



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

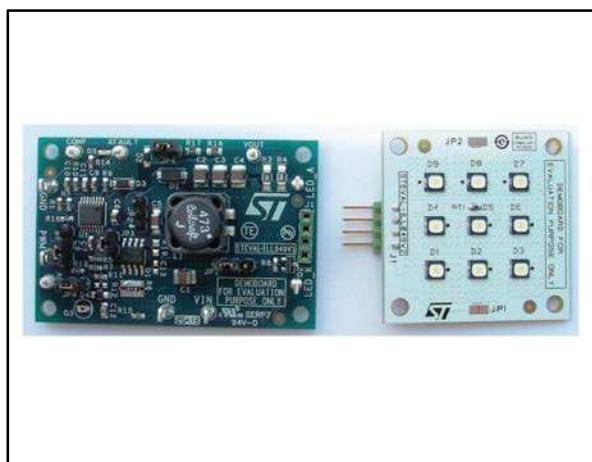
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



LED driver based on the LED6001 + 9-LED board with NTC sensor

Data brief

**Description**

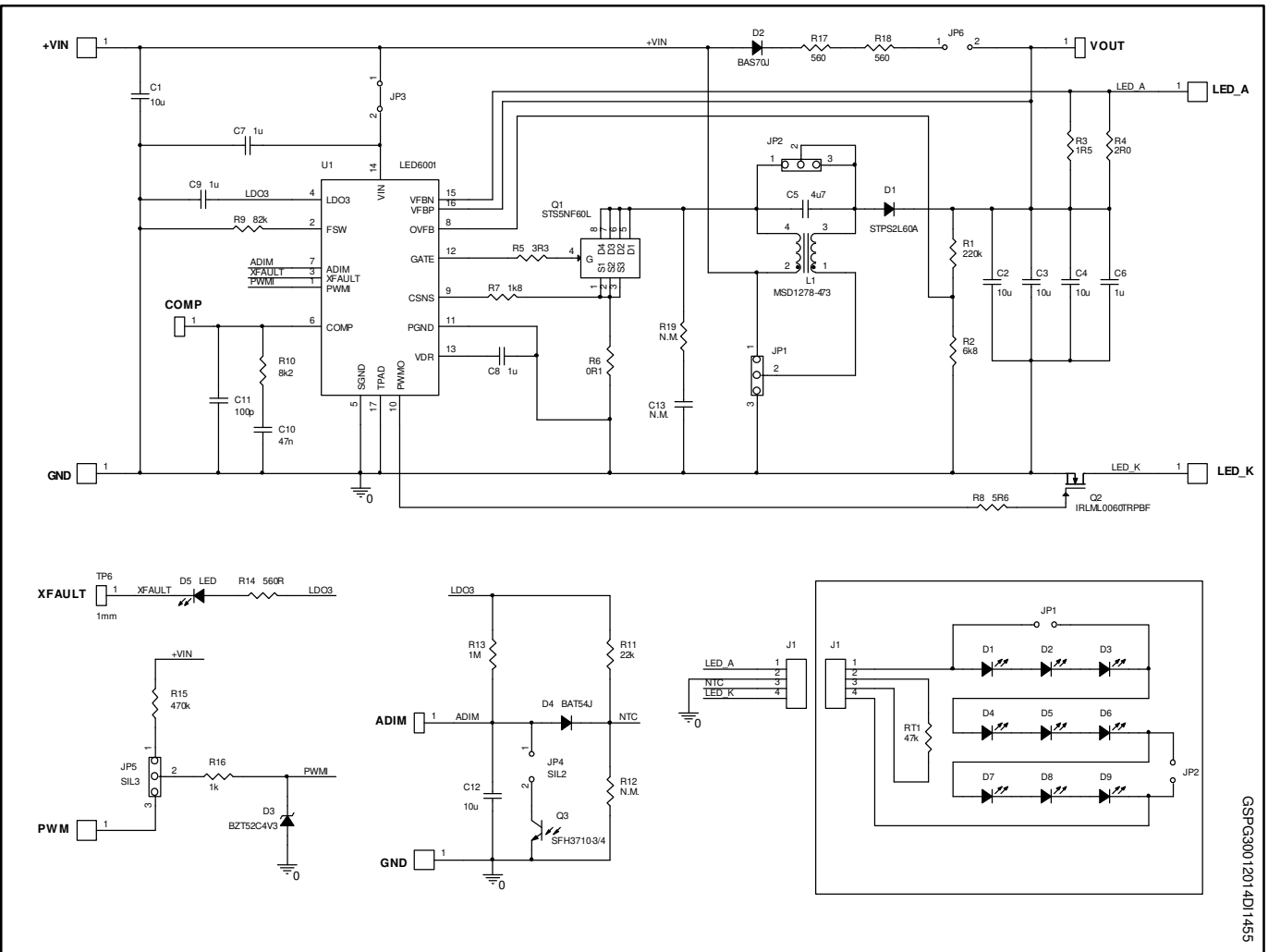
The purpose of this product evaluation board is to provide an application example of a compact LED driver using the new LED6001 chip from STMicroelectronics. The board is equipped with a single-channel, constant-current LED driver operating with both boost and SEPIC topologies. The brightness of the LED string connected to its output can be controlled through a PWM signal (0%-100% dimming) or a control voltage (10:1 analog dimming). Open LED, feedback disconnection, LED overcurrent and output-to-ground short-circuit (SEPIC only) faults are detected and managed. The board has been designed to provide a solution example for applications involving several LEDs arranged as a single string (e.g. off-grid street lighting, advertisement panels, signs, gaming, etc.).

Features

- Wide DC input voltage: 6 V-24 V
- Single channel, 350 mA constant-current output with PWM brightness control
- Up to 10 high-brightness white LEDs (40 V OVP threshold)
- Selectable boost or SEPIC converter topology
- Up to 92% efficiency (boost converter)
- Onboard photo-transistor for ambient light switch function
- LED temperature protection through analog dimming control
- RoHS compliant

1 Schematic diagram

Figure 1: Circuit schematic



GSP-G30012014D11455



2 Revision history

Table 1: Document revision history

Data	Revision	Changes
29-Jul-2014	1	Initial release

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.

© 2014 STMicroelectronics – All rights reserved