## : ©hipsmall

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

## STEVAL-ILL009V4

## OSRAM Golden DRAGON ${ }^{\circledR}$ LEDs board

Data Brief

## Features

■ LED package: white SMT package, colorless clear silicone resin

■ Feature of the device: point lightsource with high luminous efficiency and low space
■ Grouping parameter: luminous flux wavelength radiant power
■ ESD-withstand voltage: up to 2 kV acc. to JESD22-A114-B

## Description

This board is an option to the STEVAL-ILL009V3. As a light source, there are four Golden DRAGON ${ }^{\circledR}$ LEDs used with a maximum forward current of 350 mA . The STEVAL-ILL009V1 can drive eight Golden DRAGON ${ }^{\circledR}$ LEDs. To demonstrate the driving capability of the STP04CM596, only four LEDs are used on the load board. This means that one STP04CM596 driver is not used. The STLM20 temperature sensor is assembled in the middle of the LEDs to protect against overheating.


## 1 <br> Board schematic

Figure 1. Schematic


## 2 Revision history

Table 1. Document revision history

| Date | Revision | Changes |  |
| :---: | :---: | :--- | :--- |
| $20-$ Nov-2007 | 1 | Initial release |  |

## Please Read Carefully:

Information in this document is provided solely in connection with ST products. STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, modifications or improvements, to this document, and the products and services described herein at any time, without notice.
All ST products are sold pursuant to ST's terms and conditions of sale.
Purchasers are solely responsible for the choice, selection and use of the ST products and services described herein, and ST assumes no liability whatsoever relating to the choice, selection or use of the ST products and services described herein.
No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted under this document. If any part of this document refers to any third party products or services it shall not be deemed a license grant by ST for the use of such third party products or services, or any intellectual property contained therein or considered as a warranty covering the use in any manner whatsoever of such third party products or services or any intellectual property contained therein.

UNLESS OTHERWISE SET FORTH IN ST'S TERMS AND CONDITIONS OF SALE ST DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE USE AND/OR SALE OF ST PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION), OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

UNLESS EXPRESSLY APPROVED IN WRITING BY AN AUTHORIZED ST REPRESENTATIVE, ST PRODUCTS ARE NOT RECOMMENDED, AUTHORIZED OR WARRANTED FOR USE IN MILITARY, AIR CRAFT, SPACE, LIFE SAVING, OR LIFE SUSTAINING APPLICATIONS, NOR IN PRODUCTS OR SYSTEMS WHERE FAILURE OR MALFUNCTION MAY RESULT IN PERSONAL INJURY, DEATH, OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE. ST PRODUCTS WHICH ARE NOT SPECIFIED AS "AUTOMOTIVE GRADE" MAY ONLY BE USED IN AUTOMOTIVE APPLICATIONS AT USER'S OWN RISK.

Resale of ST products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by ST for the ST product or service described herein and shall not create or extend in any manner whatsoever, any liability of ST.

> ST and the ST logo are trademarks or registered trademarks of ST in various countries. Information in this document supersedes and replaces all information previously supplied.

The ST logo is a registered trademark of STMicroelectronics. All other names are the property of their respective owners.
© 2007 STMicroelectronics - All rights reserved

STMicroelectronics group of companies
Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan Malaysia - Malta - Morocco - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America
www.st.com

