

1.2MHz Step-Up PWM Controller

DESCRIPTION

The EUP2573 is a compact, high efficiency, fixed frequency pulse-width-modulation (PWM) controller. It provides an easy-to-use power supply solution for the application from one Li-ion battery to 5V output. All compensation and protection circuitry are integrated to minimize external components. The 1.2MHz high switching frequency allows smaller inductor and output capacitor, making the EUP2573 ideally suited for small battery-powered applications and saves PCB space.

The EUP2573 contains thermal shutdown function and output short protection circuit. Built-in soft-start circuitry prevents excessive inrush current during start-up.

The EUP2573 is available in a Pb-free, thin-SOT23-5 package.

FEATURES

- V_{DD} Range: 2.7V to 5.5V
- High Efficiency up to 90%
- 1.2MHz Fixed Switching Frequency
- Tiny External Components
- Output Short Protection
- $<1\mu\text{A}$ Shutdown Current
- 3.3V to +5.0V Distributed Power Supply
- Single Cell Li-ion Battery to 5V Converter
- Available in SOT23-5 Package
- RoHS Compliant and 100% Lead (Pb)-Free Halogen-Free

APPLICATIONS

- One Li-Ion Battery to 5V Output
- Handheld Devices

Typical Application Circuit

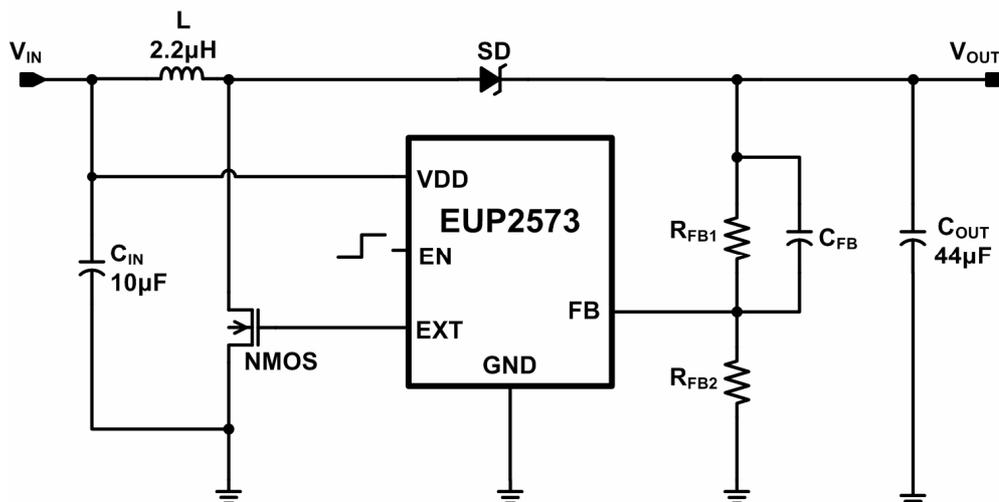


Figure 1. Connecting VDD to V_{IN}

Typical Application Circuit (Continued)

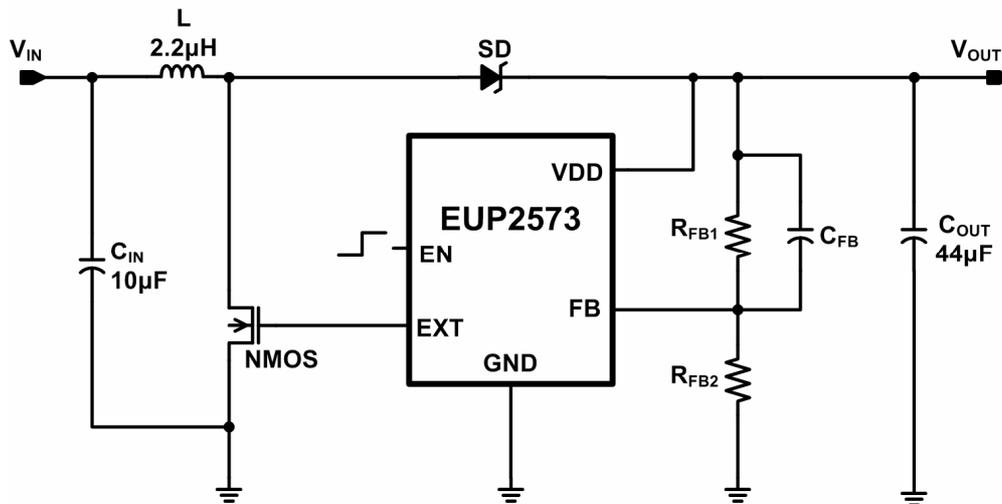


Figure 2. Connecting VDD to V_{OUT}

Pin Configurations

| Package Type | Pin Configurations |
|--------------|--------------------|
| SOT23-5 | |

Pin Description

| PIN | SOT23-5 | DESCRIPTION |
|-----|---------|---|
| 1 | EN | Enable input. EN is an active high asserted input. Set EN lower than 0.4V will disable EUP2573. |
| 2 | GND | Ground. |
| 3 | EXT | Output of MOSFET gate driver. Connect this pin to the gate of the external MOSFET. |
| 4 | VDD | Power input. Connect VDD to the input power supply or to the output of the regulator. |
| 5 | FB | Feedback pin. |