
PSR Single-Stage AC-DC LED Driver with High PF

FEATURES

- Primary side control without secondary feedback circuit
- Single-stage active PFC for high power factor and low THD
- High current accuracy $\pm 3\%$
- Ultra-low start up current
- Cycle-by-cycle current limit
- Over-voltage protection
- Short-circuit protection
- Over temperature protection
- Under voltage lockout protection
- FT8260: external power mos
FT8260B: internal power mos
FT8262DD: internal power mos

APPLICATIONS

- AC/DC LED driver applications
- Signal and decorative LED light
- E14/E27/PAR30/PAR38/GU10 LED lamp
- T8/T10 LED String

DESCRIPTION

The FT826xx is a single stage primary-side control offline LED controller with high power factor, low THD and excellent current accuracy for isolated LED lighting applications.

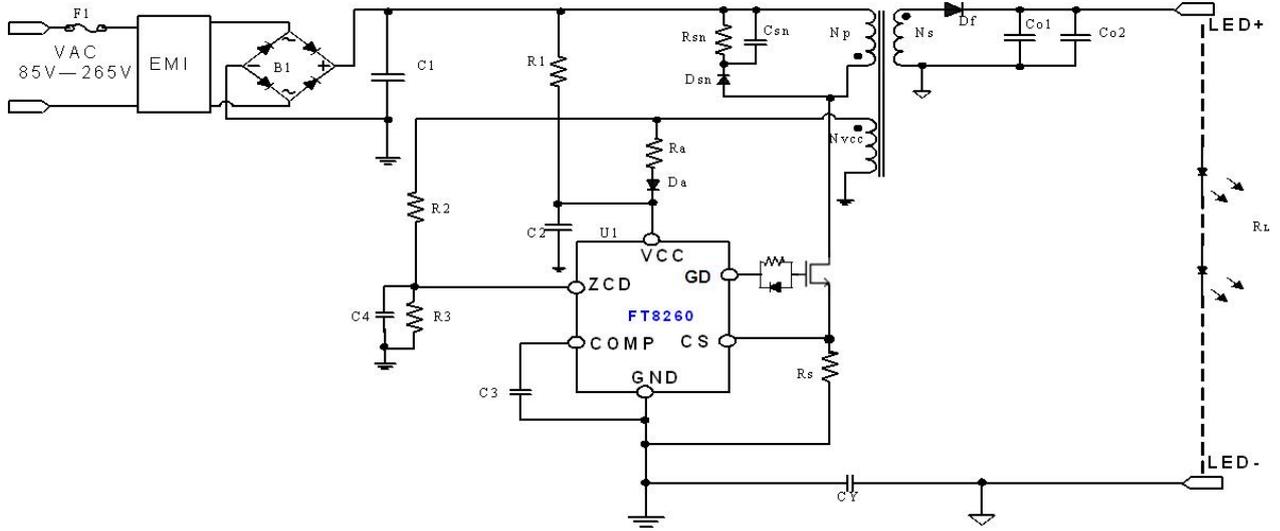
The accurate current control from the primary side significantly simplifies the LED lighting system design by eliminating the secondary side feedback components and the opto-coupler.

The extremely low start-up current and quiescent current of FT826xx reduce the power consumption, resulting in excellent efficiency.

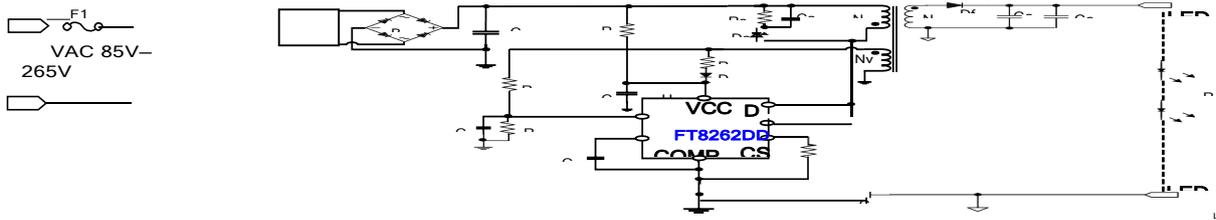
The multi-protection function of the FT826xx greatly enhances the system reliability and safety. The FT826xx features fruitful protection functions such as over-voltage protection, short-circuit protection, cycle-by-cycle current limit, over-temperature protection, VCC UVLO protection.

FT8260 is available in SOT23-6 package.
FT8260B is available in SOP8 package.
FT8262DD is available in DIP8 package.

TYPICAL APPLICATION CIRCUIT

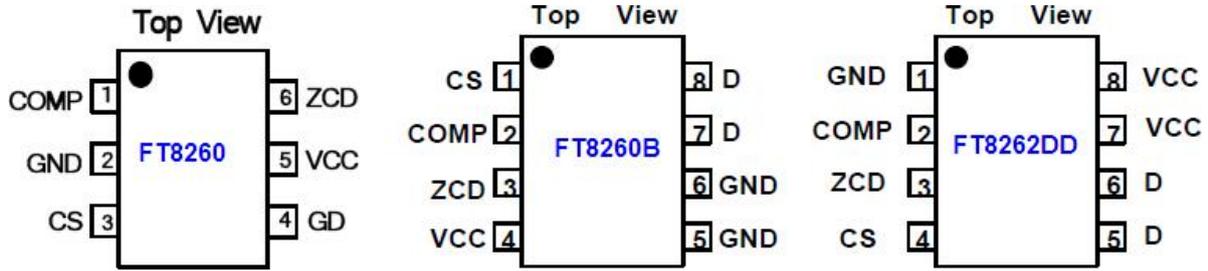


Pic1: FT8260 typical application (external mos)



Pic2: FT8260B/FT8262DD typical application (internal mos)

PIN CONFIGURATION



| FT8260 | FT8260B | FT8262DD | PIN NAME | FUNCTION |
|--------|---------|----------|----------|--|
| 2 | 5/6 | 1 | GND | Ground |
| 1 | 2 | 2 | COMP | Internal EA's output. This pin connects a capacitor to ground to stabilize the current control loop |
| 6 | 3 | 3 | ZCD | Zero current detection pin. A negative edge triggers the turn on signal of the internal MOSFET. Connecting this pin through a resistor divider from the auxiliary winding to GND. Over-voltage condition is detected through ZCD. If ZCD voltage is higher than the over-voltage protection (OVP) threshold after a blanking time of 1us, the over-voltage condition is detected |
| 3 | 1 | 4 | CS | Current sense pin. This pin connects a current sense resistor to GND |
| | 7/8 | 5/6 | D | Internal power MOSFET drain |
| 5 | 4 | 7/8 | VCC | Power supply |
| 4 | | | GD | Gate Driver output pin |

Table1.2 FT826x terminal description