

## Description

BP2878K is a PWM dimmable high-precision low power factor buck for constant current LED driver. Internal the IC, it has PWM to analog dimming algorithm. It is designed for flicker-free and noiseless LED smart lighting applications. It is also optimized for linearity of dimming and output LED current accuracy. It is suitable for 85Vac~265Vac input voltage range.

BP2878K utilizes MOSFET driving technique and current sensing method with very few external components, it can achieve excellent constant current performance, so the system cost and size are greatly reduced.

BP2878K has various protections, includes LED open circuit protection, LED short circuit protection, input under-voltage protection and over temperature regulation to enhance the system reliability.

BP2878K is available in SOP8 package.

## Features

- ◆ PWM to analog dimming algorithm
- ◆ Flicker-free dimming
- ◆ Stepless dimming
- ◆ External power supply for VCC
- ◆ 1%-100% PWM dimming
- ◆ ±5% output LED current accuracy
- ◆ LED open/short circuit protection
- ◆ Thermal foldback
- ◆ SOP8 package

## Application

- ◆ LED Smart Bulbs
- ◆ LED Smart Ceiling lamps
- ◆ Other Smart LED lighting

## Typical Application

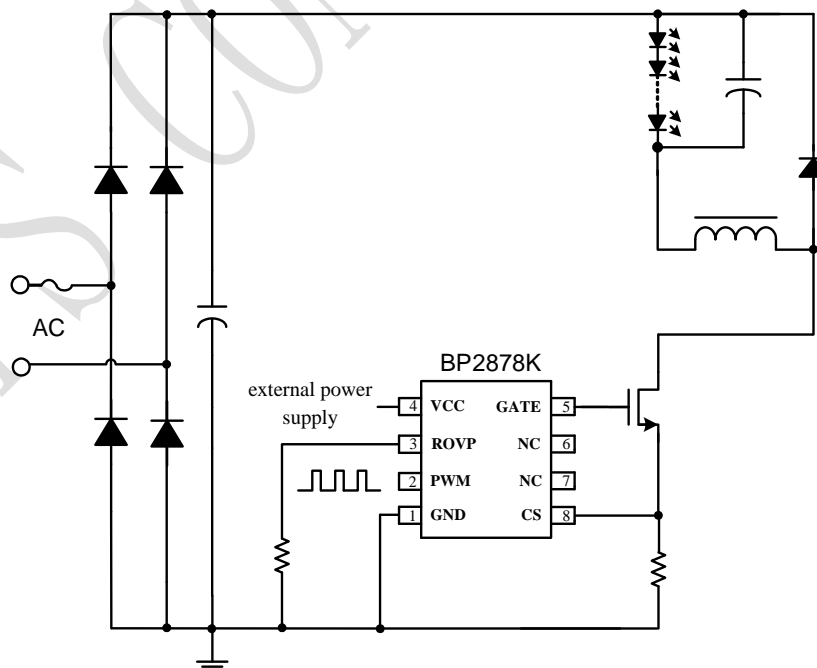


Figure 1. BP2878K Typical Application

### Order Information

Part Number	Package	Temperature	Packing Method	Mark
BP2878K	SOP8	-40 °C to 105 °C	Tape 4,000 pcs/reel	BP2878 12345CX H1WWK

### Pin Configuration and Marking Information

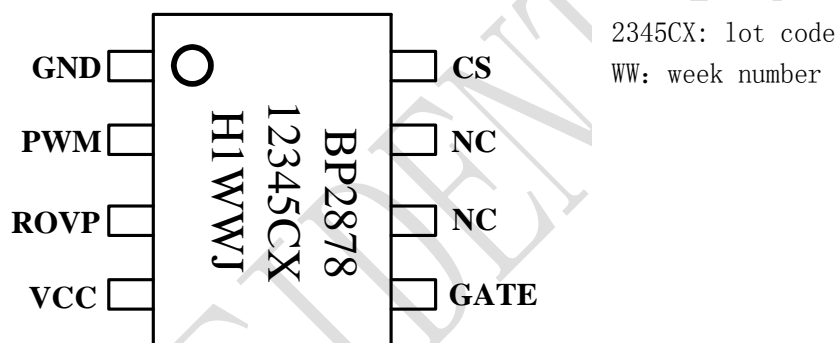


Figure 2. Pin Configuration

### Pin Descriptions

管脚号	管脚名称	描述
1	GND	IC ground.
2	PWM	PWM dimming signal input.
3	ROVP	Over voltage protection setting pin. Connected with the GND pin through resistor. the larger resistance, the higher OVP voltage.
4	VCC	Power supply
5	GATE	Gate of external MOSFET.
6,7	NC	NC
8	CS	Current sense, connect the current sense resistor to GND pin.

## Disclaimer

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