

500 KHz, 18V/2A&3A Synchronous Step-Down Converter

FEATURES

- High Efficiency: Up to 94%
- 500KHz Frequency Operation
- 2A&3A Output Current
- No Schottky Diode Required
- 4.5V to 18V Input Voltage Range
- Output Adjustable Down to 0.923V
- 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
- Thermal Shutdown
- Inrush Current Limit and Soft Start
- -40°C to +85°C Temperature Range

APPLICATIONS

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

APPLICATIONS

GENERAL DESCRIPTION

The STI348X is a fully integrated, high-efficiency 2A&3A synchronous rectified step-down converter. The STI348X 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 STI348X requires a minimum number of readily available standard external components and is available in an 8-pin SOP ROHS compliant package

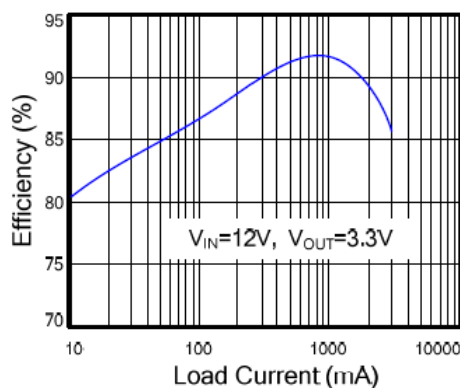
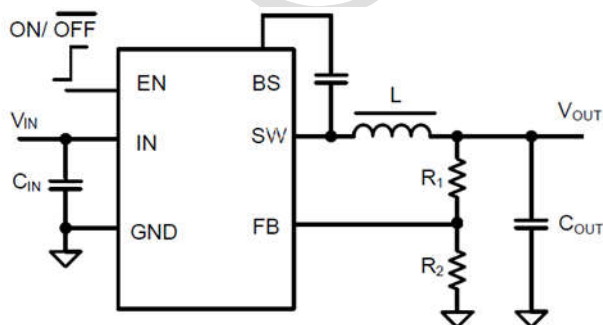


Figure 1. Basic Application Circuit Efficiency(%) vs. Load Current(mA)