

### Features

- 10V~36V Input Voltage Range
- Fixed 5.1V Output Voltage
- Programmable Operation Frequency from 50KHz~300KHz
- Dual Channel Accurate OCP
- COT Control with Internal ripple injection
- Programmable Protection Auto-restart Time
- Build-in Wire Drop Compensation
- Selectable CCM/DEM Operation
- Output Short-Circuit Protection
- Output Over-Voltage Protection
- Output Under-Voltage Protection
- Over Temperature Protection
- QFN23-4x4 Package
- Green Product (RoHS, Lead-Free, Halogen-Free Compliant)

### Applications

- Car Charger
- Portable Charger Devices
- Automotive Power Application
- General-Purposed DC-DC Converters

### General Description

The GS92D1 is a synchronous Buck converter. Features include wide input voltage range, dual channel accurate OCP, build-in wire drop compensation and auto-restart after protections.

The GS92D1 has fast dynamic transient response with COT control scheme and also has good line and load regulation with internal ripple injection.

The GS92D1 provide dual channel accurate OCP. When OCP is detected in channel, the output is disabled until ART timing is over, and then the chip will restart automatically, which make sure the safety of whole system. Wire drop compensation is also provided to compensate the voltage loss in cable transmission.

Other protections include over-voltage protection, under-voltage protection, short-circuit protection and over-temperature protection.

The GS92D1 is available in QFN23-4x4 package.