

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, WDFN-10 Packages
- ★ RoHS Compliant and Halogen Free

General Description

The XS8500 is a high accuracy ($\pm 1\%$ over line, load, and temperature), low dropout voltage regulator that is capable sourcing 3A. The XS8500 provides two types of output voltage category. First, the XS8500 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, XS8500 is designed with quite low R_{DS_ON} which features low dropout voltage on XS8500. Furthermore, the XS8500 provides several protections including current limit protection, thermal protection and PGOOD indicator. The XS8500 provides optional two types of packages such as PSOP-8 and WDFN3x3-10L.

Applications

- ★ Notebook, PC
- ★ Motherboard Applications

Simplified Application Circuit

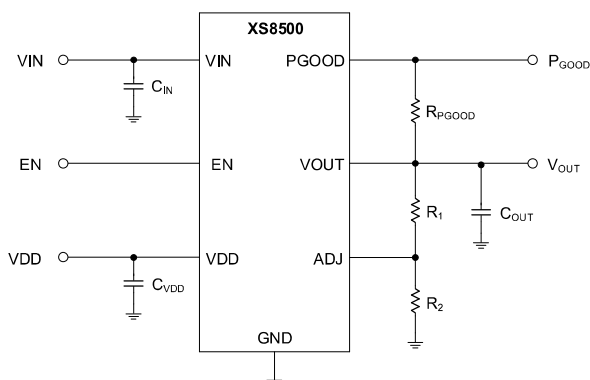


Figure 1. Adjustable Voltage Regulator.

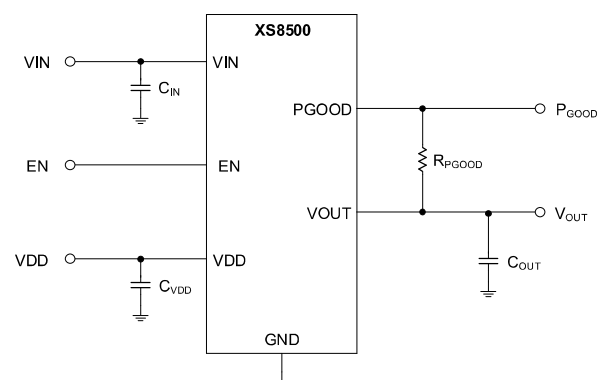


Figure 2. Fixed Voltage Regulator