

3A, Ultra-Low Dropout Voltage Regulator

Features

- ★ Low Dropout Voltage
 - V_{drop} : 160mV at 2A
 - V_{drop} : 240mV at 3A
- ★ Output Current Capability up to 3A
- ★ Excellent Line Regulation and Load Regulation
- ★ Current Limiting Protection
- ★ Thermal Protection
- ★ Support Power Good Indicator
- ★ Independent Enable Control
- ★ Internal Discharge Resistance
- ★ WDFN-10 Packages
- ★ RoHS Compliant and Halogen Free

General Description

The PS8503 is a high accuracy ($\pm 1\%$ over line, load, and temperature), low dropout voltage regulator that is capable sourcing 3A. The PS8503 provides two types of output voltage category. First, the PS8503 implements various fixed output voltage versions with internal resistor setting. Besides, this series also provides adjustable output voltage version and the output voltage is up to 3.3V. For the efficiency and thermal considerations, PS8503 is designed with quite low $R_{DS(on)}$ which features low dropout voltage on PS8503. Furthermore, the PS8503 provides several protections including current limit protection, thermal protection and PGOOD indicator. The PS8503 is available in WDFN3x3-10L package.

Applications

- ★ Notebook, PC
- ★ Motherboard Applications

Simplified Application Circuit

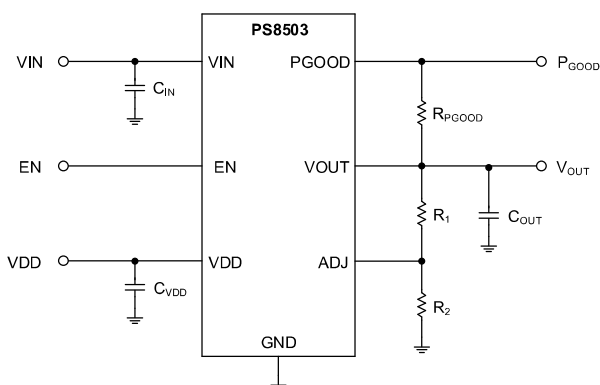


Figure 1. Adjustable Voltage Regulator.

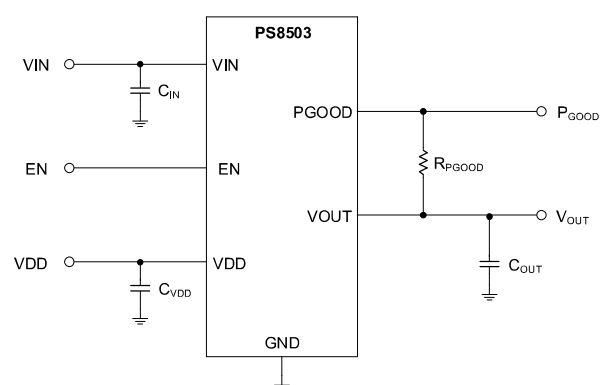


Figure 2. Fixed Voltage Regulator