ANALOG PWM IC

1. General Description

The G1565P is a high performance AC/DC power supply Switch for battery charger and adapter applications requirements up to 24W in an open frame design.It can meet less than 80 mW standby power.

G1565P is a current mode PWM Switch with a high voltage power MOSFET. It operates in fixed frequency which is precisely set internally. It could operate in Extended Burst Mode at no load or light load, in which mode switching loss is minimized and the frequency is adjusted internally. To ensure that power supplies work quietly, the frequency is set beyond 20 KHz.

Small current is needed when G1565P starts up and works, thus a large value resistor could be used in the startup circuit to minimize the standby power. Slope compensation circuit is integrated in G1565P, which improves system large signal stability and reduces the possible sub-harmonic oscillation at high PWM duty cycle.

Frequency shuffling technique is integrated in G1565P, which helps to achieve excellent EMI performance.

G1565P offers complete protection functions including cycle-by-cycle current limiting protection(OCP), over load protection(OLP),VDD over voltage protection(OVP), VDD over voltage clamp and under voltage lockout(UVLO).

The G1565P is available in DIP7 package.

Features

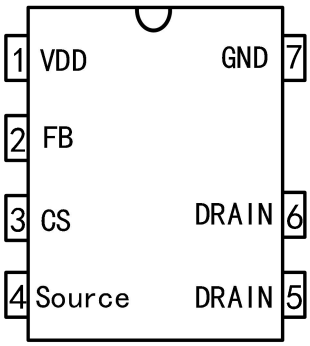
- Built-in Soft Start
- Random Frequency Adjustment to Reduce System EMI
- Audio Noise Free Operation
- Internal Cable Compensation
- Extended Burst Mode Control For Improved Efficiency and Minimum Standby Power Design
- Internal Synchronized Slope Compensation
- Low VDD Startup Current and Low Operating Current
- Leading Edge Blanking on Current Sense Input
- Over Load Protection(OLP) and Cycle-by-Cycle Current Limiting Protection(OCP)
- Over Voltage Protection (OVP), Under Voltage Lockout Protection (UVLO) and Over Voltage Clamp

Applications

- Offline AC/DC flyback converter
- Power Adapter
- Set-Top Box Power Supplies
- Open-frame SMPS
- Auxiliary Power Supply for PC and Server
- Digital Cameras and Camcorder Adapter

2. Products Information

2.1 Pin configuration



Pin Configuration: G1565P Series

Pin Name	I/O	Description
VDD	P	Power Supply
FB	I	Feed Back Input Pin
CS	I	Current Sense Input Pin
SOURCE	SOURCE	HV MOSFET Source Pin.The Source pin is connected to the Primary current sense resistor.
DRAIN	O	HV MOSFET Drain Pin. The Drain pin is connected to the primary lead of the transformer.
GND	P	Ground