

Novel Low Cost Green-Power PWM Controller

Features

- Low Cost, Green-Power PSM & PWM
- Very Low Start-up Current (about 5 μ A)
- Low Operating Current (about 2mA)
- Current Mode Operation
- Under Voltage Lockout (UVLO)
- Built-in Synchronized Slope Compensation
- Programmable PWM Frequency
- High-Voltage CMOS Process with ESD
- Cycle-by-cycle Current Limiting
- Soft Clamped gate output Voltage 14.5V
- Over voltage protect 25.5V
- Leading edge Blanking on Sense Input
- SOT-23-6L & DIP-8 Pb-Free Packaging
- Compatible with SG6848 and LD7550

Applications

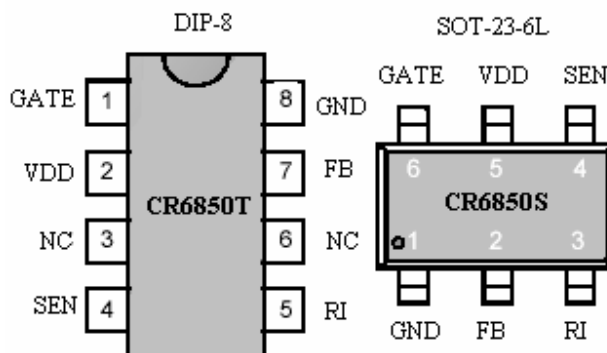
- Switching AC/DC Adaptor
- Battery Charger
- Open Frame Switching Power Supply
- 384X Replacement

General Description

The CR6850 is a highly integrated low cost current mode Green-Power PWM controller, which is ideal for small power current mode of offline AC-DC fly-back converter applications. Making use of external resistors, the IC changes the operating frequency and automatically enters the PSM (Pulse Skipping model) under light-load or zero-load conditions. This can minimize standby power consumption, achieving green-mode functions. With a very low start-up current, the CR6850 could use a large value start-up resistor.

Built-in synchronized slope compensation enhances the stability of the system and avoids sub-harmonic oscillation. Trapezoid form power limiting circuit minimizes output power change caused by delay time of the system and then reduces the shattering possibility of external transformer and power diode. Leading edge blanking circuit could remove spike of the power MOSFET. The CR6850 is with both SOT-23-6L and DIP-8 package.

Pin Assignment



Pin Descriptions

Name	Description
GND	GND Pin
FB	Analog Input. Voltage feedback pin (same as the COMP pin in UC384X),
RI	This pin is to program the switching frequency. By connecting a resistor to ground to set the switching frequency.
SEN	Current sense pin, connect to sense the MOSFET current.
VDD	Supply voltage pin.
GATE	Gate drive output to drive the external MOSFET.