

4A, Synchronous Step-Down Converter

DESCRIPTION

The EUP3427A is a 1 MHz fixed frequency synchronous, current-mode, step-down dc-dc converter capable of providing up to 4A output current. The EUP3427A operates from an input range of 2.7V to 5.5V and provides a regulated output voltage from 0.6V to 5V. The internal synchronous power switch improves efficiency and eliminates the need for an external Schottky diode. The EUP3427A can be externally set for either forced PWM continuous mode or pulse skipping mode. Forced PWM operation provides very low output ripple voltage for noise sensitive applications while pulse skipping operation improves light load efficiency by reducing switching loss.

The EUP3427A features short circuit and thermal protection circuits to improve system reliability. Internally soft-start avoids input inrush current during startup. The EUP3427A is available in TDFN 3mm×3mm 10-pin package with the exposed pad.

FEATURES

- 2.7V to 5.5V Input Voltage Range
- High Efficiency up to 96%
- 4A Available Load Current
- 62/35mΩ Integrated PFET/NFET Switches
- 1MHz Switching Frequency
- 100% Duty Cycle Low Dropout Operation
- Short Circuit and Thermal Protection
- Integrated UVLO and Power Good
- Excellent Line and Load Transient Response
- Available in 10-Pin 3mm×3mm TDFN Package
- RoHS Compliant and 100% Lead(Pb)-Free Halogen-Free

APPLICATIONS

- High Performance DSPs, FPGAs, ASICs and Microprocessors
- Base Station, Telecom, and Networking Equipment Power Supplies
- ePC and NetPCs

Typical Application Circuit

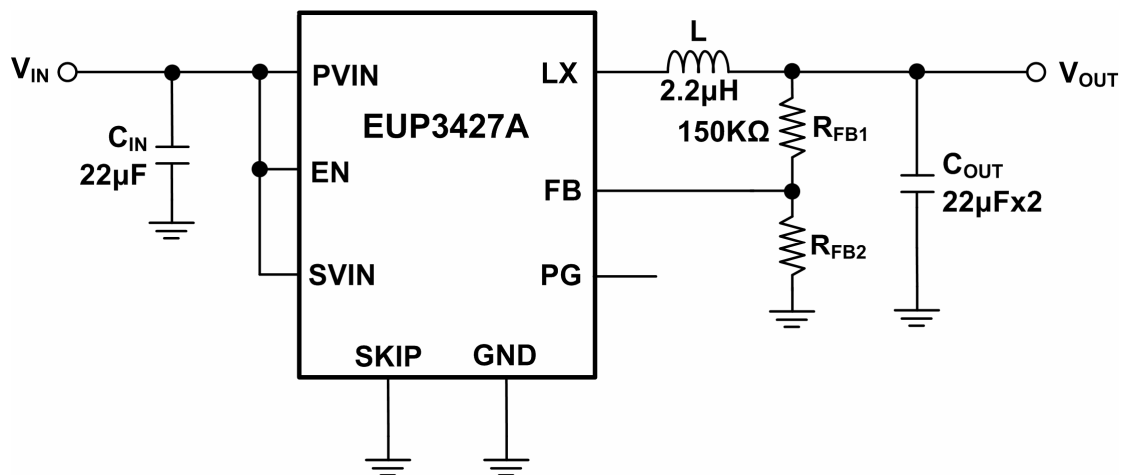


Figure1. Typical Application Circuit