

IC REG CTRLR BUCK PWM VM 16-SSOP

Manufacturers	Analog Devices, Inc
Package/Case	SSOP16
Product Type	Power Management ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC3830EGN#TRPBFB or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC3830/LTC3830-1 are high power, high efficiency switching regulator controllers optimized for 3.3V-5V to 1.xV-3.xV step-down applications. A precision internal reference and feedback system provide $\pm 1\%$ output regulation over temperature, load current and line voltage variations. The LTC3830/LTC3830-1 use a synchronous switching architecture with N-channel MOSFETs. Additionally, the chip senses output current through the drain-source resistance of the upper N-channel FET, providing an adjustable current limit without a current sense resistor.

The LTC3830/LTC3830-1 operate with an input supply voltage as low as 3V and with a maximum duty cycle of $>91\%$ over temperature. They include a fixed frequency PWM oscillator for low output ripple operation. The 200kHz free-running clock frequency can be externally adjusted or synchronized with an external signal from 100kHz to 500kHz. In shutdown mode, the LTC3830 supply current drops to $<10\mu\text{A}$. The LTC3830-1 differs from the LTC3830 S8 version by replacing shutdown with a soft-start function.

For a similar, pin compatible DC/DC converter with an output voltage as low as 0.6V, please refer to the LTC3832.

Features

High Power Switching Regulator Controller for 3.3V-5V to 1.xV-3.xV Step-Down Applications

No Current Sense Resistor Required

Low Input Supply Voltage Range: 3V to 8V

Maximum Duty Cycle >91% Over Temperature

All N-Channel External MOSFETs

Excellent Output Regulation: $\pm 1\%$ Over Line, Load and Temperature Variations

High Efficiency: Over 95% Possible

Adjustable or Fixed 3.3V Output (16-Pin Version)

Programmable Fixed Frequency Operation: 100kHz to 500kHz

External Clock Synchronization

Soft-Start (16-Pin Version and LTC3830-1)

Low Shutdown Current: $< 10\mu\text{A}$

Overtemperature Protection

Available in S8, S16 and SSOP-16 Packages

Application

CPU Power Supplies

Multiple Logic Supply Generator

Distributed Power Applications

High Efficiency Power Conversion



(1P) SUPP PROD ID: LTC3830EGN#TRPBF



(D) DATE CODE: 0739

SL / FL:

REV:

MSL: 1



(1T) LOT NO: 459781.1

(Q) QTY: 2500



(4L) COUNTRY OF ORIGIN: MY

PACK DATE: 06OCT07

PLT: N

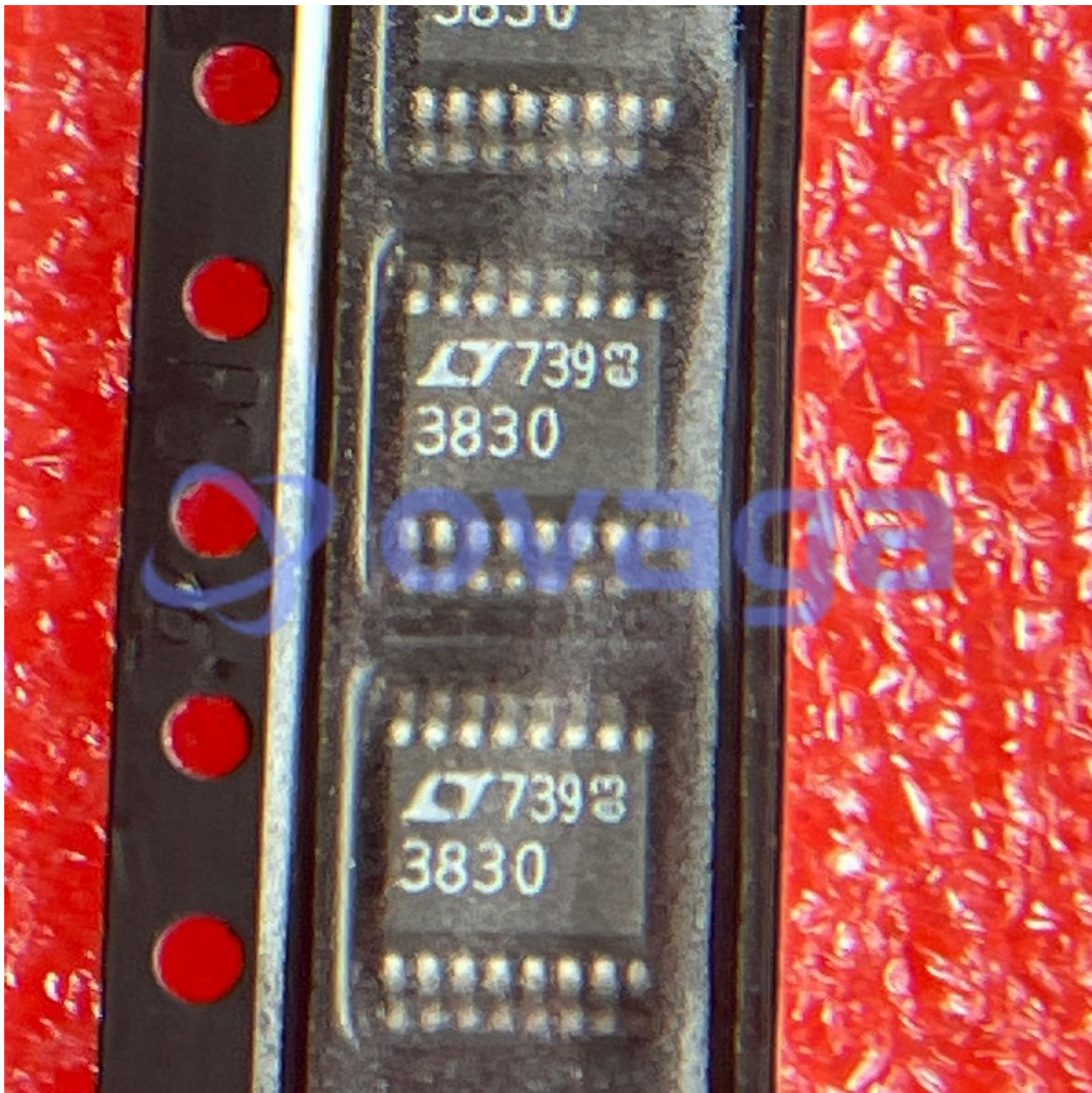


Qty: 00018

MC: S08

US and/ or Int'l Patent No.:





Related Products



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TSSOP28



[LTC4417IUF](#)

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