

## WLED Backlight Driver

Preliminary Specification Rev. 1.4

### FEATURES

- Integrated DC/DC Boost Controller
- Support Up to 4 LED Strings
- Integrated Current Matching MOSFETs
- Both PWM Dimming & Analog Dimming Mode Supported
- Integrated Circuits to Convert PWM Input Signal to Analog Dimming Output
- Programmable Output Current
- Enable Input
- Boost Over Current Protection
- Short LED Lamp Protection
- Open LED Lamp Protection
- Over Temperature Protection
- Inductor/Diode Short Protection

### APPLICATIONS

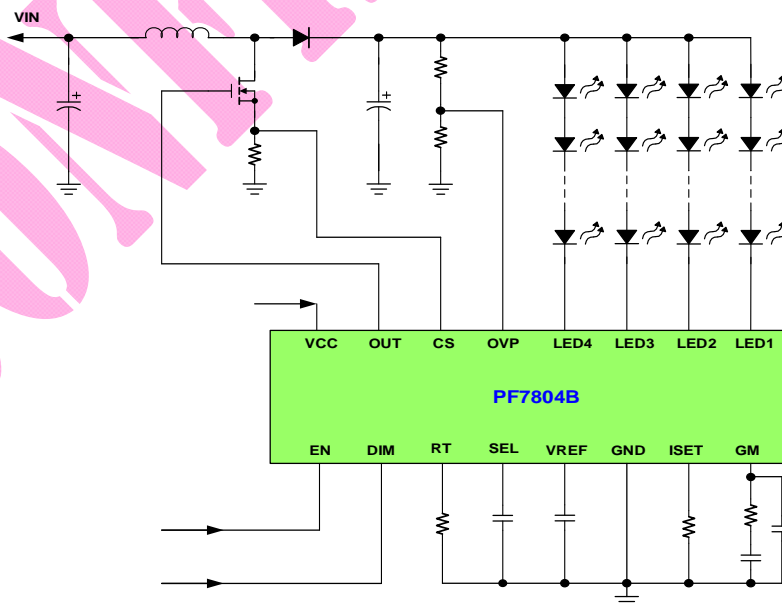
- LED Backlight Driver for LCD TV/Monitor

### GENERAL DESCRIPTION

The PF7804B is an 80V, 4-channel LED driver which integrates 4 current-programmable power MOSFETs and a boost controller. The adjustable switching frequency of the boost controller offers the flexibility for the designs on solving EMI and efficiency issues. The LED is adjustable from 5mA to 160mA by ISET resistor. Two kinds of dimming control modes are supported by PF7804B. With PWM dimming input, either PWM dimming output control or analog dimming output can be easily achieved.

Furthermore, the embedded boost over current protection, open LED lamp protection, short LED lamp protection, and over-temperature protection provide the users a highly integration solution as well as to reduce the part counts and required PCB space. The PF7804B is in a SOP-16/PSOP-16 or DIP-16 package.

### TYPICAL APPLICATION



Application of Analog Dimming Output Control