

LTC3616EUDD#PBF

Data Sheet

Conv DC-DC 2.25V to 5.5V Synchronous Step Down Single-Out 0.6V to 5.5V 6A Automotive 24-Pin QFN EP Tube

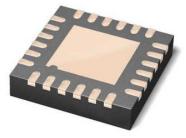
Manufacturers <u>Analog Devices, Inc</u>

Package/Case QFN24

Product Type Power Management ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for LTC3616EUDD#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The LTC3616 is a low quiescent current monolithic synchronous buck regulator using a current mode, constant frequency architecture. The no-load DC supply current in sleep mode is only $70\mu\text{A}$ while maintaining the output voltage (Burst Mode operation) at no load, dropping to zero current in shutdown. The 2.25V to 5.5V input supply voltage range makes the LTC3616 ideally suited for single Li-Ion as well as fixed low voltage input applications. 100% duty cycle capability provides low dropout operation, extending the operating time in battery-powered systems.

The operating frequency is externally programmable up to 4MHz, allowing the use of small surface mount inductors. For switching noise-sensitive applications, the LTC3616 can be synchronized to an external clock at up to 4MHz.

Forced continuous mode operation in the LTC3616 reduces noise and RF interference. Adjustable compensation allows the transient response to be optimized over a wide range of loads and output capacitors.

The internal synchronous switch increases efficiency and eliminates the need for an external catch diode, saving external components and board space. The LTC3616 is offered in a leadless 24-pin $3mm \times 5mm$ thermally enhanced QFN package.

Features

6A Output Current

2.25V to 5.5V Input Voltage Range

Low Output Ripple Burst Mode® Operation:>

Output Voltage Down to 0.6V

High Efficiency: Up to 95%

Low Dropout Operation: 100% Duty Cycle

Programmable Slew Rate on SW Node Reduces Noise and EMI

Adjustable Switching Frequency: Up to 4MHz

Optional Active Voltage Positioning (AVP) with Internal Compensation

Selectable Pulse-Skipping/Forced Continuous/Burst Mode Operation with Adjustable Burst Clamp

Programmable Soft-Start

Inputs for Start-Up Tracking or External Reference

DDR Memory Mode,>

Available in a 24-Pin 3mm × 5mm QFN Thermally Enhanced Package

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



Point-of-Load Supplies

Distributed Power Supplies

Portable Computer Systems

DDR Memory Termination

Handheld Devices



LT1038CK

Analog Devices, Inc

TO-3



LTC3440EMS

Analog Devices, Inc

MSOP10



LTC2990IMS#PBF

Analog Devices, Inc

10MSOP



LT4295IUFD#PBF

Analog Devices, Inc

28-WFQFN