



# STEVAL-ILL002V4

High-brightness LED driver with diagnostics (40 LEDs)  
demonstration board based on the STP08DP05

Data brief

## Features

- Brightness regulation
- Blinking speed regulation
- Animated text
- Error detection on output
- Graphic user interface (GUI)
- DC-DC converter

## Description

This demonstration board provides a complete solution for driving 40 high-brightness green LEDs manufactured by Toshiba.

The high-brightness LEDs are arranged on the board in a 5x8 matrix.

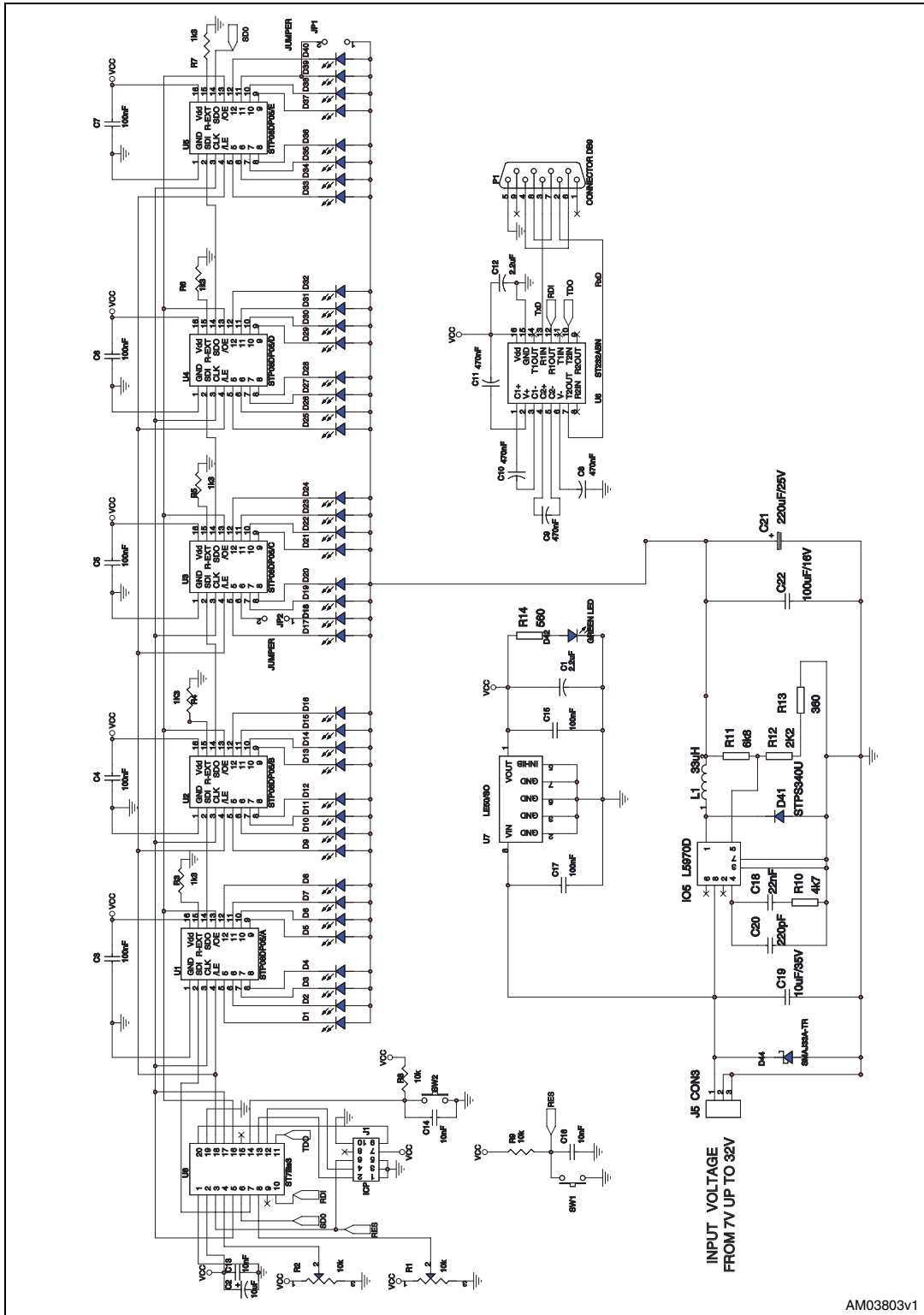
The matrix is driven by five 8-channel STP08DP05 drivers which are controlled by the ST7FLITE3x 8-bit microcontroller.

The innovative feature of STP08DP05 is the full output error detection function, which checks the status of the outputs without invasive tests (via software).



# 1 Circuit schematic

Figure 1. Schematic diagram



## 2 Revision history

**Table 1. Document revision history**

Date	Revision	Changes
11-May-2009	1	Initial release.

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