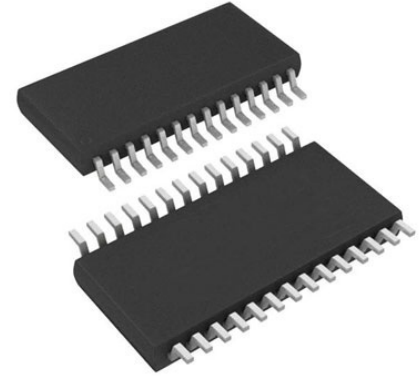


Conv DC-DC 3.6V to 15V Synchronous Step Down Dual-Out 0.6V 3A/3A 28-Pin TSSOP EP Tube

Manufacturers	Analog Devices, Inc
Package/Case	28-TSSOP (0.173, 4.40mm Width)
Product Type	Power Management ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC3633IFE#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC3633A is a high efficiency, dual-channel monolithic synchronous buck regulator using a controlled on-time, current mode architecture, with phase lockable switching frequency. The two channels can run 180° out of phase to relax the requirements for input and output capacitance. The operating supply voltage range is from 3.6V to 20V, making it suitable for lithium-ion battery stacks as well as point of load power supply applications from a 12V or 5V supply.

The operating frequency is programmable from 500kHz to 4MHz with an external resistor and may be synchronized to an external clock signal. The high frequency capability allows the use of small surface mount inductors and capacitors. The unique constant frequency/controlled ontime architecture is ideal for high step-down ratio applications that operate at high frequency while demanding fast transient response. An internal phase locked loop servos the on-time of the internal one-shot timer to match the frequency of the internal clock or an applied external clock.

The LTC3633A can select between forced continuous mode and high efficiency Burst Mode operation. The LTC3633A and LTC3633A-1 differ in their output voltage sense range (refer to Table 1 in the Operation section of the datasheet for a description of the entire LTC3633A product family).

Part Number	Output Voltage Sense Range	S _{vin}	Input V _{2P5}	Output	LTC3633	Pin Compatible	LTC3633A	0.6V TO 6V	No	Yes	Yes	LTC3633A-		
LTC3633A-1	1.5V TO 12V	No	Yes	Yes	LTC3633A	-20.6V TO 6V	Yes	No	No	LTC3633A-	-31.5V TO 12V	Yes	No	No

Features

3.6V to 20V Input Voltage Range

3A Output Current per Channel

Up to 95% Efficiency

Low Duty Cycle Operation: 5% at 2.25MHz

Selectable 0°/180° Phase Shift Between Channels

Adjustable Switching Frequency: 500kHz to 4MHz

External Frequency Synchronization

Current Mode Operation for Excellent Line and Load Transient Response

0.6V Reference Allows Low Output Voltages

User Selectable Burst Mode® Operation or Forced Continuous Mode Operation

Output Voltage Tracking and Soft-Start Capability

Short-Circuit Protected

Overvoltage Input and Overtemperature Protection

Power Good Status Outputs

LTC3633: 16V Absolute Maximum VIN

LTC3633A: 20V Absolute Maximum VIN, Pin Compatible with LTC3633

Low Profile (4mm × 5mm) QFN-28 and 28-Lead TSSOP Packages

Application

Distributed Power Systems

Battery Powered Instruments

Point of Load Power Supplies

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](#)

Analog Devices, Inc
10MSOP



[LTM8045EY#PBF](#)

Analog Devices, Inc

BGA40



[LT4295IUFD#PBF](#)

Analog Devices, Inc

28-WFQFN