

## 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
- ★ PSOP-8 Packages
- ★ RoHS Compliant and Halogen Free

### General Description

The PS8508 is a high accuracy ( $\pm 1\%$  over line, load, and temperature), low dropout voltage regulator that is capable sourcing 3A. The PS8508 provides two types of output voltage category. First, the PS8508 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, PS8508 is designed with quite low  $R_{DS\_ON}$  which features low dropout voltage on PS8508. Furthermore, the PS8508 provides several protections including current limit protection, thermal protection and PGOOD indicator. The PS8508 provides optional two types of packages such as PSOP-8.

### Applications

- ★ Notebook, PC
- ★ Motherboard Applications

### Simplified Application Circuit

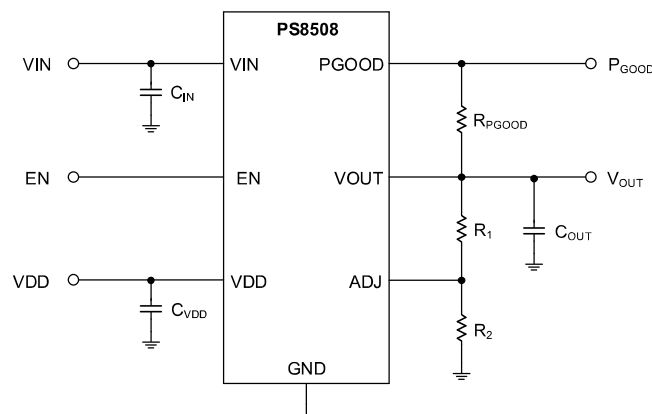


Figure 1. Adjustable Voltage Regulator.