

General Description

OB3316 is a high performance Cold Cathode Fluorescent Lamp (CCFL) backlight controller IC dedicated for use in push pull configuration. The controller is designed to drive single or multiple CCFLs in Liquid Crystal Display (LCD) applications.

OB3316 converts unregulated DC input voltage to the pseudo sinusoidal voltage and current waveforms in required frequency, to ignite and operate CCFL lamps.

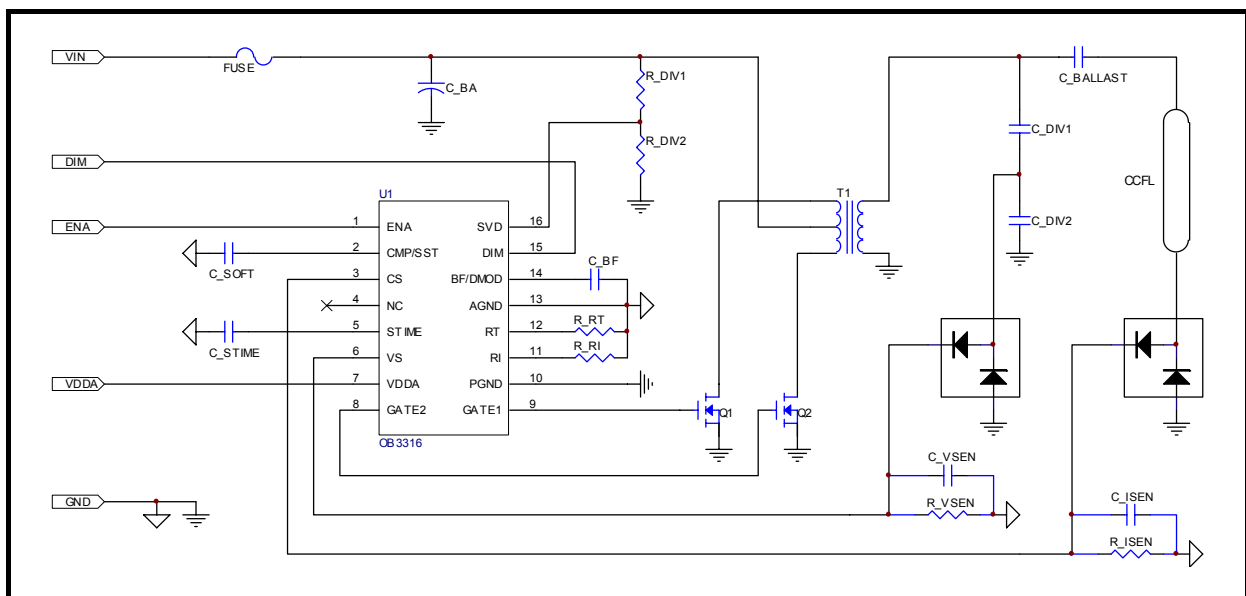
OB3316 provides a high degree of design flexibility by offering great programmability for key parameters which includes operating frequency, striking frequency, striking time, burst frequency for dimming and soft-start time.

OB3316 offers variable dimming controls. Both internal burst and external low frequency PWM (LPWM) dimming methods are available for a wide range of dimming control (10% to 100%). Further more, analog dimming is provided through external DC input control to achieve 40% to 100% dimming range.

The highly integrated OB3316 provides complete protection features covering IC Under Voltage Lockout (UVLO), System supply brownout protection, Output Over Voltage Protection (OVP) and Open-Lamp Protection.

OB3316 is available in SOP16 and DIP16 Packages.

Typical Application Circuit



Features

- Built-in burst and external LPWM for wide range dimming control
- Analog dimming Control
- 0-3V DC voltage direct dimming without any additional components
- High precision reference and frequency control
- Support single or multiple CCFLs
- Flexible user programmability
 - External programmable constant operating frequency
 - Programmable striking frequency and voltage control
 - Programmable soft on/off timer
 - Programmable striking time control
 - Programmable internal burst mode frequency control
- Comprehensive protection coverage
 - IC supply under voltage lockout (UVLO)
 - System supply brownout protection
 - Output over voltage protection (OVP)
 - Open lamp protection

Applications

- LCD Monitor
- LCD TV
- LCD Flat Panel Display for Instrument, Automobile and Handhold Device