Features

- Maximum 3A Low-Dropout Voltage Regulator
- Ultra Low Dropout Voltage
  Typically 240mV at 3A Output Current
- High Output Accuracy over Line, Load and Temperature
- Build-In Soft-Start
- Excellent startup under load from 0 to 3A
- Power-On-Reset Monitoring on Both V_{DD} and V_{IN} Pins
- Power-OK Output function
- Foldback over Current Protection and Thermal shutdown
- 0.1μA (typ) Shutdown Supply Current
- Low ESR Output Capacitor(Multi-layer Chip Capacitors (MLCC)) Applicable
- Vout Pull Low Resistance when Disable
- PSOP-8, TDFN10-3x3
- Green Product (RoHS, Lead-Free, Halogen-Free Compliant)

Applications

- Notebook PC Applications
- Motherboard Applications
- Low Voltage Logic Supplies
- Microprocessor and Chipset Supplies
- Graphic Cards
- Cordless phones

General Description

The GS7133 can deliver up to 3A of continuous output current with a typical dropout voltage of only 240mV using internal n-channel MOSFETs. The linear regulator uses a separate VDD supply to power the control circuitry and drive the Internal n-channel MOSFETs. The output voltage is adjustable from 0.8V to the voltage that is very close to V_{IN}.

The GS7133 allows the use of low-ESR ceramic capacitor as low as 10uF. Moreover the IC provides good performance on both line transient response and load transient response.

The GS7133 provides foldback over current limit and thermal shutdown to prevent the linear regulator from damage. Built-in soft-start minimizes stress on the input power source by reducing capacitive inrush current on start-up. During start-up, POK remain low until the output reaches 92% of its rating value.

The GS7133 is available in PSOP-8 package or TDFN10- 3x3 package.