

## LT3751EFE#PBF

Data Sheet

Controller 5V to 24V Automotive 20-Pin TSSOP EP Tube

Manufacturers Analog Devices, Inc

Package/Case TSSOP20 -40 -125

Product Type Power Management ICs

RoHS Pb-free Halide free

Lifecycle Images are for reference only

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Please submit RFQ for LT3751EFE#PBF or <a href="mailto:sales@ovaga.com"><u>Email to us: sales@ovaga.com</u></a> We will contact you in 12 hours.

## **General Description**

The LT3751 is a high input voltage capable flyback controller designed to rapidly charge a large capacitor to a user-adjustable high target voltage set by the transformer turns ratio and three external resistors. Optionally, a feedback pin can be used to provide a low noise high voltage regulated output.

The LT3751 has an integrated rail-to-rail MOSFET gate driver that allows for efficient operation down to 4.75V. A low 106mV differential current sense threshold voltage accurately limits the peak switch current. Added protection is provided via user-selectable overvoltage and undervoltage lockouts for both VCC and VTRANS. A typical application can charge a 1000µF capacitor to 500V in less than one second.

The CHARGE pin is used to initiate a new charge cycle and provides ON/OFF control. The DONE pin indicates when the capacitor has reached its programmed value and the part has stopped charging. The FAULT pin indicates when the LT3751 has shut down due to either VCC or VTRANS voltage exceeding the user-programmed supply tolerances.

**Features** 

Charges Any Size Capacitor

Low Noise Output in Voltage Regulation Mode

Stable Operation Under a No-Load Condition

Integrated 2A MOSFET Gate Driver with Rail-to-Rail Operation for VCC ≤ 8V

Selectable 5.6V or 10.5V Internal Gate Drive Voltage Clamp

User-Selectable Over/Undervoltage Detect

Easily Adjustable Output Voltage

Primary or Secondary Side Output Voltage Sense

Wide Input VCC Voltage Range (5V to 24V)

Available in 20-Pin QFN 4mm × 5mm and 20-Lead TSSOP Packages

## **Application**

High Voltage Regulated Supply

High Voltage Capacitor Charger

Professional Photoflash Systems

Emergency Strobe

Security/Inventory Control Systems

Detonators

## **Related Products**



**LT3763EFE** 

Analog Devices, Inc TSSOP28



**LTC4417IUF** 

Analog Devices, Inc QFN-24



LTC1966CMS8#PBF

Analog Devices, Inc MSOP-8P



LTM8045EY#PBF

Analog Devices, Inc

BGA40



LT1038CK

Analog Devices, Inc TO-3



LTC3440EMS

Analog Devices, Inc MSOP10



LTC2990IMS#PBF

Analog Devices, Inc 10MSOP



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Analog Devices, Inc

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