

STEVAL-ILL014V1

Evaluation board for the STCS1A constant current controller for high brightness LEDs

Data brief



Description

The best way to power LEDs is to control the forward current in order to achieve good matching of light output. LED manufacturers specify the characteristics (such as lumens, beam pattern, color) of their devices at a specified forward current. The STEVAL-ILL014V1 evaluation board demonstrates the operation of the STCS1A constant current LED driver. The STCS1A is capable of controlling the LED current under several application conditions, while also providing useful features that make it suitable for different applications such as advertising signs, automotive interior and exterior lighting, and emergency vehicle warning lights.

Features

- Input voltage (VIN): 4.5 V to 40 V
- Less than 0.5 V voltage overhead
- Up to 1.5 A output current
- PWM dimming pin
- Shutdown pin
- LED disconnection diagnostic
- RoHS compliant

Schematic diagram STEVAL-ILL014V1

1 Schematic diagram

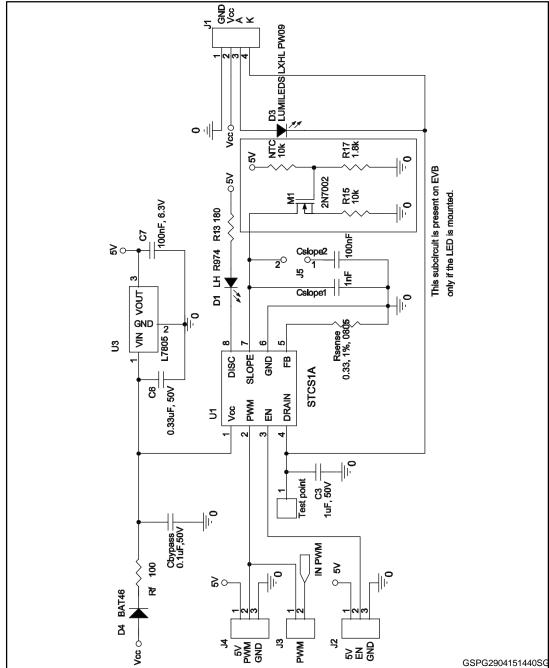


Figure 1: STEVAL-ILL014V1 circuit schematic

STEVAL-ILL014V1 Revision history

2 Revision history

Table 1: Document revision history

Date	Version	Changes
05-May-2008	1	Initial release.
04-May-2015	2	Updated board photo on the cover page.

IMPORTANT NOTICE - PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2015 STMicroelectronics - All rights reserved

