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# 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




**STEVAL-ILL002V4**

## 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).



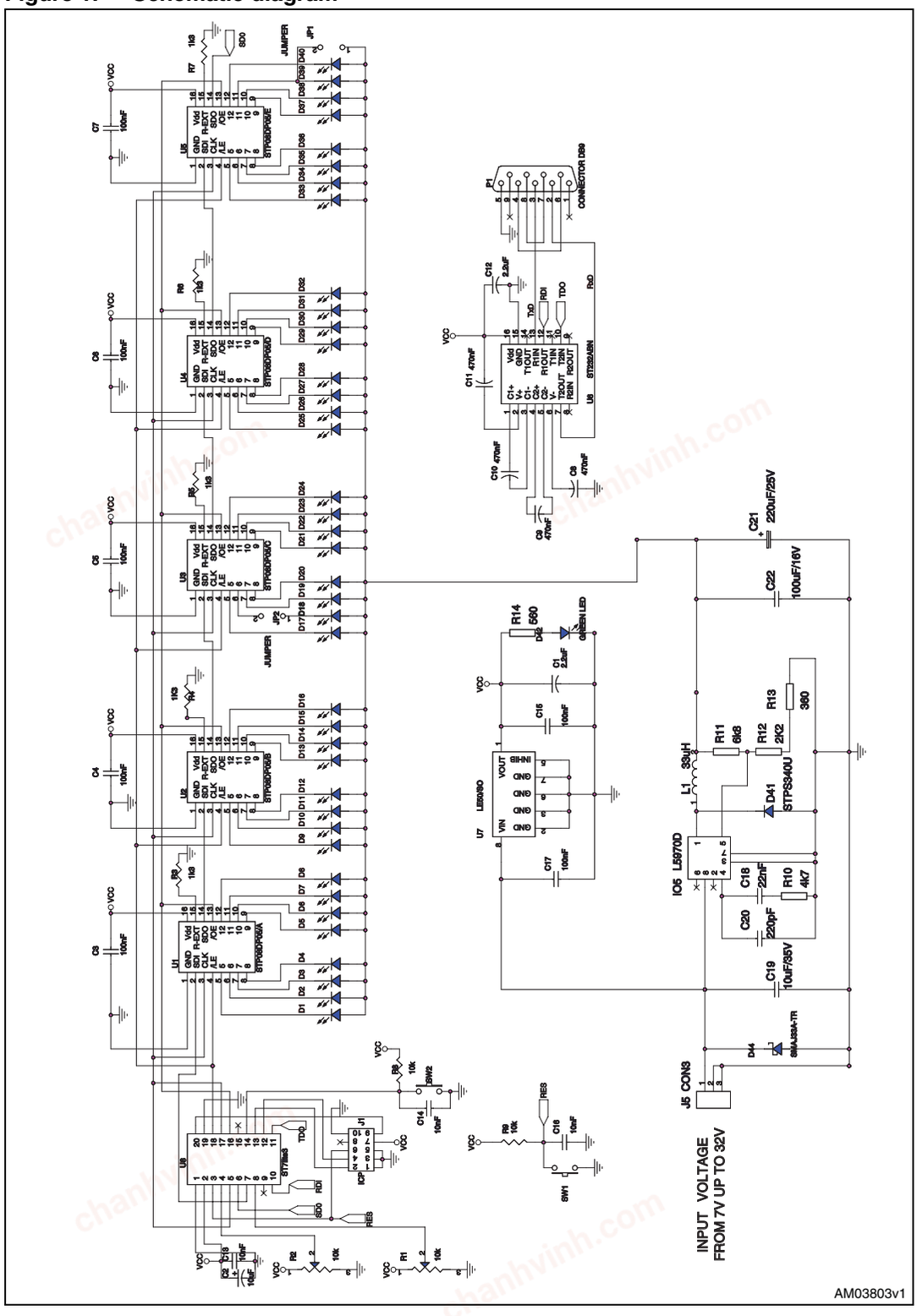
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# 1 Circuit schematic

**Figure 1. Schematic diagram**



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# 2 Revision history

Table 1. Document revision history

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

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