

600kHz, 18V, 2.0A Synchronous Step-Down Converter

FEATURES

- High Efficiency: Up to 94%(@5V)
- 600kHz Frequency Operation
- 2.0A Output Current
- No Schottky Diode Required
- 3.5V to 18V Input Voltage Range
- 0.6V Reference
- Slope Compensated Current Mode Control for Excellent Line and Load Transient Response
- Integrated Internal Compensation
- Stable with Low ESR Ceramic Output Capacitors
- Over Current Protection with Hiccup-Mode
- Input overvoltage protection (OVP)
- Thermal Shutdown
- Inrush Current Limit and Soft Start
- Available in SOT23-6 Package
- -40°C to +85°C Operation Temperature Range

GENERAL DESCRIPTION

The STI3470 is a fully integrated, high-efficiency 2.0A synchronous rectified step-down converter. The STI3470 operates at high efficiency over a wide output current load range.

This device offers two operation modes, PWM control and PFM Mode switching control, which allows a high efficiency over the wider range of the load.

The STI3470 requires a minimum number of readily available standard external components and is available in a 6-pin SOT23 ROHS compliant package.

APPLICATIONS

- Distributed Power Systems
- Digital Set Top Boxes
- Flat Panel Television and Monitors
- Notebook computer
- Wireless and DSL Modems

TYPICAL APPLICATION

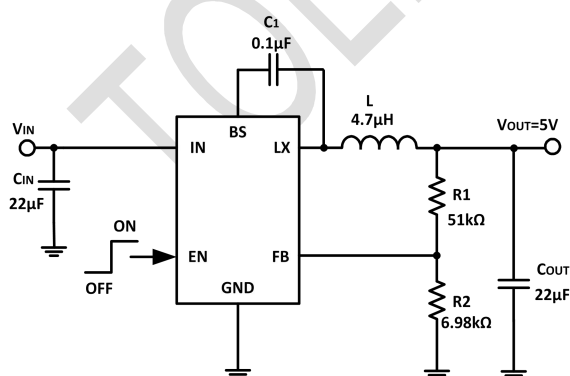


Figure 1. Basic Application Circuits

Efficiency

$V_{OUT}=5V$, $L=4.7\mu H$

