

High Performance, High Power Factor Flyback PWM Controller

FEATURES

- ◆ Programmable Load Over Voltage Protection (Load OVP)
- ◆ Built-in Over Load Protection (OLP) with 120ms Debounce Time
- ◆ Built-in Soft Start
- ◆ Very Low Startup Current
- ◆ Under Voltage Lockout with 7.7V Hysteresis
- ◆ VCC Over Voltage Protection (OVP)
- ◆ Clear External EA Feedback Network before Power On
- ◆ Transition Mode (TM) Operation
- ◆ Highly Linear Analog Multiplier
- ◆ Proprietary “Frequency Adjusting” for Higher PF and Low THD
- ◆ 3.3us Min. OFF Time
- ◆ 270KHz Max Frequency Clamp
- ◆ Trimmed 1.5% Internal Voltage Reference
- ◆ Restart Timer for Stand-alone Applications
- ◆ Cycle-by-Cycle Current Limiting
- ◆ Built-in Leading Edge Blanking (LEB)
- ◆ Audio Noise Free Operation
- ◆ 10V to 32V Wide Range of VCC Voltage
- ◆ 800mA Drive Capability

APPLICATIONS

- ◆ LED Lighting Application
- ◆ Single Stage High PF Flyback AC/DC SMPS

GENERAL DESCRIPTION

SFL330 is a high performance, high power factor flyback PWM controller special for LED lighting applications. The IC adopts transition mode (TM) operation for high efficiency and low EMI.

SFL330 has programmable **Load Over Voltage Protection (Load OVP)** which can simplify system design greatly. The IC also has built-in **Over Load Protection (OLP)** with 120ms debounce time, which can protect the system especially when load is short. SFL330 will **Clear External EA Feedback Network** before IC power on. The IC also has **Soft Start** control during power on period.

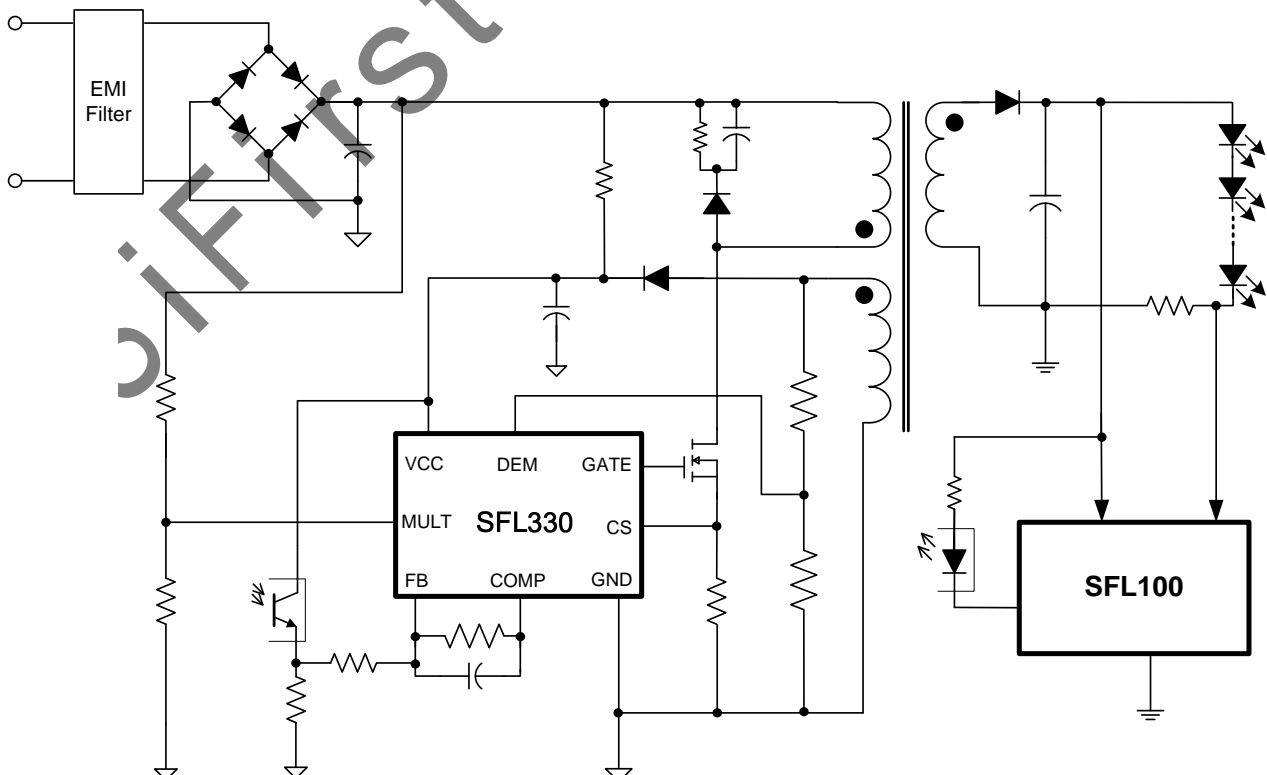
In SFL330, a highly linear analog multiplier is integrated to achieve low THD and high power factor. A restart timer is for stand alone applications. The IC also has the function of Min. OFF time and Max. Frequency Clamp to limits power MOS Vds spike when LED output is short.

In SFL330, the proprietary “**Frequency Adjusting**” can help to improve THD performance, while ensures audio noise free operation. A VCC Over Voltage Protection (VCC OVP) is integrated to improve system reliability.

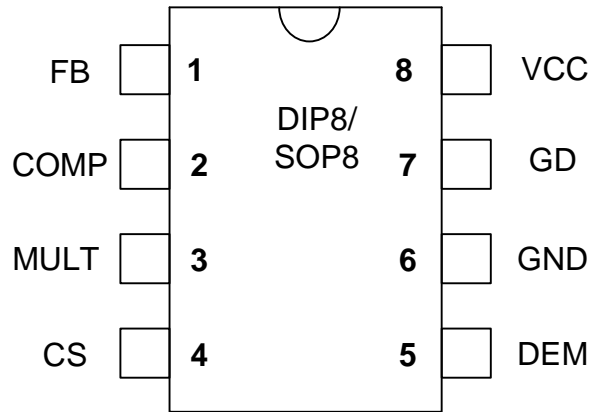
SFL330 integrates functions and protections of Under Voltage Lockout (UVLO), Over Load Protection (OLP), VCC Over Voltage Protection (OVP), Load Over Voltage Protection (Load OVP), Soft Start, Cycle-by-cycle Current Limiting (OCP), GD Clamping, VCC Clamping, etc.

SFL330 is available in SOP-8 and DIP-8 packages.

TYPICAL APPLICATION



Pin Configuration



Ordering Information

Part Number	Top Mark	Package		Tape & Reel
SFL330SG	SFL330SG	SOP8	Green	
SFL330SGT	SFL330SG	SOP8	Green	Yes
SFL330DP	SFL330DP	DIP8	RoHS	

Marking Information

