

Dual 1A, 2.25MHz Synchronous Step-Down DC/DC Regulator

DESCRIPTION

The EUP3292 is synchronous dual step-down DC-DC converters optimized for battery powered portable applications. It provides two independent output voltage rails powered by 1-cell Li-Ion or 3-cell NiMH/NiCD batteries. The device is also suitable to operate from a standard 3.3V or 5V voltage rail.

With an input voltage range of 2.7V to 5.5V, the EUP3292 is ideal to power portable applications like smart phones, PDAs and other portable equipment.

The EUP3292 operates at 2.25MHz fixed switching frequency allowing the use of small inductors and capacitors to achieve a small solution size. Each output supports up to 1A load current, typical. The internal synchronous switch increases efficiency and eliminates the need for an external schottky diode.

Automatic switching between PWM low-noise and PFM low-current operation increases efficiency at light loads, further extending battery life.

The EUP3292 has internal soft start and avoids inrush current during startup.

FEATURES

- High Efficiency Up to 95%
- 2.25MHz Constant Switching Frequency
- 1A Available Load Current on Each Channel
- 30μA Typical Quiescent Current on Each Input
- 2.7V to 5.5V Input Voltage Range
- Adjustable Output Voltage as Low as 0.6V
- No Schottky Diode Required
- Short Circuit and Thermal Protection
- Internal Soft Start Function
- Automatic PFM/PWM Mode Switching
- Available in 3mm×3mm TDFN-12 Package
- RoHS Compliant and 100% Lead(Pb)-Free Halogen-Free

APPLICATIONS

- SSD Module
- Smart Phones
- Tablet PC
- Plug-in DC/DC Modules for Routers and Switchers

Typical Application Circuit

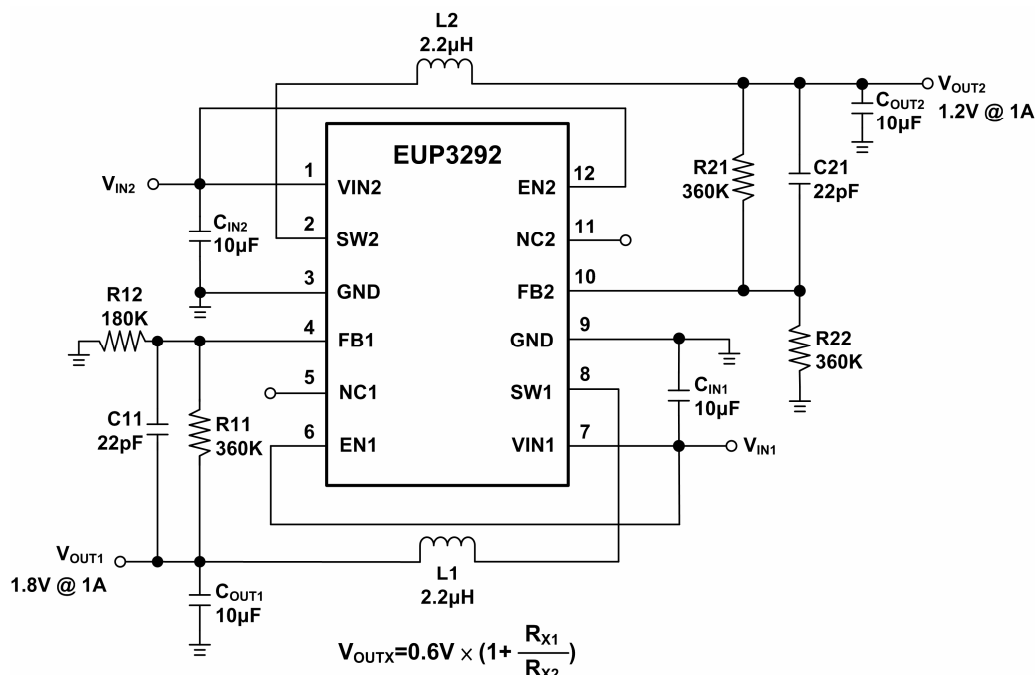


Figure 1.