## STEVAL-ILL009V1

## RGB color control board based on STP04CM05

## Features

■ Different LEDs as a load can be used

- 3 A at 4 V DC/DC converter using L4973D3 for user-friendly input (8-30 V)
- Red, green, blue individual tuning

■ 64 levels of brightness for each LED with software color control

■ LED temperature limit set by software

- SW start up implemented (200 ms)



## Description

This board was designed to drive super highbrightness multicolor RGB LEDs with current up to 700 mA per LED. The LED brightness and color are very easily changed by potentiometers, and an automatic color-change mode continuously modulates the color of the LED to generate multicolor light. A LED over-temperature protection is designed on this board, so the power delivered to the LED can be automatically limited to prevent LED overheating.

The STEVAL-ILL009V1 is a motherboard assembled without LEDs. To evaluate light effect features, it is necessary to order a load board. Two load boards are available for easy performance evaluation. The first with a OSTAR projection module has ordering code STEVALILL009V3, and the second with Golden Dragon LEDs has ordering code STEVAL-ILL009V4

## 1 Board schematic

Figure 1. Schematic


## 2 Revision history

Table 1. Document revision history

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

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