

## LT3844EFE#PBF

Data Sheet

High Voltage, Current Mode Switching Regulator Controller with Programmable Operating Frequency; Package: TSSOP; No of Pins: 16; Temperature Range: -40°C to +125°C

Manufacturers

Analog Devices, Inc

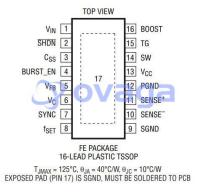
Package/Case

TSSOP-16

Product Type

Power Management ICs

RoHS



Images are for reference only

Please submit RFQ for LT3844EFE#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

### **General Description**

Lifecycle

The LT3844 is a DC/DC controller used for medium power, low part count, high efficiency supplies. It offers a wide 4V to 60V input range (7.5V minimum startup voltage) and can implement step-down, step-up, inverting and SEPIC topologies.

The LT3844 includes Burst Mode operation, which reduces quiescent current below 120µA and maintains high efficiency at light loads. An internal high voltage bias regulator allows for simple biasing.

Additional features include current mode control for fast line and load transient response; programmable fixed operating frequency that can be synchronized to an external clock for noise sensitive applications; a gate driver capable of driving large N-channel MOSFETs; a precision undervoltage lockout function; 10µA shutdown current; short-circuit protection and a programmable soft-start function.

The LT3844 is available in a 16-lead thermally enhanced TSSOP package.

### **Features**

High Voltage Operation: Up to 60V

Output Voltages up to 36V (Step-Down)

Programmable Constant Frequency: 100kHz to 500kHz

Synchronizable up to 600kHz

Burst Mode® Operation: 120µA Supply Current

10µA Shutdown Supply Current

Drives N-Channel MOSFET

Programmable Soft-Start

Programmable Undervoltage Lockout

Internal High Voltage Regulator for Gate Drive

Thermal Shutdown

Current Limit Unaffected by Duty Cycle

16-Pin Thermally Enhanced TSSOP Package

# **Application**

Industrial Power Distribution

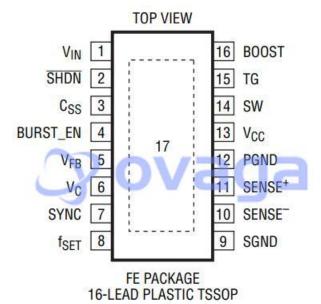
12V and 42V Automotive and Heavy Equipment

High Voltage Single Board Systems

Distributed Power Systems

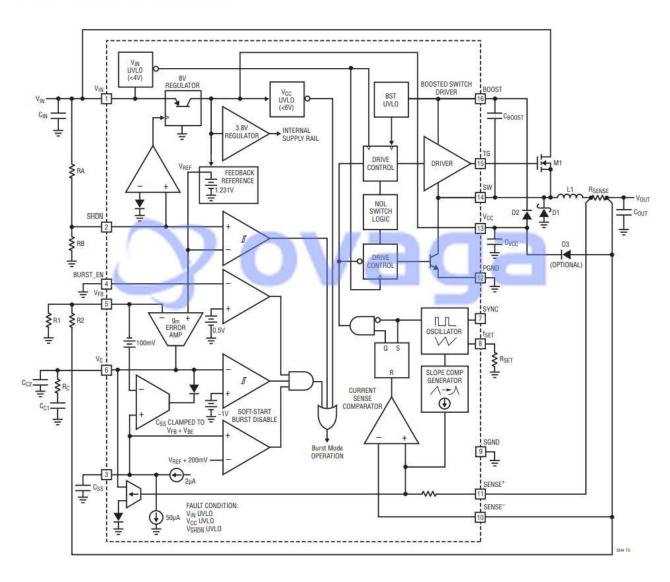
Avionics

Telecom Power



 $T_{JMAX}$  = 125°C,  $\theta_{JA}$  = 40°C/W,  $\theta_{JC}$  = 10°C/W EXPOSED PAD (PIN 17) IS SGND, MUST BE SOLDERED TO PCB

## **FUNCTIONAL DIAGRAM**



#### **Related Products**



**LT3763EFE** 

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



LTM8045EY#PBF
Analog Devices, Inc
BGA40



LT4295IUFD#PBF
Analog Devices, Inc
28-WFQFN