



Features

It is suitable for multiple mode applications including discontinuous conduction mode (DCM), quasi-resonant mode (QR) and continuous conduction mode (CCM). The Drain-to-source voltage (V_{SW}) of SR MOSFET is sensed to control the turn on and off of the SR MOSFET. G3668BF can generate its own supply voltage for battery charging applications with potential low output voltage, and at short circuit output condition, or for high-side SR configuration.

- ◆ Integrated 60V Power MOSFET
- ◆ Suitable for DCM, QR and CCM
- ◆ Supports both High-side and Low-side Rectification
- ◆ Wide Output Range down to 3V
- ◆ Supports USB PD + PPS
- ◆ No need for Auxiliary Winding or external power supply
- ◆ Ringing Detection Prevents False Turn-on during DCM and Quasi-Resonant Operations
- ◆ 10nS Fast Turn-off delay and 30nS Turn-on delay
- ◆ Accurate secondary side built-in MOSFET V_{SW} sensing
- ◆ Anti-interference with digital isolation
- ◆ SOP8 Package Available

- USB PD Quick Chargers
- Power adapter
- Flyback Power Supplies with Very Low and/or Variable Output Voltage

G3668BF

Fast Turn-Off Intelligent Synchronous Rectifier

2. Products Information

2.1 Pin configuration

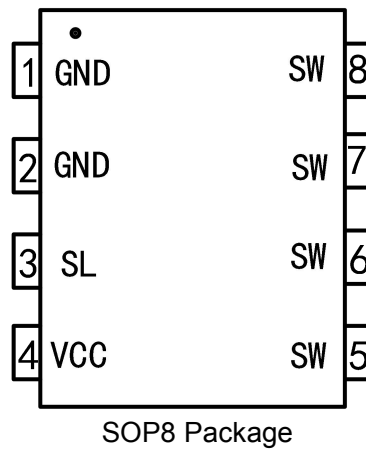


Fig.1. G3668BF Pin Configuration

Pin Num	Pin Name	I/O	Description
1,2	GND	P	Ground. GND is also used as a MOSFET source sense reference for SW.
3	SL	I	Programming for turn-on signal slew rate detection.SL prevents the SR controller from turning on falsely by ringing below the turn-on threshold at SW in DCM and QR mode. Any signal slower than the pre-set slew rate cannot turn on MOSFET.
4	VCC	P	Power supply, Bypass a capacitor between VCC and GND.
5,6,7,8	SW	O	MOSFET Drain Pin.