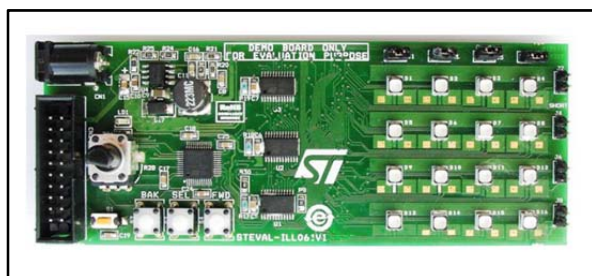


High brightness RGB LED array driver with local dimming and diagnostics based on the LED1642GW and STM32

Data brief



Features

- High brightness 4x4 RGB LED matrix
- Complete hardware and software package
- Various preconfigured and programmable patterns
- Open/short error simulation and real-time detection
- 6 to 28 V DC polarity-independent power supply
- GUI for advanced driver configuration
- RoHS compliant

Description

The STEVAL-ILL061V1 is a high brightness RGB LED array driver system evaluation board with local dimming and diagnostics based on LED1642GW independent PWM LED driver controlled through an STM32 microcontroller SPI interface.

An ST L7981 DC-DC converter provides the voltages/power for overall functioning of the board.

1 Schematic diagrams

Figure 1: STEVAL-ILL061V1 power supply

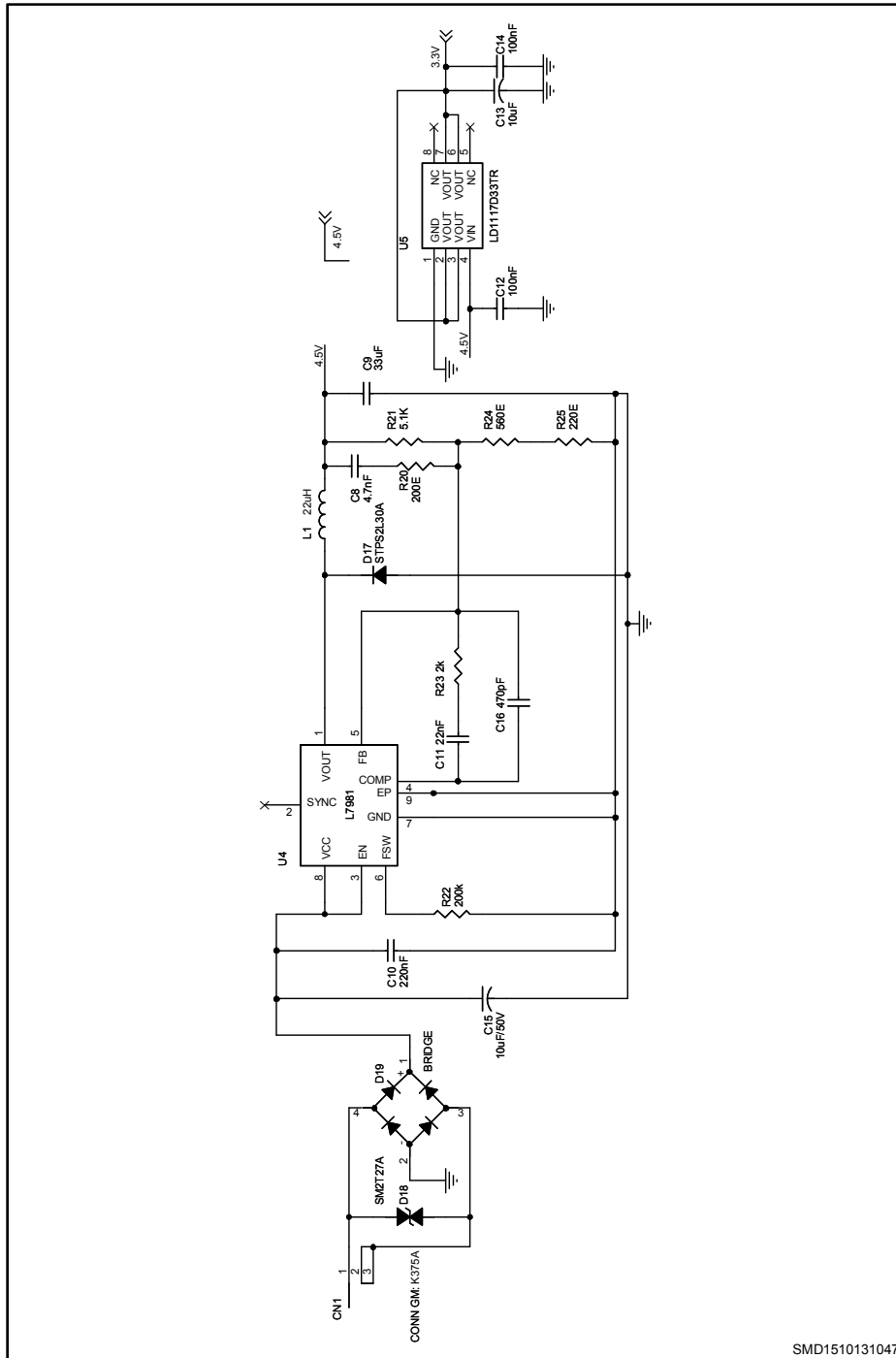
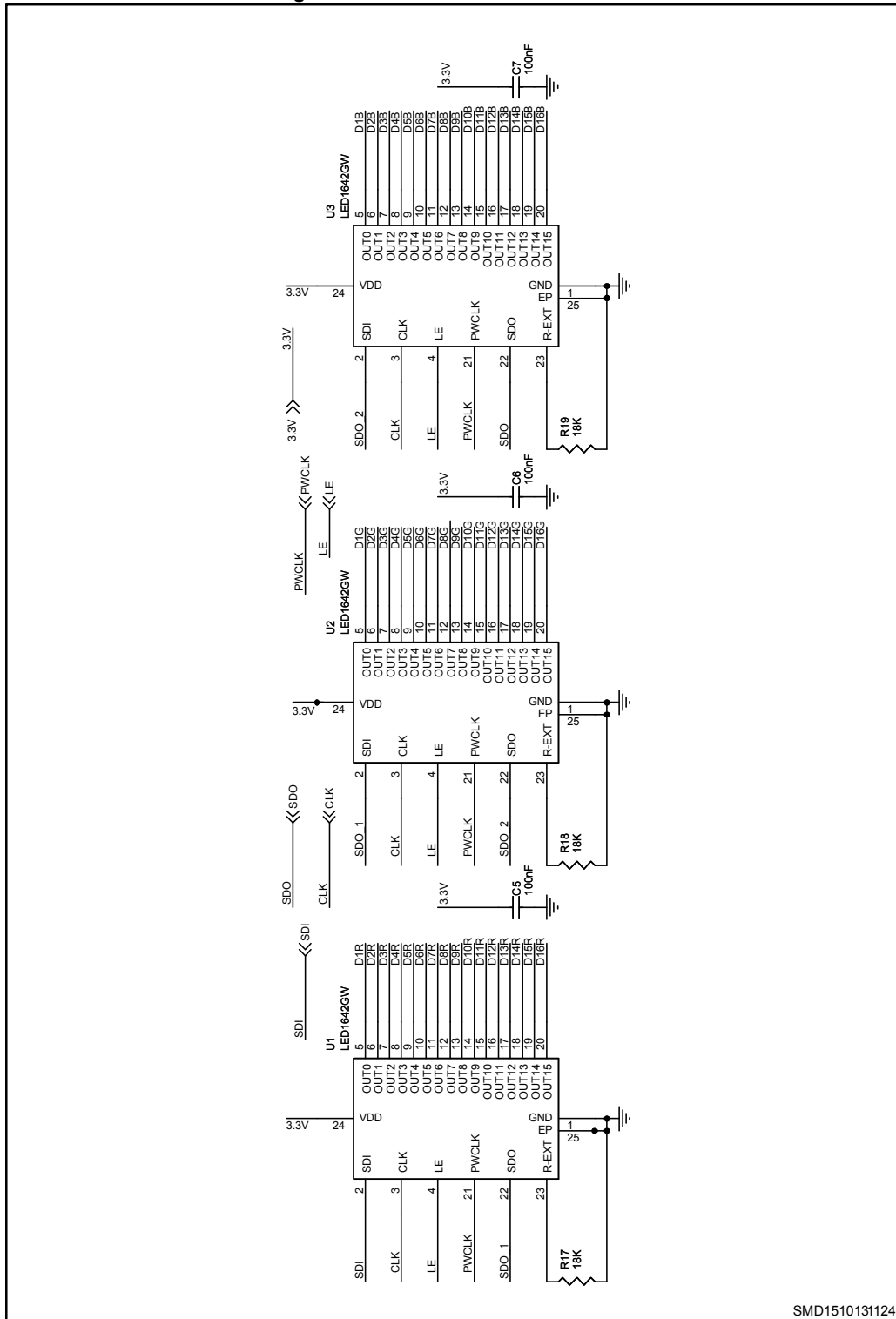
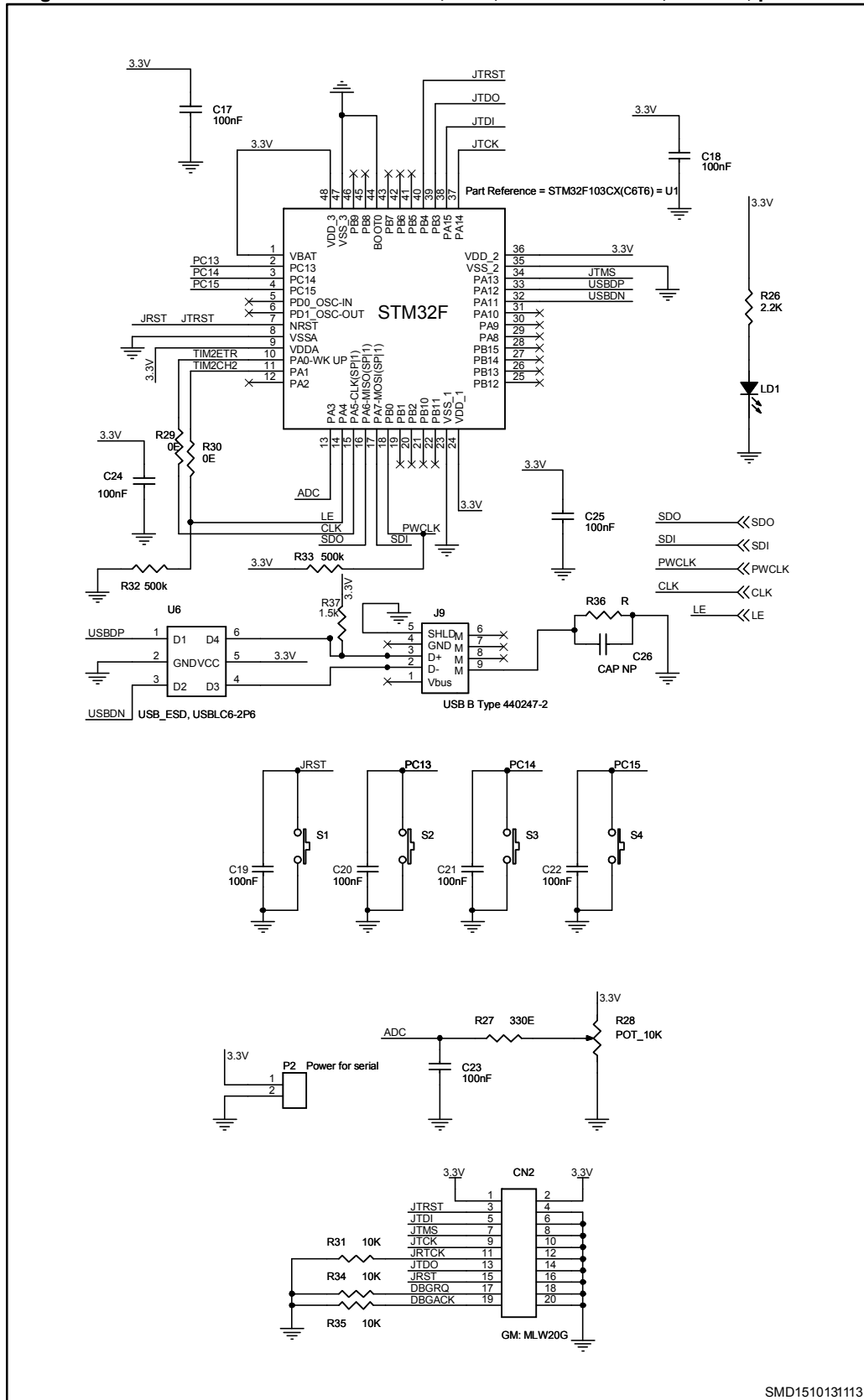


Figure 2: STEVAL-ILL061V1 LED drivers



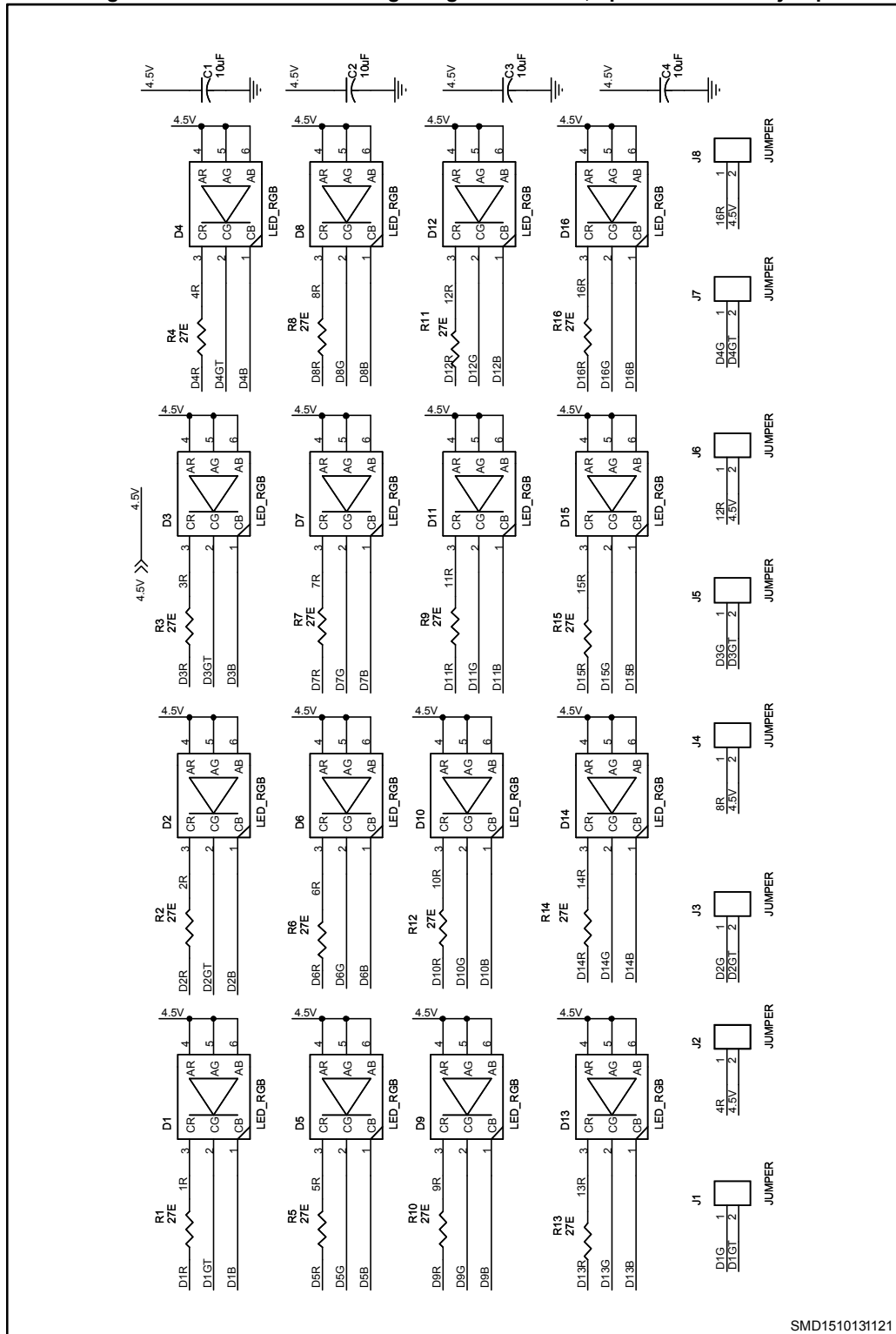
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Figure 3: STEVAL-ILL061V1 microcontroller, USB, JTAG connector, buttons, potentiometer



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Figure 4: STEVAL-ILL061V1 high brightness LEDs, open/short circuit jumpers



2 Revision history

Date	Revision	Changes
15-Oct-2013	1	Initial release.