

Features

- Maximum 3A Low-Dropout Voltage Regulator
- Ultra Low Dropout Voltage
Typically 170mV at 3A Output Current
- High Output Accuracy over Line, Load and Temperature
- Build-In Soft-Start
- Power-On-Reset Monitoring on Both VCNTL and VIN Pins
- Power-OK Output function
- Low ESR Output Capacitor(Multi-layer Chip Capacitors (MLCC)) Applicable
- Vout Pull Low Resistance when Disable
- TDFN10-3x3 package.
- 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 GS7163 can deliver up to 3A of continuous output current with a typical dropout voltage of only 170mV using internal n-channel MOSFETs. The linear regulator uses a separate VCNTL supply to power the control circuitry and drive the internal n-channel MOSFETs. The output voltage is adjustable from 1.05V to the voltage that is very close to VIN.

The GS7163 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 GS7163 provides current limit, short current protection 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 GS7163 is available in TDFN10-3x3 package.