



XR46110 Product Brief

LED Current Controller with Line Regulation Compensation

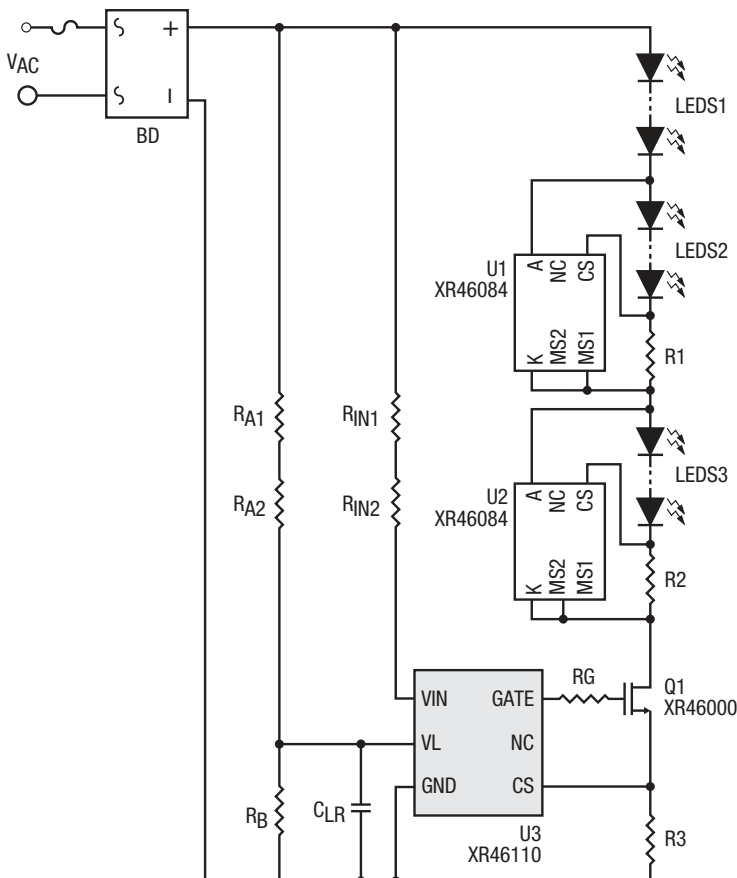
Description

The XR46110 is an LED current controller with line regulation compensation for operating over a wide alternative current (AC) voltage source range. It can drive an external N-channel power MOSFET to regulate the current flowing through a high voltage (HV) LED string.

The application of the XR46110 is configured in series with an LED string, working as a constant current sink with linear type overvoltage protection (OVP), linear type over temperature protection (OTP), and line regulation compensation. It is suitable for applications with a rectified AC voltage source.

The PCB design can be very compact to meet various shape requirements. It is especially suitable for replacing incandescent light bulb and linear type fluorescent lamps.

Typical Application



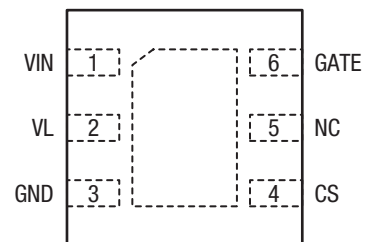
FEATURES

- Device
 - 6V to 78V chip supply voltage range
 - Excellent system power regulation in $\pm 10\%$ AC mains fluctuation
 - Over temperature protection
 - Overvoltage protection
 - Single board LED lighting solution available
 - 2mm x 2mm TDFN-6L package
- System
 - All solid state components
 - No electrolytic capacitor required
 - Scalable architecture allows optimization of performance vs. cost
 - Driver-on-board and chip-on-board design solution available which minimize process flow and assembly cost
 - High PF and low THD performance
 - Flexible PCB layout options

APPLICATIONS

- LED Lighting Applications
 - Downlight
 - High bay
 - Specialty
 - Architectural

Pin Configuration



2mm x 2mm TDFN-6

Ordering Information⁽¹⁾

Part Number	Operating Temperature Range	Lead-Free	Package	Packaging Method
XR46110IHBTR	-40°C ≤ T _J ≤ 125°C	Yes ⁽²⁾	TDFN6 2x2	Tape and reel

NOTE:

1. Refer to www.exar.com/XR46110 for most up-to-date Ordering Information.
2. Visit www.exar.com for additional information on Environmental Rating.

Please contact LEDtechsupport@exar.com to request a complete datasheet.



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