

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

FEATURES

- High Efficiency: Up to 93%@5V
- 500kHz Switching Frequency
- STI3482: 2.0A Output Current
- STI3484: 3.0A Output Current
- No Schottky Diode Required
- 4.5V to 18V Input Voltage Range
- 0.923V Feedback Voltage
- 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
- STI3482: SOP8 Package
- STI3484: ESOP8 Package

GENERAL DESCRIPTION

The STI3482 and STI3484 are fully integrated, high-efficiency 2A and 3A synchronous rectified step-down converter. The STI3482 and STI3484 operates at high efficiency over a wide output current load range.

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

The STI3482 and STI3484 require a minimum number of readily available standard external components and is available in SOP8 and ESOP8 ROHS compliant package.

APPLICATIONS

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

TYPICAL APPILICATION

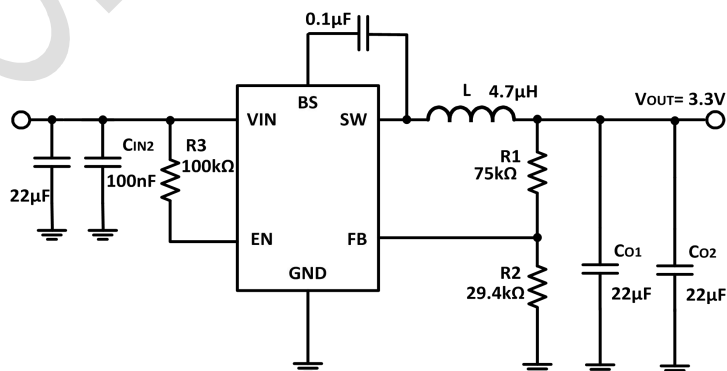


Figure 1. Basic Application Circuit