

# 2A, Synchronous Step-Down Converter

#### **DESCRIPTION**

The EUP3421 is a 1 MHz fixed frequency synchronous, current-mode, step-down dc-dc converter capable of providing up to 2A output current. The EUP3421 operates from an input range of 2.7V to 5.5V and provides a regulated output voltage from 0.8V to 5V. The internal synchronous power switch improves efficiency and eliminates the need for an external Schottky diode. Forced PWM operation provides very low output ripple voltage for noise sensitive applications.

The EUP3421 features short circuit and thermal protection circuits to improve system reliability. Externally adjustable soft-start avoids input inrush current during startup. The EUP3421 is available in SOP-8 package.

#### **FEATURES**

- 2.7V to 5.5V Input Voltage Range
- High Efficiency up to 96%
- 2A Available Load Current
- 100/60mΩ Integrated PFET/NFET Switches
- 1MHz Switching Frequency
- 100% Duty Cycle Low Dropout Operation
- Short Circuit and Thermal Protection
- Integrated UVLO
- Excellent Line and Load Transient Response
- Available in SOP-8 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**

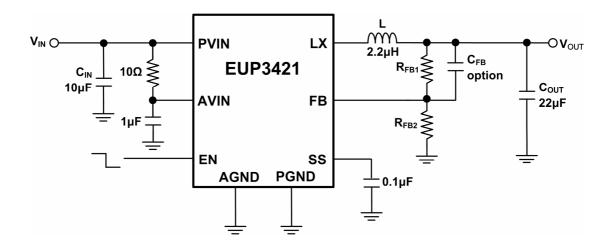


Figure 1. Typical Application Circuit

