

Features

- Wide Input Voltage Range: 10V~32V
- Heavy Load up
- Programmable Operation Frequency
50KHz~300KHz
- Output Voltage Accuracy over Line and Load Regulation
- Programmable Accurate OCP
- Programmable Auto-restart Time
- Wire Drop Compensation
- Selectable Forced CCM or auto-DEM
- Internal 5V Pre-regulator
- Internal Soft-start
- Internal Over/Under Voltage Protection
- Internal Over Temperature Protection
- QFN23-4x4 package
- Green Product (RoHS, Lead-Free, Halogen-Free Compliant)

Applications

- Car Charger
- Quick Charger
- Portable Device
 - Mobile Phone
 - Tablet PC
 - Notebook

General Description

The GS92F2 is small size chip with a relative constant on-time synchronous buck switching converter with VOUT changing suitable for QC/USB PD Features include wide input voltage range, accurate OCP protect, build-in wire drop compensation and auto-restart after protections.

The GS92F2 has a unique power save mode, which can save battery power supply by decreasing frequency when load current falls down below preset critical current point.

The fast dynamic transient response means that buck converter applications based on GS92F2 will provide about 100ns-order response to load while output voltage falls down or rises up. The frequency will increase or decrease to meet the change in output load with the same on time.

The GS92F2 provide over current protection and wire drop compensation to compensate the voltage loss in cable transmission.

The integrated gate drivers feature adaptive shoot-through protection, fast signal transmission. Additional features include current limit, soft-start, thermal shutdown over-voltage and under-voltage protection. The GS92F2 is available in package QFN23-4x4.