

LTC3895EFE#PBF

Data Sheet

DC-DC Controller, Synchronous Buck (Step Down), 4V to 140V, 1 Output, 900kHz, TSSOP-38

Manufacturers <u>Analog Devices, Inc</u>

Package/Case 38-PowerTFSOP (0.173, 4.40mm Width), 31 Leads

Product Type Power Management ICs

RoHS Green

Lifecycle



Images are for reference only

Please submit RFQ for LTC3895EFE#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The LTC3895 is a high performance step-down switching regulator DC/DC controller that drives an all N-channel synchronous power MOSFET stage that can operate from input voltages up to 140V. A constant frequency current mode architecture allows a phase-lockable frequency of up to 850kHz.

The gate drive voltage can be programmed from 5V to 10V to allow the use of logic or standard-level FETs to maximize efficiency. An integrated switch in the top gate driver eliminates the need for an external bootstrap diode. An internal charge pump allows for 100% duty cycle operation.

The low $40\mu A$ no-load quiescent current extends operating run time in battery-powered systems. OPTI-LOOP® compensation allows the transient response to be optimized over a wide range of output capacitance and ESR values. The LTC3895 features a precision 0.8V reference and power good output indicator. The output voltage can be programmed between 0.8V to 60V using external resistors or pin-programmed for a fixed 5V or 3.3V.

Features

Wide VIN Range: 4V to 140V (150V Abs Max)

Wide Output Voltage Range: 0.8V to 60V

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

Low Operating IQ: 40µA>

100% Duty Cycle Operation

No External Bootstrap Diode Required

Selectable Gate Drive UVLO Thresholds

Onboard LDO or External NMOS LDO for DRVCC

EXTVCC LDO Powers Drivers from VOUT

Phase-Lockable Frequency (75kHz to 850kHz)

Programmable Fixed Frequency (50kHz to 900kHz)

Selectable Continuous, Pulse-Skipping or Low Ripple Burst Mode® Operation at Light Loads

Adjustable Burst Clamp and Current Limit

Adjustable or Fixed (5V/3.3V) Output Voltage

Power Good Output Voltage Monitor

Programmable Input Overvoltage Lockout

38-Lead TSSOP High Voltage Package

Related Products



LT3763EFE
Analog Devices, Inc
TSSOP28



LTC4417IUF

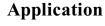
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