

# LTC3891EFE#PBF

Data Sheet

Linear Technology, LTC3891EFE#PBF Step-Down Switching Regulator 5A Adjustable, 0.8 24 V 20-Pin, TSSOP

Manufacturers	Analog Devices, Inc	
Package/Case	TSSOP20	- THUR
Product Type	Power Management ICs	Au
RoHS		
Lifecycle		Images are for reference only
Please submit RFQ fo	or LTC3891EFE#PBF or Email to us: sales@ovaga.com We will contact you i	n 12 hours. RFO

# **General Description**

The LTC3891 is a high performance step-down switching regulator DC/DC controller that drives an all N-channel synchronous power MOSFET stage. A constant frequency current mode architecture allows a phase-lockable frequency of up to 750kHz.

The 50µA 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 LTC3891 features a precision 0.8V reference and power good output indicator. A wide 4V to 60V input supply range encompasses a wide range of intermediate bus voltages and battery chemistries. The output voltage of the LTC3891 can be programmed between 0.8V to 24V.

The TRACK/SS pin ramps the output voltages during start-up. Current foldback limits MOSFET heat dissipation during short-circuit conditions. The PLLIN/MODE pin selects among Burst Mode operation, pulse-skipping mode, or continuous conduction mode at light loads.

## Features

- Wide VIN Range: 4V to 60V (65V Abs Max)
- Low Operating IQ: 50µA
- Wide Output Voltage Range:  $0.8V \le VOUT \le 24V$
- RSENSE or DCR Current Sensing
- Phase-Lockable Frequency (75kHz to 750kHz)
- Programmable Fixed Frequency (50kHz to 900kHz)
- Selectable Continuous, Pulse-Skipping or Low Ripple Burst Mode® Operation at Light Load
- Selectable Current Limit
- Very Low Dropout Operation: 99% Duty Cycle
- Adjustable Output Voltage Soft-Start or Tracking
- Power Good Output Voltage Monitor
- Output Overvoltage Protection
- Low Shutdown IQ:  $< 14 \mu A$
- Internal LDO Powers Gate Drive from VIN or EXTVCC
- No Current Foldback During Start-Up
- Small 20-Pin 3mm × 4mm QFN and TSSOP Packages

#### **Related Products**



## LT3763EFE

Analog Devices, Inc TSSOP28







LTC1966CMS8#PBF Analog Devices, Inc MSOP-8P







#### Automotive Always-On Systems

Application

Battery Powered Digital Devices

Distributed DC Power Systems

LTC3440EMS Analog Devices, Inc MSOP10

Analog Devices, Inc

**LT1038CK** 

TO-3

#### LTC2990IMS#PBF

Analog Devices, Inc 10MSOP



### LTM8045EY#PBF

Analog Devices, Inc BGA40



LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN