

### Features

- Wide Input Voltage Range: 2.8V~5.5V
- Heavy Load 3A
- Current mode operation
- Fix Frequency : 1MHz
- Adjustable 0.6V~80%\*VIN Output Range
- Stable with Ceramic Output Capacitors
- Build-in Soft-Start
- Over-voltage/under-voltage fault protection
- Low quiescent power dissipation
- Internal Short Current Protection
- Over temperature protection(Non-Latch)
- Integrated Low Rds(on) Upper and Lower MOSFET Switches: 100mΩ and 80mΩ
- SOT-23-6, TDFN8-2x2 package
- Green Product (RoHS, Lead-Free, Halogen-Free Compliant)

### Applications

- Notebook
- FPGA/ASIC Power Supplies
- Chip/RAM Supplies
- Battery-Powered Portable Devices
- Point-of-Load Regulation
- LCD TV

### General Description

The GS7316 is small size chip with a high efficiency synchronous buck switching converter suitable for applications in notebook computers and other battery operated portable devices. GS7316 include an internal low on resistance power switch, it is capable of delivering 3.0A output current over a wide input voltage form 2.8V to 5.5V.

GS7316 is current mode operation with internal compensation. The IC's switching frequency is fixed internally at 1MHz. Moreover, the GS7316 will take the same method to regulate the output voltage when input voltage changes. When transient response regulated, the converter will maintain a new steady-state operation. The output voltage is adjustable from 0.6V to 0.8\*Vin by a voltage divider.

The integrated gate drivers feature adaptive shoot-through protection, fast signal transmission.

Additional features include current limit, soft-start, over-voltage, under-voltage protection and a power good flag. The GS7316 is available in package SOT-23-6 and TDFN8-2x2.