### [LTC4417IUF](#)

Analog Devices, Inc  
QFN-24



### [LTC1966CMS8#PBF](#)

Analog Devices, Inc  
MSOP-8P



### [LT1038CK](#)

Analog Devices, Inc  
TO-3



### [LTC3440EMS](#)

Analog Devices, Inc  
MSOP10



### [LTC2990IMS#PBF](#)

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10MSOP



[LTM8045EY#PBF](#)

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BGA40



[LT4295IUFD#PBF](#)

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