

LTC3418EUHF#PBF

Data Sheet

Conv DC-DC 2.25V to 5.5V Synchronous Step Down Single-Out 0.8V to 5V 8A Automotive 38-Pin QFN EP Tube

Manufacturers	Analog Devices, Inc.		
Package/Case	QFN-38	Caraca SSSS	2227
Product Type	Power Management ICs	Caller SP22	
RoHS	Pb-free Halide free		
Lifecycle		Images are for reference or	nly
Please submit RFQ for L1	C3418EUHF#PBF or Email to us: sales@ovaga.com We will contact you in	12 hours.	<u>RFQ</u>

General Description

The LTC3418 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 8A of output current. The internal synchronous power switch 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. OPTI-LOOP® compensation allows the transient response to be optimized over a wide range of loads and output capacitors.

The LTC3418 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. A tracking input in the LTC3418 allows for proper sequencing with respect to another power supply.

Features

High Efficiency: Up to 95%

8A Output Current

2.25V to 5.5V Input Voltage Range

Low RDS(ON) Internal Switch: $35m\Omega$

Tracking Input to Provide Easy Supply Sequencing

- Programmable Frequency: 300kHz to 4MHz
- 0.8V±1% Reference Allows Low Output Voltage
- Quiescent Current: 380µA

Selectable Forced Continuous/Burst Mode® Operation with Adjustable Burst Clamp

Synchronizable Switching Frequency

Low Dropout Operation: 100% Duty Cycle

Power Good Output Voltage Monitor

Overtemperature Protected

38-Lead Low Profile (0.75mm) Thermally Enhanced QFN (5mm × 7mm) Package

Related Products



LT3763EFE Analog Devices, Inc

TSSOP28



LTC4417IUF Analog Devices, Inc QFN-24







LTM8045EY#PBF Analog Devices, Inc

BGA40









Application

Microprocessor, DSP and Memory Supplies

Distributed 2.5V, 3.3V and 5V Power Systems

Automotive Applications

Point of Load Regulation

Notebook Computers

Analog Devices, Inc TO-3

LT1038CK

LTC3440EMS Analog Devices, Inc MSOP10

LTC2990IMS#PBF

Analog Devices, Inc 10MSOP

LT4295IUFD#PBF Analog Devices, Inc 28-WFQFN