

Dual High-Efficiency 1.5MHz 1A PWM Step-Down DC-DC Converter

DESCRIPTION

The EUP3020 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 EUP3020 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 EUP3020 can also run at 100% duty cycle for low dropout applications. EUP3020 is available in an adjustable output or fixed output 1.2V, 1.8V and 3.3V.

FEATURES

- 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
- Current Mode Operation
- Short Circuit Protection
- Thermal Fault Protection
- <1µA Shutdown Current
- Soft Start Function
- Space Saving 3mm × 3mm 12-Pin TDFN Package
- RoHS Compliant and 100% Lead(Pb)-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

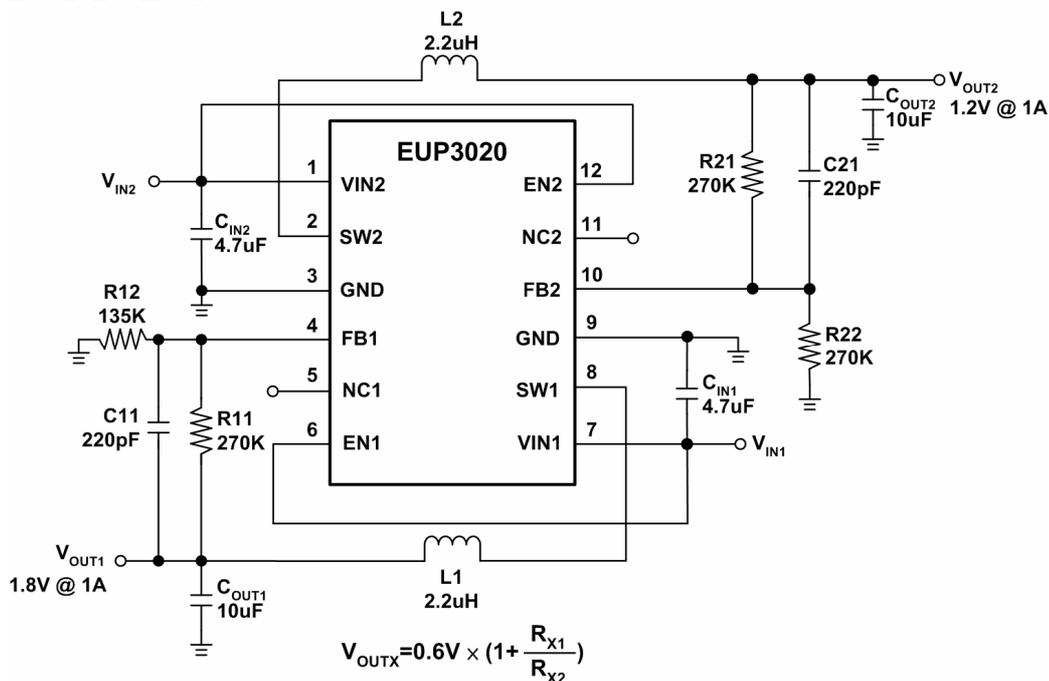


Figure 1. Adjustable Output Regulators