

PG79319 4.5V to 16V, 50A Fully Integrated Hot-Swap Solution With PMBus

Features

- Wide input voltage range: 4.5V to 16V
- Maximum 50A Output Current
- Integrated 0.8mΩ Power MOSFET
- PMBus/I2C 1.3 Compliant
- Integrated current sensing output
- Programmable over current limit
- Programmable short circuit current limit
- High precision EIN, PIN, POUT, IOUT reporting
- Built-in insertion delay
- Adjustable soft start time
- +/-1.5% IMON report accuracy
- Junction temperature reporting
- VIN OVP, SCP, OCP, OTP Protections with no action, latch, retry or hiccup options
- Programmable TON-DELAY and TOFF-DELAY
- Fault signal output (GOK) and Fault type output (FLT_TYPE)
- Intelli-Fuse controller
- Standalone operation or parallel operation with RS31386
- RoHS compliant and Green

Applications

- Server and AUX supplies
- PCI and PCIe cards
- Disk Drives
- Router and Networking
- Laptops

Description

The PG79319 is fully integrated hot-swap protection device with PMBus interface. It can work in standalone operation or in parallel operation as a master device.

The device has built-in delay time for hot-swap. To limit the inrush current during device turn-on, the output soft start time can be set by a capacitor between SS and ground.

The device provides integrated current sense output and current monitor output. The over current limit and short circuit current limit are programmable.

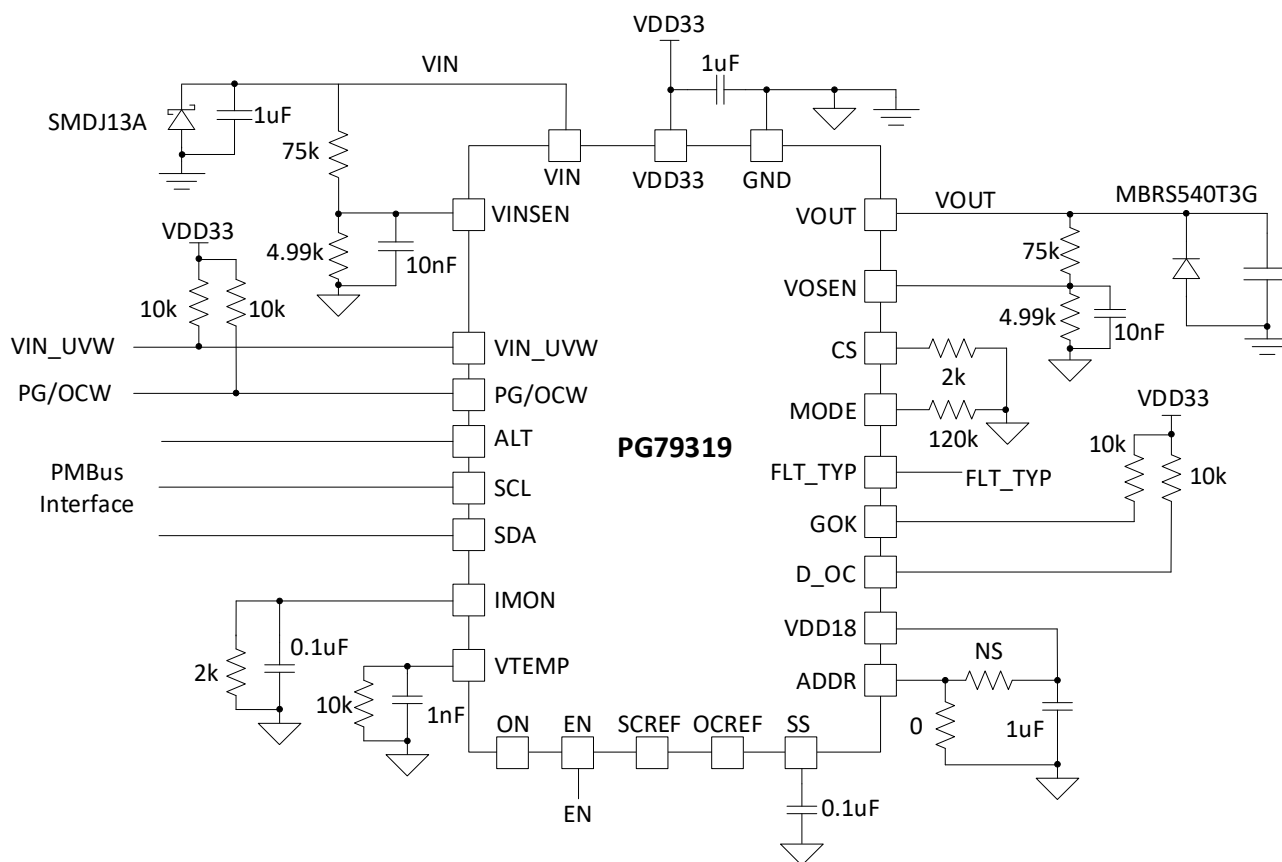
The PG79319 provides rich fault protection including input over-voltage protection (VIN OVP), over-current protection (OCP), short circuit protection (SCP), over-temperature protection (OTP). The device also has fault output indicator (GOK) and fault type indicator (FLT_TYPE).

With PMBus interface, the device provides VIN, input current, input energy (EIN), output voltage (VOUT), output current (IOUT) and power (PIN and POUT) telemetry.

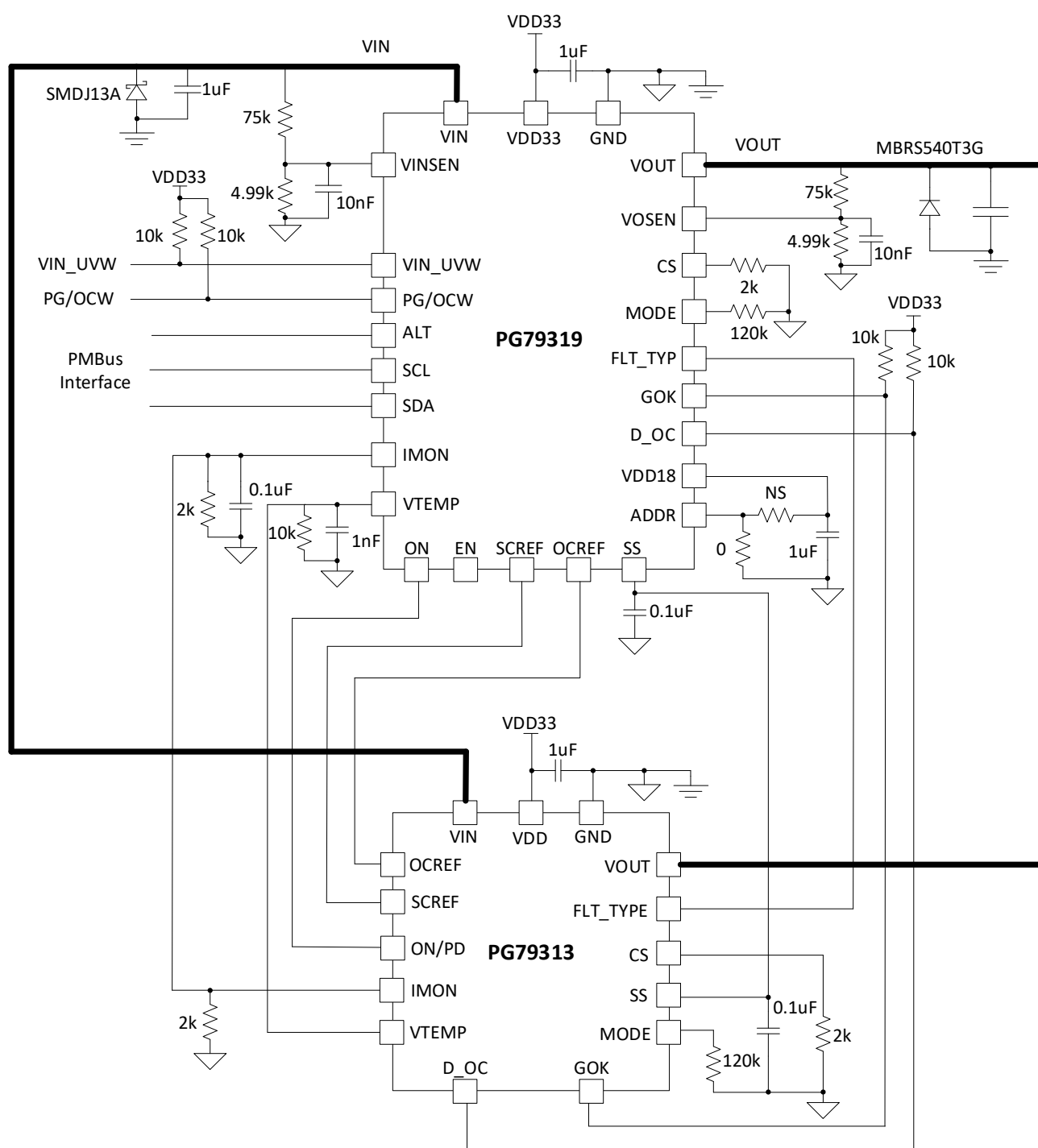
The device is available in LGA-45, 5x7 mm package.

PART NUMBER	PACKAGE	BODY SIZE
PG79319	LGA-45	5x7 mm

Typical Application Circuit



Standalone Operation



Parallel Operation (PG79319 + PG79313)