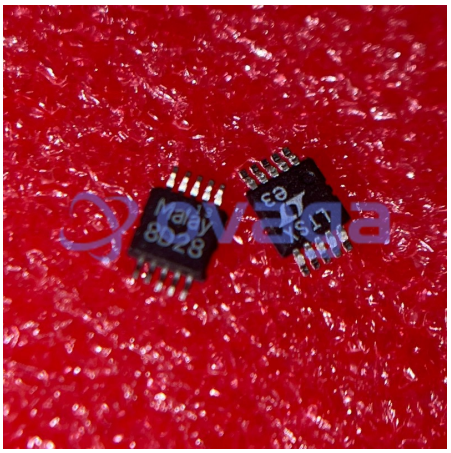
LTC1871EMS#PBF

Data Sheet

BOOST/FLYBACK/SEPIC CONTROLLER,Supply Voltage Min:2.5V, Supply Voltage Max:36V, No. of Outputs:1, Duty Cycle (%):97%,Switching Frequency:1MHz, Topology:Boost, Flyback, SEPIC

Manufacturers	Analog Devices, Inc
Package/Case	MSOP10
Product Type	Power Management ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC1871EMS#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The LTC1871 is a wide input range, current mode, boost, flyback or SEPIC controller that drives an N-channel power MOSFET and requires very few external components. Intended for low to medium power applications, it eliminates the need for a current sense resistor by utilizing the power MOSFET's on-resistance, thereby maximizing efficiency.

The IC's operating frequency can be set with an external resistor over a 50kHz to 1MHz range, and can be synchronized to an external clock using the MODE/SYNC pin. Burst Mode operation at light loads, a low minimum operating supply voltage of 2.5V and a low shutdown quiescent current of 10µA make the LTC1871 ideally suited for battery-operated systems.

For applications requiring constant frequency operation, Burst Mode operation can be defeated using the MODE/ SYNC pin. Higher output voltage boost, SEPIC and flyback applications are possible with the LTC1871 by connecting the SENSE pin to a resistor in the source of the power MOSFET.

The LTC1871 is available in the 10-lead MSOP package.

Vin RangeINTVccFeaturesLTC18712.5V to 36V5.2V-LTC1871-12.5V to 36V5.2VLower Burst Mode Threshold (0.195V vs. 0.3V)LTC1871-76V to 36V7VDrives 6V Gate N-Channel MOSFETsLTC1871X2.5V to 36V5.2V175°C Junction Temp, 100% Tested at 175°C

Features

High Efficiency (No Sense Resistor Required)

Wide Input Voltage Range: 2.5V to 36V

Current Mode Control Provides Excellent Transient Response

High Maximum Duty Cycle (92% Typ)

Micropower Shutdown:>

Programmable Operating Frequency (50kHz to 1MHz) with One External Resistor

Synchronizable to an External Clock Up to 1.3 × fOSC

User-Controlled Pulse Skip or Burst Mode® Operation

Internal 5.2V Low Dropout Voltage Regulator

Output Overvoltage Protection

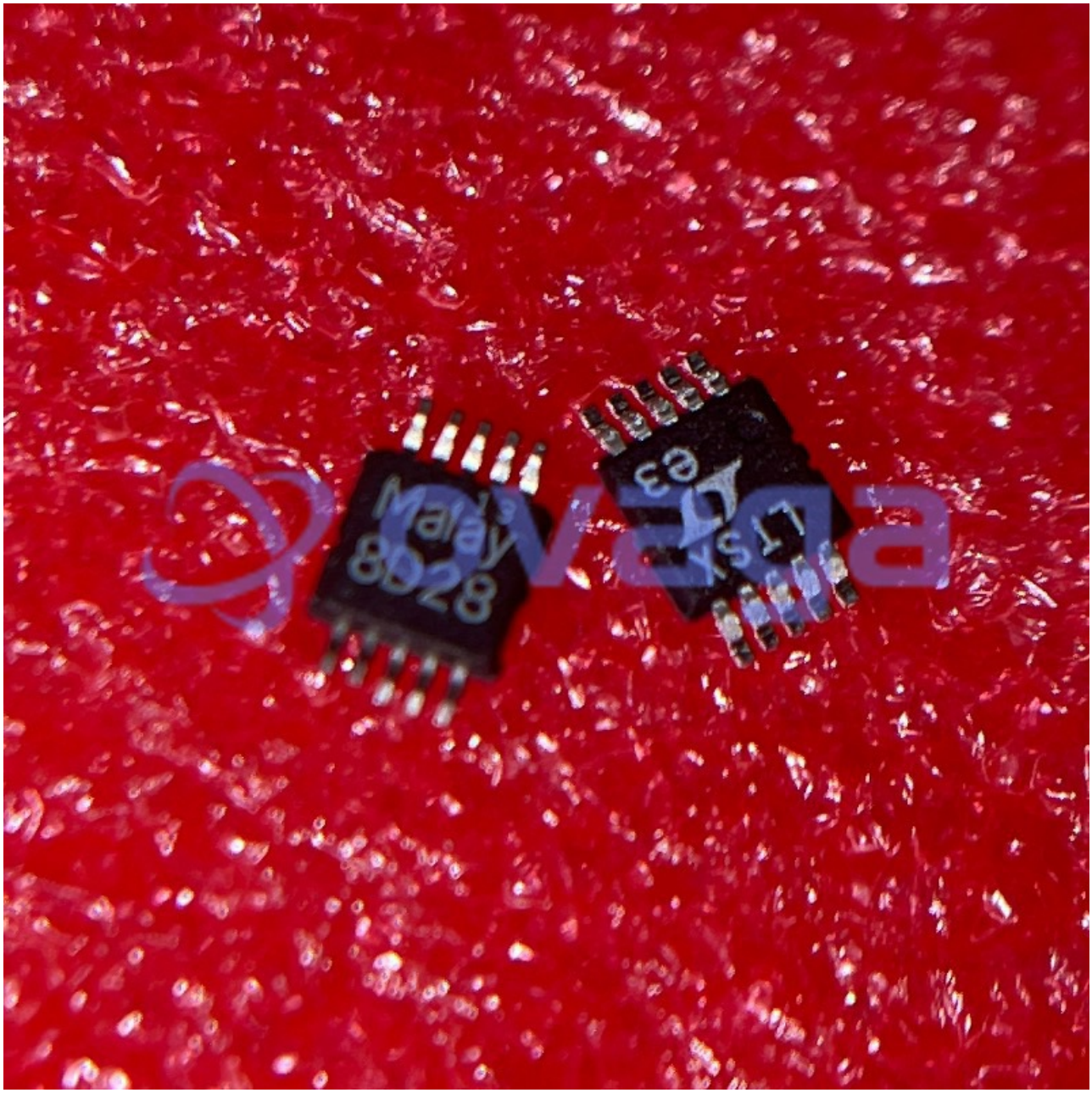
Capable of Operating with a Sense Resistor for High Output Voltage Applications

Small 10-Lead MSOP Package

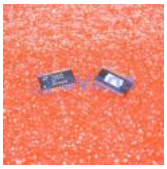
Application

Telecom Power Supplies

Portable Electronic Equipment



Related Products



[LT3763EFE](#)

Analog Devices, Inc

TSSOP28

[LT1038CK](#)

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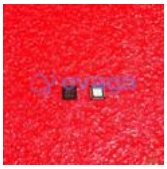

[LTC4417IUF](#)

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QFN-24

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MSOP10

[LTC1966CMS8#PBF](#)

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MSOP-8P

[LTC2990IMS#PBF](#)

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10MSOP

LTM8045EY#PBF

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BGA40

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