

# Dual 1.5MHz, 1A Synchronous Step-Down Converter

## DESCRIPTION

The EUP3419 contains two independent 1.5MHz constant frequency, current mode, PWM step-down converters. Each converter integrates a main switch and a synchronous rectifier for high efficiency without an external Schottky diode. The EUP3419 is ideal for powering portable equipment that runs from a single cell Lithium-Ion (Li+) battery. Each converter can supply 1A of load current from a 2.5V to 5.5V input voltage. The output voltage can be regulated as low as 0.6V. The EUP3419 can also run at 100% duty cycle for low dropout applications. 25 $\mu$ A per channel quiescent current at light loads increases efficiency and battery life.

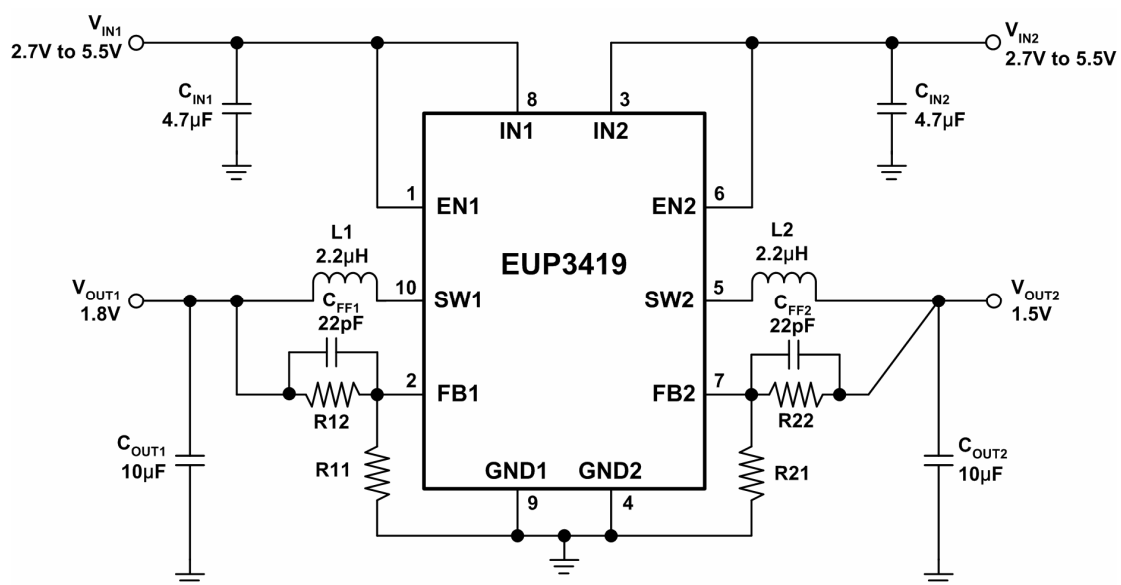
## FEATURES

- 25 $\mu$ A Quiescent Current per Channel at Light Load
- Up to 96% Efficiency
- 1.5MHz Constant Switching Frequency
- 1A Load Current on Each Channel
- 2.5V to 5.5V Input Voltage Range
- Output Voltage as Low as 0.6V
- 100% Duty Cycle in Dropout
- Short Circuit Protection
- Thermal Fault Protection
- <1 $\mu$ A Shutdown Current
- Soft Start Function
- 3mm $\times$ 3mm TDFN-10 Package
- RoHS Compliant and 100% Lead(Pb)-Free Halogen-Free

## APPLICATIONS

- Cellular and Smart Phones
- Microprocessors and DSP Core Supplies
- PDAs and Portable Media Players
- Wireless and DSL Modems
- Digital Still and Video Cameras

## Typical Application Circuit



**Figure 1. Adjustable Voltage Regulator**