

Part Number	Input Voltage	Package	Current Rating
IS6806C	2.5V~16V	5mm x 6mm	70A

Description

The IS6806C is a 70A smart power stage integrating both power MOSFETs and gate drives. It offers highly accurate current reporting and temperature reporting. It is designed for low duty cycle applications especially for multi-phase applications. It provides high current capability, great thermal performance, and high efficiency with optimized MOSFETs design.

This IS6806C is designed to be compatible with 3.3V PWM logic and it also works with tri-state PWM signal. The IMON pin reports high accurate current sensing signal with 5mV/A which is proportional to the output current. A temperature monitor provides the system indication of the power stage internal temperature (TMON) and the TMON signal is pulled high to 3.3V immediately if catastrophic fault issue happens.

The IS6806C is equipped with full suite of protection functions, including positive and negative current limit, over temperature and input supply UVLOs.

Overall, the IS6806C is designed for high current, high efficiency, low duty cycle operation with full fault detection and protection, which is very ideal for high current multi-phase applications.

Features

- Wide 2.5V to 16V Input Voltage Range
- Works with Tri-State PWM Signal
- Up to 70A Output Current Capability
- 5mV/A IMON
- 8mV/°C temperature reporting
- Switching frequency up to 1,500kHz
- Over temperature protection
- 5mm x 6mm package
- Operating Temp: $-40^{\circ}\text{C} < T_J < 125^{\circ}\text{C}$
- Moisture Sensitivity Level (MSL) 3

Applications

- Server Applications
- Storage Applications
- Cloud service and calculate
- Telecom & Datacom Applications

Typical Application Diagram

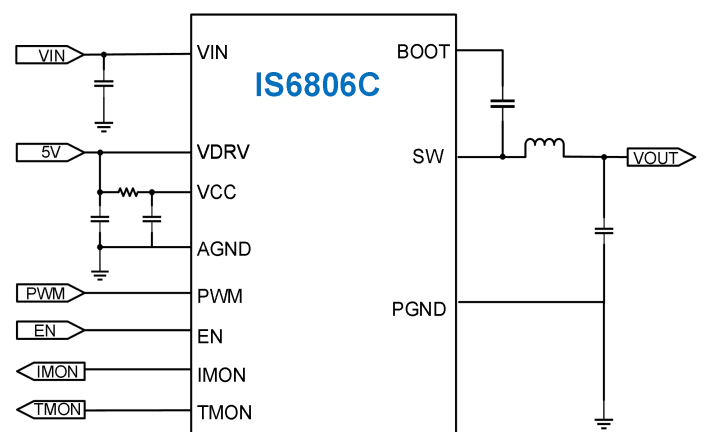


Fig. 1 - Typical Application Diagram