

IC DRVR NCH MOSFET 8-MSOP

Manufacturers	<u>Analog Devices, Inc</u>
Package/Case	MSOP-8
Product Type	Gate Drivers
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC4442IMS8E#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC4442 is a high frequency gate driver designed to drive two N-channel MOSFETs in a synchronous buck DC/DC converter topology. The powerful driver capability reduces switching losses in MOSFETs with high gate capacitance.

The LTC4442 features a separate supply for the input logic to match the signal swing of the controller IC. If the input signal is not being driven, the LTC4442 activates a shutdown mode that turns off both external MOSFETs. The input logic signal is internally level-shifted to the bootstrapped supply, which may function at up to 42V above ground.

The LTC4442 contains undervoltage lockout circuits on both the driver and logic supplies that turn off the external MOSFETs when an undervoltage condition is present. The LTC4442 and LTC4442-1 have different undervoltage lockout thresholds to accommodate a wide variety of applications. An adaptive shoot-through protection feature is also built-in to prevent power loss resulting from MOSFET cross-conduction current.

The LTC4442/LTC4442-1 are available in the thermally enhanced 8-lead MSOP package.

Features

Wide VCC Range: 6V to 9.5V

38V Maximum Input Supply Voltage

Adaptive Shoot-Through Protection

2.4A Peak Pull-Up Current

5A Peak Pull-Down Current

8ns TG Fall Time Driving 3000pF Load

12ns TG Rise Time Driving 3000pF Load

Separate Supply to Match PWM Controller

Drives Dual N-Channel MOSFETs

Undervoltage Lockout

Thermally Enhanced MSOP Package

Application

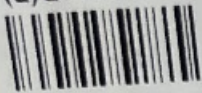
Distributed Power Architectures

High Density Power Modules

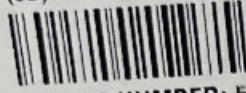
COUNTRY OF ASSEMBLY: THAILAND
COUNTRY OF DIFFUSION: UNITED STATES

REMARKS:
BOX 002

(Q)QTY: 350



(9D)DATE CODE: 2127



(1T)LOT NUMBER: 54170021



(1P)MFG NO: LTC4442IMS8E#PBF



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2021° M17



MSL 1
PPBT = 260°C
e3





Related Products



[LT3763EFE](#)

Analog Devices, Inc
TSSOP28



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TO-3



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