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.

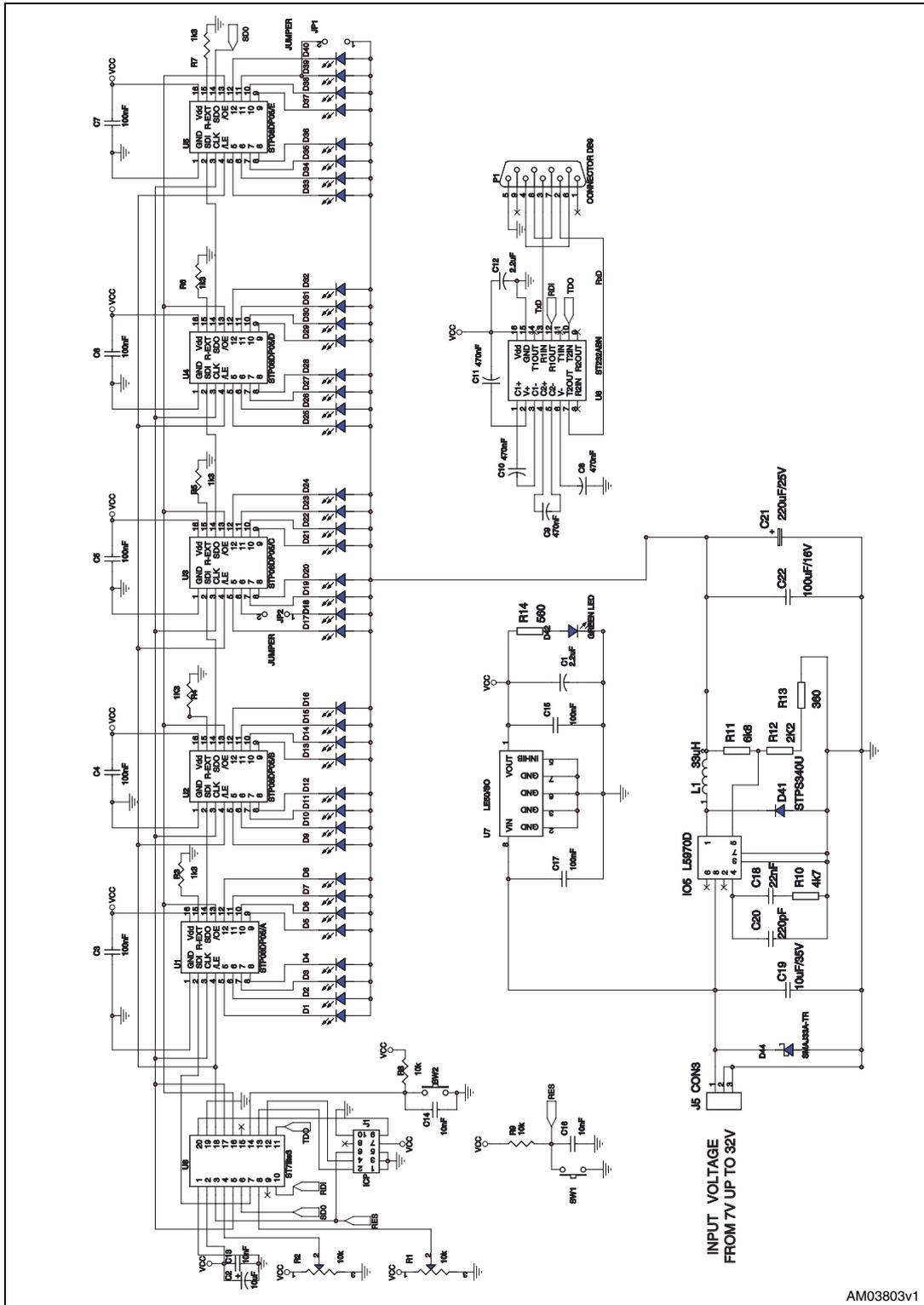The high-brightness LEDs are arranged on the board in a 5x8 matrix.

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).

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1   Circuit schematic

Figure 1.   Schematic diagram

AM03803v1

2   Revision history

Table 1.   Document revision history

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