

## AC/DC PWM Controller with Extremely Low Startup Current and Brownout Protection

Specification Rev. V1.2

### FEATURES

- Extremely Low Startup Current (< 900nA)
- Current Mode Control
- Fixed 65/130KHz Switching Frequency
- OCP (Cycle-by-cycle Over Current Protection)
- OLP (Over Load Protection) with 50/80mS Delay
- OVP (Over Voltage Protection) through VCC Pin
- Embedded Soft Start 6.5mS
- Brownout Protection
- OUT Driving capability +150mA/-400mA (Typ.)

### APPLICATIONS

- Switching AC/DC Adapter
- Switching Battery Charger
- Open Frame Power Supply

### GENERAL DESCRIPTION

With the proprietary low power technology, PF6005 start up with the current as low as only several hundred nano-Amps (nA). Therefore, the PF6005 startup resistor value can be very high to reduce the power dissipation and the requirement of 100mW no-load power consumption on AC/DC adapters can be easily achieved.

When the output loading is getting lower, the PF6005 switching frequency decreases from 65/130KHz to 20KHz gradually then further gets into burst mode operation for light load efficiency. In addition, all the required protections, including OLP, OVP, and Brownout control integrated in a tiny SOT-26 or SOP-8 package, can be completely fulfilled with minimized external components.

### TYPICAL APPLICATION

