

60V Low IQ, Dual, 2-Phase Synchronous Step-Down DC/DC Controller

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	32-Lead QFN (5mm x 5mm x 0.75mm w/ EP)
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTC3892EUH#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LTC3892/LTC3892-1/LTC3892-2 is a high performance dual step-down DC/DC switching regulator controller that drives all N-channel synchronous power MOSFET stages. Power loss and noise are minimized by operating the two controller output stages out-of-phase.

The gate drive voltage can be programmed from 5V to 10V to allow the use of logic or standard-level FETs and to maximize efficiency. Internal switches in the top gate drivers eliminate the need for external bootstrap diodes.

A wide 4.5V to 60V input supply range encompasses a wide range of intermediate bus voltages and battery chemistries. Output voltages up to 99% of  $V_{IN}$  can be regulated. OPTI-LOOP<sup>®</sup> compensation allows the transient response and loop stability to be optimized over a wide range of output capacitance and ESR values.

The 29 $\mu$ A no-load quiescent current extends operating run time in battery powered systems.

Applications

## Features

Wide V

IN

Wide Output Voltage Range:  $0.8V \leq V$

OUT

IN

Adjustable Gate Drive Level 5V to 10V (OPTI-DRIVE)

No External Bootstrap Diodes Required

Low Operating I

Q

Selectable Gate Drive UVLO Thresholds

Out-of-Phase Operation Reduces Required Input Capacitance and Power Supply Induced Noise

Phase-Lockable Frequency: 75kHz to 850kHz

Selectable Continuous, Pulse Skipping or Low Ripple Burst Mode

Selectable Current Limit (LTC3892/LTC3892-2)

Very Low Dropout Operation: 99% Duty Cycle

Power Good Output Voltage Monitors (LTC3892/LTC3892-2)

Low Shutdown I

Q

Small 32-Lead 5mm × 5mm QFN Package (LTC3892/LTC3892-2) or TSSOP Package (LTC3892-1)

## Application

Automotive and Industrial Power Systems

Distributed DC Power Systems

High Voltage Battery Operated Systems

## Related Products



[LT3763EFE](#)

Analog Devices, Inc  
TSSOP28



[LT1038CK](#)

Analog Devices, Inc  
TO-3



[LTC4417IUF](#)

Analog Devices, Inc  
QFN-24



[LTC3440EMS](#)

Analog Devices, Inc  
MSOP10



[LTC1966CMS8#PBF](#)

Analog Devices, Inc  
MSOP-8P



[LTM8045EY#PBF](#)

Analog Devices, Inc  
BGA40



[LTC2990IMS#PBF](#)

Analog Devices, Inc  
10MSOP



[LT4295IUFD#PBF](#)

Analog Devices, Inc  
28-WFQFN