

LTC3615EUF#PBF

Data Sheet

Conv DC-DC 2.25V to 5.5V Synchronous Step Down Dual-Out 0.6V to 5.5V 3A/3A Automotive 24-Pin QFN EP Tube

Manufacturers	Analog Devices, Inc	E
Package/Case	QFN-24	in I
Product Type	Power Management ICs	
RoHS		
Lifecycle		Images are for reference only
Please submit REO for LTC3615ELE#PRE or Email to us; sales@oyaga.com We will contact you in 12 hours REO		

General Description

The LTC3615/LTC3615-1 are dual 3A synchronous stepdown regulators using a current mode, constant-frequency architecture. The DC supply current is only 130μ A (Burst Mode operation at no-load) while maintaining the output voltages, dropping to zero current in shutdown. The 2.25V to 5.5V input supply range makes the parts ideally suited for single Li-Ion applications. 100% duty cycle capability provides low dropout operation, which extends operating time in battery-operated systems.

The operating frequency is externally programmable up to 4MHz, allowing the use of small surface mount inductors. 0° , 90° , or 180° (LTC3615) or $140^{\circ}/180^{\circ}$ (LTC3615-1) of phase shift between the two channels can be selected to minimize input current ripple and output voltage ripple in a dual 3A or single 6A output configuration. Programmable slew rate limiting reduces EMI, and external synchronization can be applied up to 4MHz.

The internal synchronous switches increase efficiency and eliminate the need for external catch diodes, saving external components and board space.

The LTC3615/LTC3615-1 are offered in leadless 24-pin 4mm × 4mm QFN and thermally enhanced 24-pin eTSSOP packages.

Features

High Efficiency: Up to 94% Dual Outputs with 2 × 3A Output Current Capability Low Output Ripple Burst Mode® Operation> 2.25V to 5.5V Input Voltage Range Output Voltages Down to 0.6V Programmable Slew Rate at Switch Pins Low Dropout Operation: 100% Duty Cycle Shutdown Current $\leq 1 \mu A$ Adjustable Switching Frequency Up to 4MHz Internal or External Compensation Selectable Pulse-Skipping/Forced Continuous/ Burst Mode Operation with Adjustable Burst Clamp Optional Active Voltage Positioning (AVP) with Internal Compensation Selectable 0°/90°/180° (LTC3615) or selectable 140°/180° (LTC3615-1) Phase Shift Between Channels Fixed Internal and Programmable External Soft-Start Accurate Start-Up Tracking Capability

DDR Memory Mode>

Available in 4mm × 4mm QFN-24 and eTSSOP-24 Packages

Related Products



LT3763EFE

Analog Devices, Inc TSSOP28



LTC4417IUF Analog Devices, Inc QFN-24



Analog Devices, Inc MSOP-8P

LTC1966CMS8#PBF







Application

Point-of-Load Supplies

Distributed Power Supplies

Portable Computer Systems

DDR Memory Termination

Handheld Devices

Analog Devices, Inc

LTC3440EMS

MSOP10

Analog Devices, Inc

LT1038CK

TO-3

LTC2990IMS#PBF

Analog Devices, Inc 10MSOP



LTM8045EY#PBF

Analog Devices, Inc BGA40



LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN