



# STEVAL-ILL009V5

New RGB color demonstration board  
based on the STP04CM05 and ST1S10

Data Brief

## Features

- 3 A at 4 V DC-DC converter using the ST1S10 for input voltage range (7 V - 18 V)
- New improved LED drivers STP04CM05 and STP08CP05
- Input over-voltage protection done by Transil™ (SMAJ15A-TR)
- Protection against input voltage reversion

## Applications

- Adapters for PDAs, camcorders, electric shavers, cellular phones, videogames
- Auxiliary power supply for LCD/PDP TVs, monitors, audio systems, computers, industrial applications
- SMPS for set-top boxes
- DVD players/recorders, white goods

## Description

The STEVAL-ILL009V5 demonstration board was designed in order to allow evaluation and testing of the new DC-DC converter ST1S10 and new LED drivers STP04CM05 and STP08CP05. This board replaces the previous version STEVAL-ILL009V1. Thanks to the ST1S10 DC-DC converter, the size of the inductor and board dimensions are reduced. The dimensions of the STEVAL-ILL009V5 are 120 mm x 47 mm, instead of 151 mm x 47 mm for the STEVAL-ILL009V1. The input voltage for this board ranges from 7 V to 18 V. The new LED drivers allow faster communications and higher output voltage. Other features such as software, brightness and color regulation, microcontroller and temperature protection, are identical on both the STEVAL-ILL009V1 and the new STEVAL-ILL009V5.



# 1 Circuit schematic

Figure 1. LED drivers part

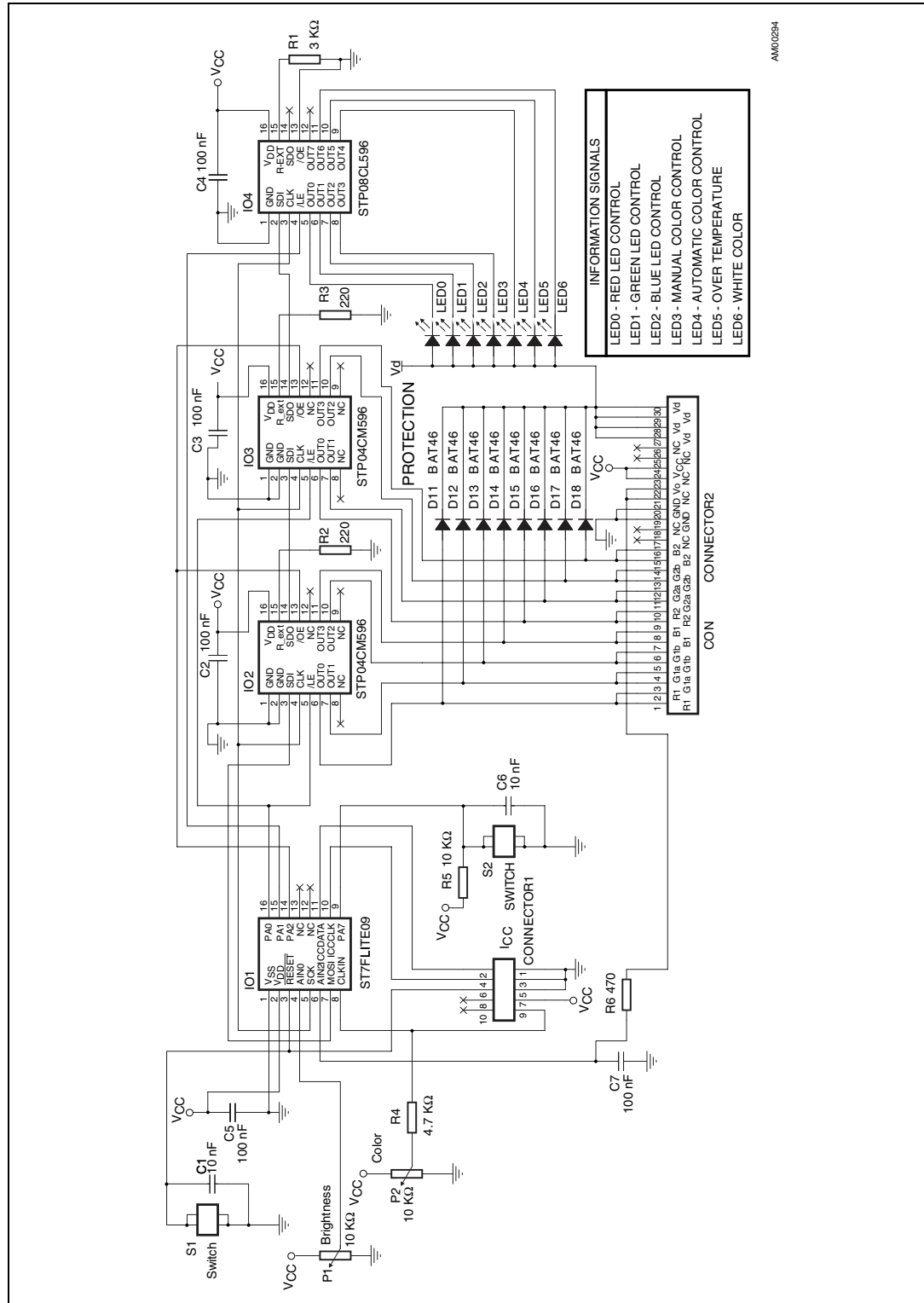
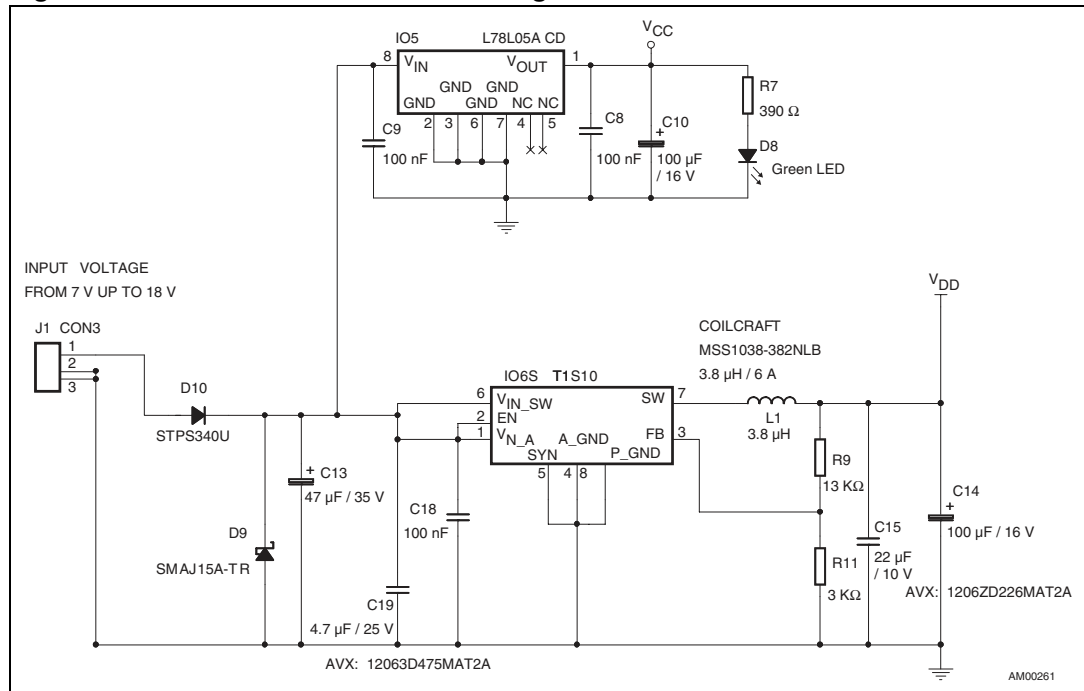


Figure 2. Power sources schematic diagram



## 2 Revision history

**Table 1. Document revision history**

Date	Revision	Changes
28-Oct-2008	1	Initial release

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