

RS31386 Stackable 50A eFuse with Hot Swap Protection and Current Monitoring

Features

- Wide input voltage range: 4V to 16V
- Integrated 1mΩ Pass MOSFET
- Accurate current monitor: ±1% at 25°C
- Adjustable output soft start time
- Paralleled operation for higher current applications
- Adjustable current limit
- Adjustable short circuit current limit
- Fast trip short-circuit protection: 200ns typical
- Fault indication and fault type output
- Selectable Latch-off mode or hiccup mode for input OV, over current, short circuit, over-temperature protections.
- Input to output short circuit detection
- 5x5mm LGA package
- RoHS compliant and Green

Applications

- Disk Drives
- PCI and PCIe cards
- Servers
- Networking
- Hotswap

Description

The RS31386 is active circuit protection device with integrated MOSFET used to limit current and voltage to safe levels during fault conditions.

The current limit level can be set with a resistor between OCREF and ground. Also, the device has integrated current sense and provides current monitor signal.

To limit the inrush current during device turn-on, the output soft start time can be set by a capacitor between SS and ground.

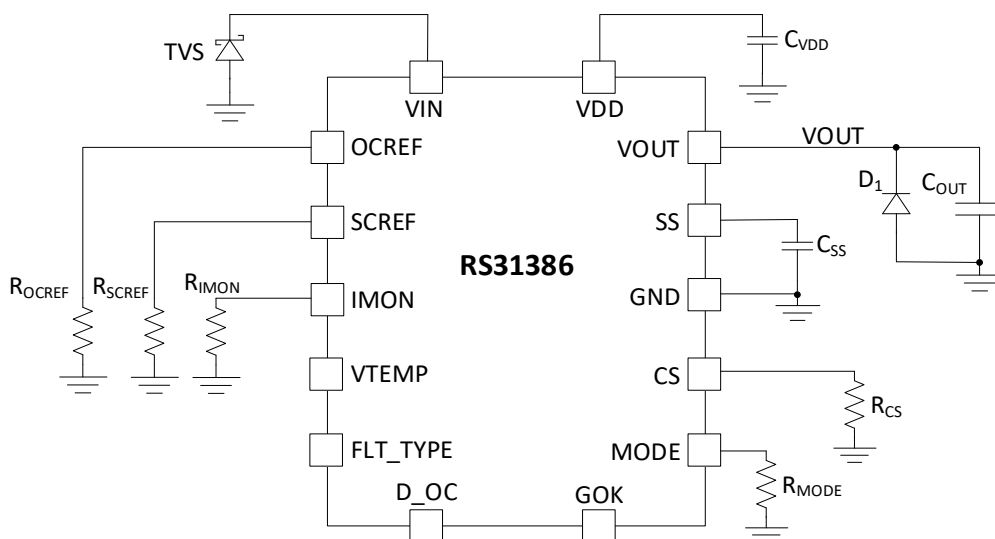
In addition, the device provides fault indication (GOK), fault type (FLT_TYPE) signal to system for monitoring and control.

RS31386 can be connected in parallel for higher current applications, and current are actively shared among the devices during soft start in parallel applications.

The device is available in LGA-32, 5x5 mm package.

PART NUMBER	PACKAGE	BODY SIZE
RS31386	LGA-32	5x5 mm

Typical Application Circuit



Ordering Information

Part Number	Package	Size	Shipping Method	Package Marking
RS31386T	LGA-32	5x5 mm	250u Tape & Reel	R31386
RS31386R	LGA-32	5x5 mm	3000u Tape & Reel	R31386