



DESCRIPTION

The PT6911 is ideally suited for AC/DC buck LED drivers. Since the PT6911 includes an 8V-450V linear regulator which allows it to work from a wide range of input voltages without the need for an external low voltage supply. Besides, the PT6911 operates in hysteretic control mode, the controller achieves good output current regulation without the need for any loop compensation. The PT6911 delivers constant current within high accuracy to a wide variety and number of series connected LEDs.

The PT6911 includes PWM dimming and linear dimming functions. The PWM dimming input can accept an external control signal with a duty cycle of 0~100% and a frequency between 100Hz and a few KHz. Output current to LED string can be programmed to any value between 0 to its maximum value by PWM dimming. Also, a 0~1.2V linear dimming input can be used for linear dimming of the LED current.

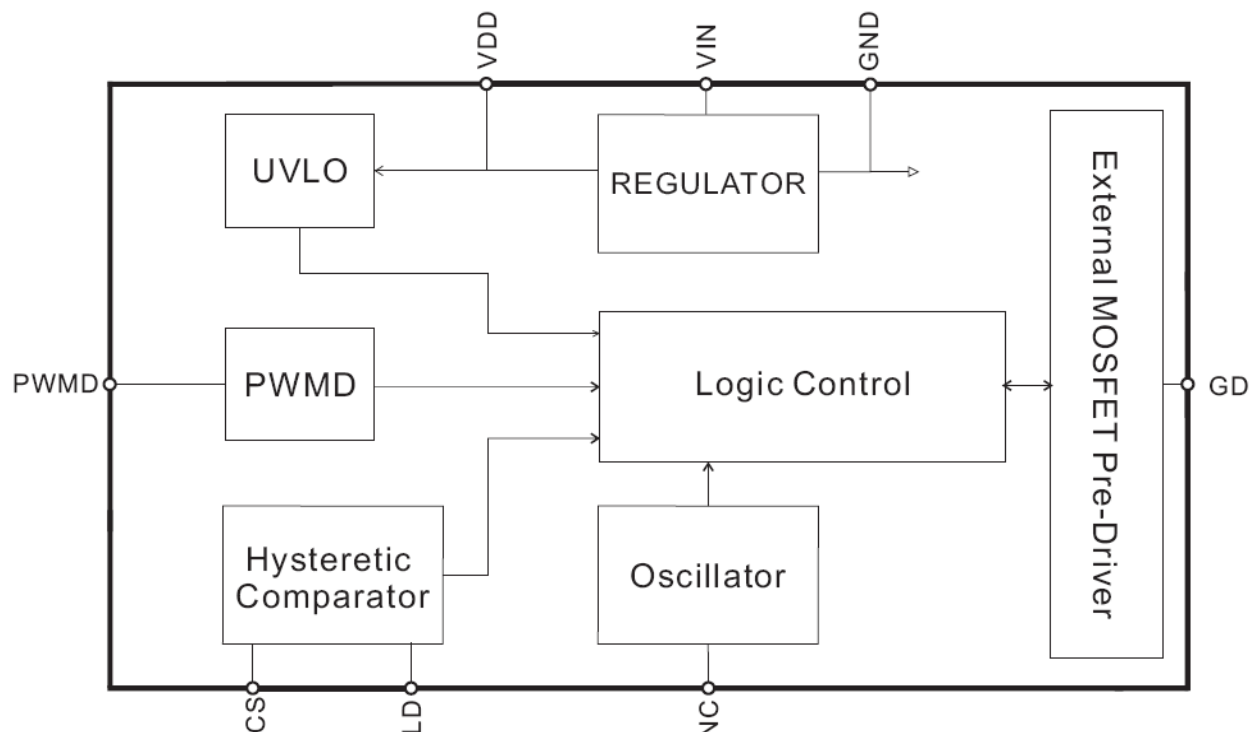
FEATURES

- 8V to 450V input range
- Hysteretic controller
- High accuracy output current
- Low stand-by power dissipation
- Soft start
- PWM low-frequency dimming and linear dimming

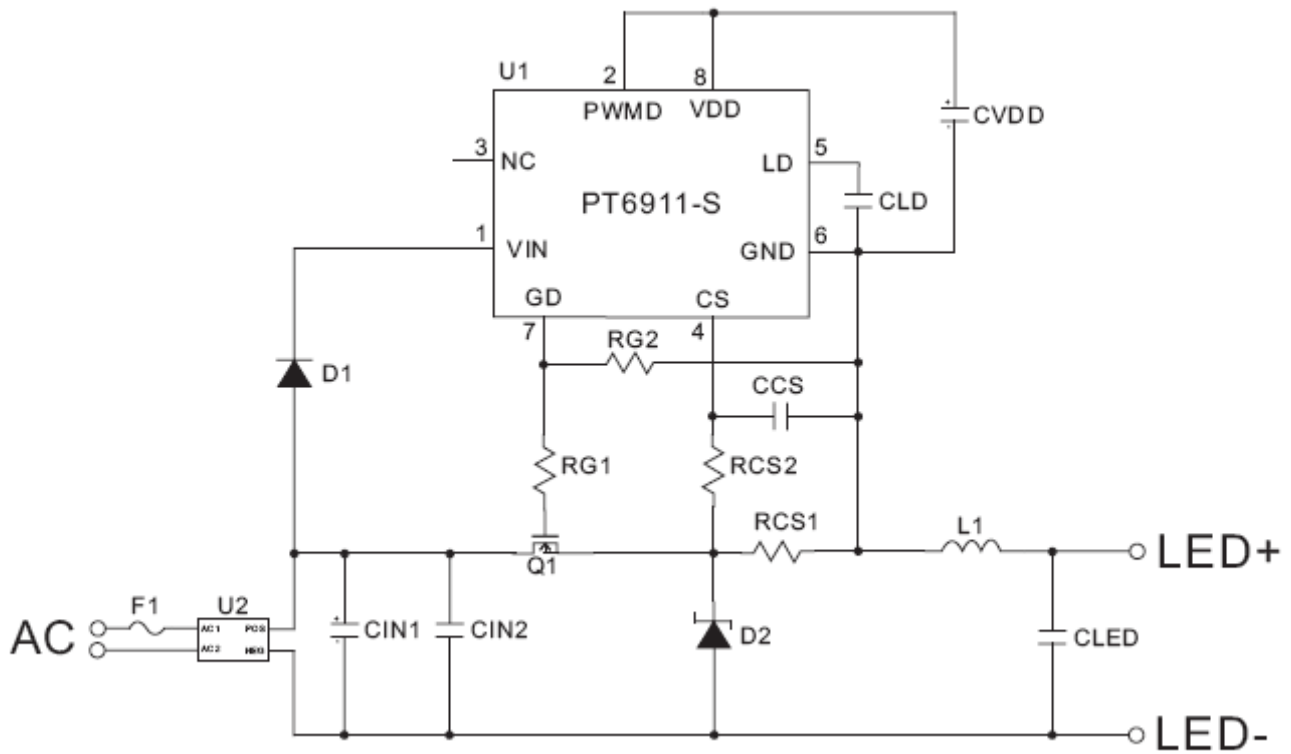
APPLICATIONS

- AC/DC LED driver
- Backlight LED driver
- Constant-Current driver

BLOCK DIAGRAM



TYPICAL APPLICATION

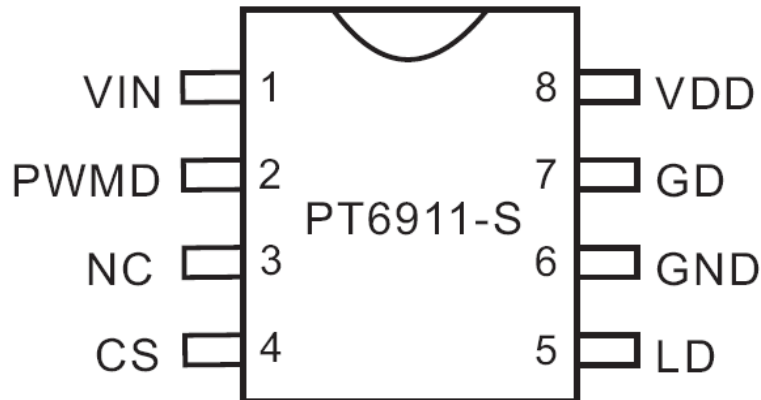




ORDER INFORMATION

| Valid Part Number | Package Type | Top Code |
|-------------------|---------------------|----------|
| PT6911-S | 8 Pins, SOP, 150MIL | PT6911-S |

PIN CONFIGURATION



PIN DESCRIPTION

| Pin Name | Description | Pin No. |
|----------|---|---------|
| VIN | Input supply voltage 8V-450V DC. | 1 |
| PWMD | Low frequency PWM dimming pin, also enable pin. When PWMD pin is floating or is pulled to GND, IC operates in stand-by mode. When PWMD pin is pulled to high, IC operates normally. | 2 |
| NC | No connection. | 3 |
| CS | Current sense pin. | 4 |
| LD | Linear dimming. If the voltage at the LD pin is less than 1.2V, the LD pin voltage sets the current sense threshold. | 5 |
| GND | IC Ground. | 6 |
| GD | IC output drives external MOSFET. | 7 |
| VDD | Internal regulated voltage output pin. It must be bypassed with a low ESR capacitor to GND. | 8 |



IMPORTANT NOTICE

Princeton Technology Corporation (PTC) reserves the right to make corrections, modifications, enhancements, improvements, and other changes to its products and to discontinue any product without notice at any time.

PTC cannot assume responsibility for use of any circuitry other than circuitry entirely embodied in a PTC product. No circuit patent licenses are implied.

Princeton Technology Corp.
2F, 233-1, Baociao Road,
Sindian, Taipei 23145, Taiwan
Tel: 886-2-66296288
Fax: 886-2-29174598
<http://www.princeton.com.tw>