

General Description

The TCS3454 is a high-frequency boost converter dedicated for small to medium LCD bias supply. The device is ideal to generate output voltages up to 30V from a dual-cell NiMH/NiCd or a single-cell Li-Ion battery. The part can also be used to generate standard 3.3V or 5V to 12V power conversions. Optimized operation frequency can meet the requirement of small LC filters value and low operation current with high efficiency. Internal soft start function can reduce the inrush current. The device has a 1.4A switch current limit, offering lower output voltage ripple and allows the use of a smaller form factor inductor for lower power applications. Low quiescent current allows device operation at very high efficiencies over the entire load current range. The TCS3454 is available in SOT23-5 package.

Features

2.5V to 5.5V Input Voltage

Adjust Output Voltage Range Up to 30V

1.23V Feedback Voltage

1.2MHz Fixed Switching Frequency

1.4A Switch Peak Current Limit

Internal Compensation

Thermal Shutdown Protection

Over Voltage Protection

-40°C to 125°C Operating Junction Temperature

Available in SOT23-5 package

Applications

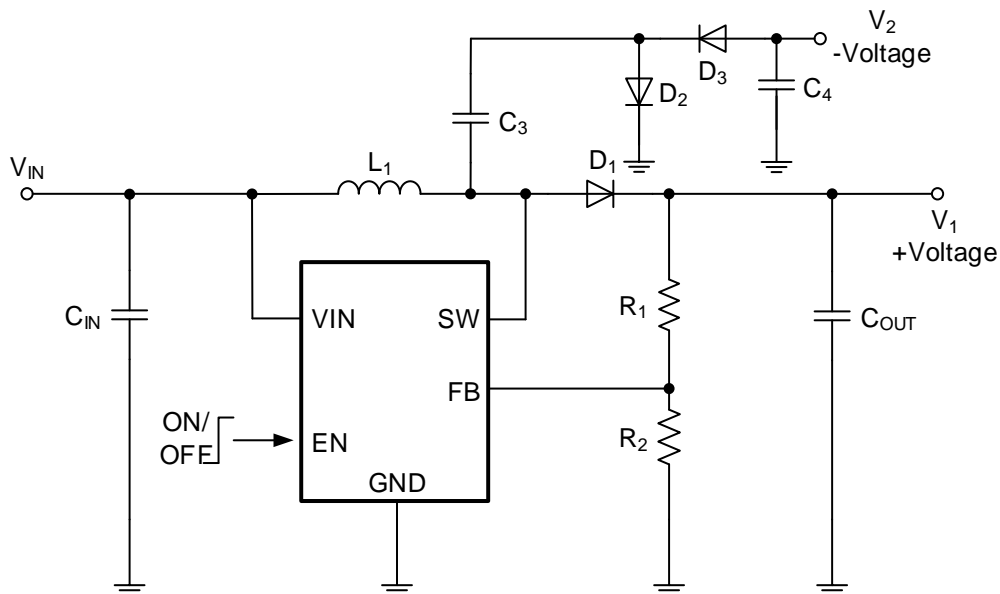
LCD Bias Supply

Digital still cameras

White-LED Supply for LCD Backlights

PDA's, Organizers, and Handheld PC's

Typical Application Circuit



Typical Positive and Negative Output LCD Bias Supply Circuit