

## LED Backlight Controller with PWM to Analog Dimming Mode

### DESCRIPTION

The EUP2950B is a high performance controller for LED Backlight. The internal soft start function can reduce the inrush current. The device uses current mode, fixed frequency architecture to regulate the LED current, which is measured through an external current sense resistor. Its low 400mV feedback voltage reduces power loss and improves efficiency.

The EUP2950B offers PWM to analog dimming mode for external PWM dimming control.

The EUP2950B integrated multiple protections, such as over current protection (OCP), over voltage protection (OVP), Diode & Inductor Short Protection, LED cathode short to GND protection, Under Voltage Lockout (UVLO), Thermal Shutdown Protection (OTP), and LED open protection.

The EUP2950B is available in SOP-8 package to provide the best solution for PCB space saving and total BOM cost.

### FEATURES

- 9V to 30V Input Voltage Range
- Current Mode PWM controller with Good Dynamic
- Internal Soft-Start
- PWM to Analog Dimming Mode
- Over Voltage Protection
- Over Current Protection
- Under Voltage Lockout
- Thermal Shutdown Protection
- LED cathode short to GND Protection
- LED Open Protection
- SOP-8 Package
- RoHS Compliant and 100% Lead (Pb)-Free

### APPLICATIONS

- LCD Monitor
- LCD TV
- Flat panel display

### Typical Application Circuit

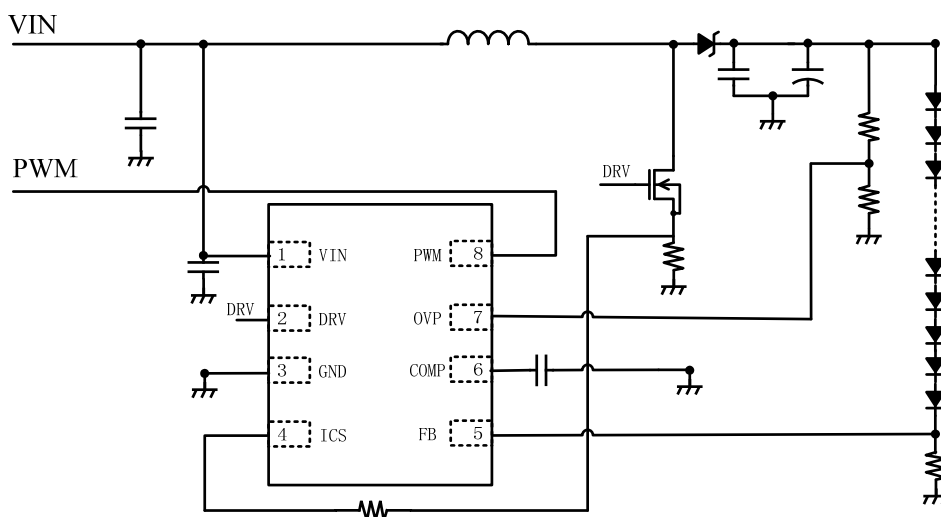


Fig 1 EUP2950B PWM Dimming for White LED Application