



RGB color control board based on STP04CM05

Data Brief

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)



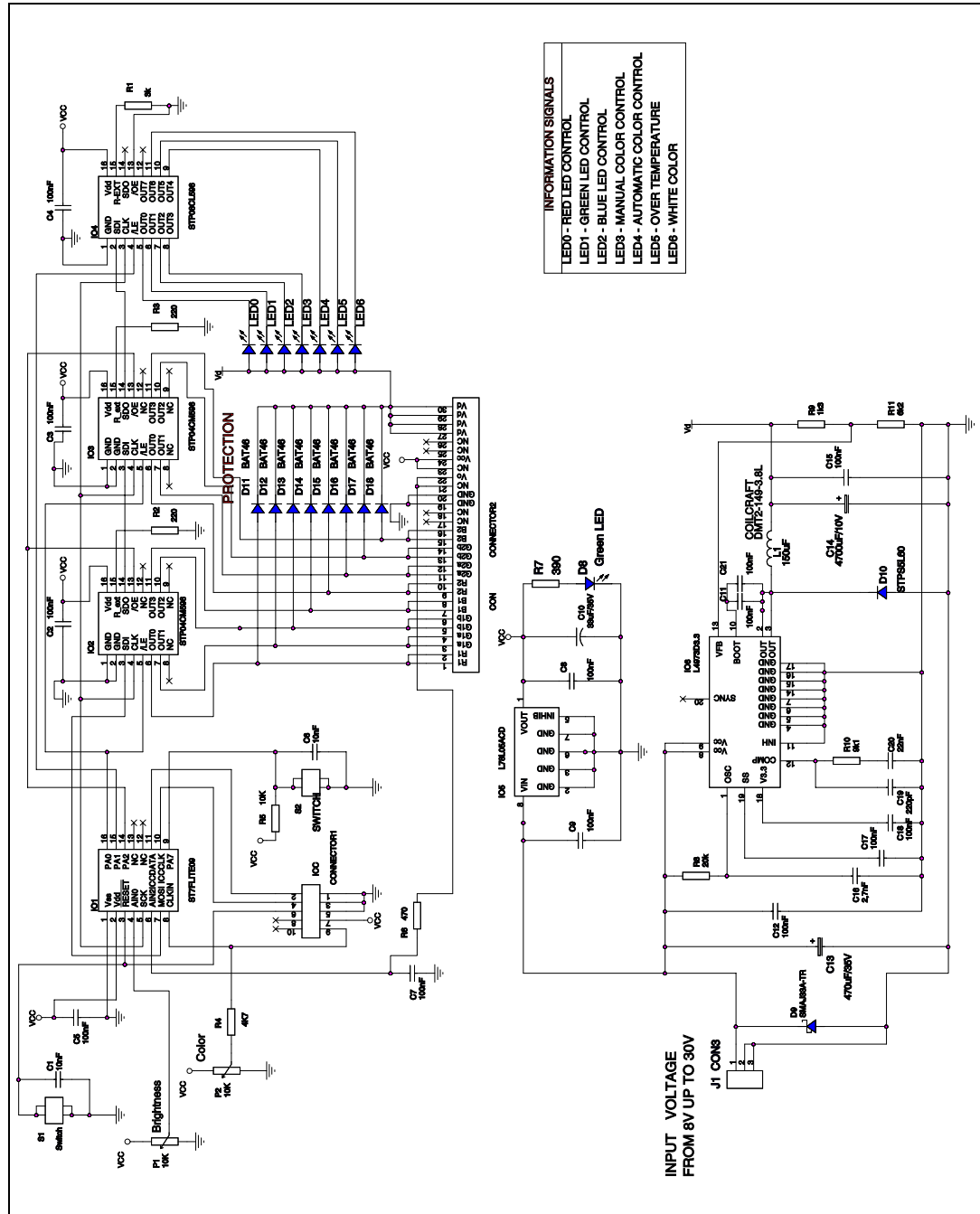
Description

This board was designed to drive super high-brightness 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 STEVAL-ILL009V3, 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	Changes
20-Nov-2007	1	Initial release

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