

# LTC3895IFE#PBF

Data Sheet

LINEAR TECHNOLOGY LTC3895IFE#PBF DC-DC Controller, Synchronous Buck (Step Down), 4V to 140V, 1 Output, 900kHz, TSSOP-38

Manufacturers	Analog Devices, Inc	00000
Package/Case	38-PowerTFSOP (0.173, 4.40mm Width), 31 Leads	
Product Type	Power Management ICs	Inne
RoHS	Green	- Rop.
Lifecycle		Images are for reference only
Please submit RFQ for LTC3895IFE#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ		

## **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**



# <u>LT3763EFE</u>

Analog Devices, Inc TSSOP28



LTC4417IUF Analog Devices, Inc QFN-24



LTC1966CMS8#PBF Analog Devices, Inc

MSOP-8P







# LT1038CK

Analog Devices, Inc TO-3

### LTC3440EMS

Analog Devices, Inc MSOP10

### LTC2990IMS#PBF

Analog Devices, Inc 10MSOP

#### Automotive and Industrial Power Systems

Application

High Voltage Battery Operated Systems

Telecommunications Power Systems



### LTM8045EY#PBF

Analog Devices, Inc BGA40



LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN