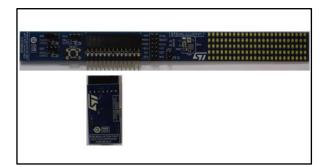


# STEVAL-LLL001V1

## STLED524 evaluation kit (5 x 24 matrix LED display driver)

Data brief



### **Features**

- Operating input voltage from 2.7 V to 5.5 V
- Drives 5 x 24 LED matrix
- Luminance separately adjustable for each
  LED by internal registers in 255 steps
- Internal registers capable of storing two patterns
- 4-way scroll function with a possibility to lock column data
- 255-step PWM dimming
- SPI interface
- Integrated step-up converter with adjustable output voltage
- Integrated LDO with 3.1 V output at 80 mA
- CSP 56 bumps 0.4 mm pitch 3.4 x 3.0 mm
- RoHS compliant

### Description

The STEVAL-LLL001V1 board is designed to demonstrate the features of the STLED524 intelligent matrix LED display driver with a 5 x 24 matrix of SMD white LEDs incorporated on the board.

Two boards can also be joined using the onboard connectors to drive a 10 x 24 LED matrix.

The board is driven by the USB control board for interface with the graphical user interface (GUI), but there is also an SPI interface connector on the STEVAL-LLL001V1 which can be used for customized control.

November 2016

DocID029803 Rev 2

For further information contact your local STMicroelectronics sales office

#### Schematic diagrams 1

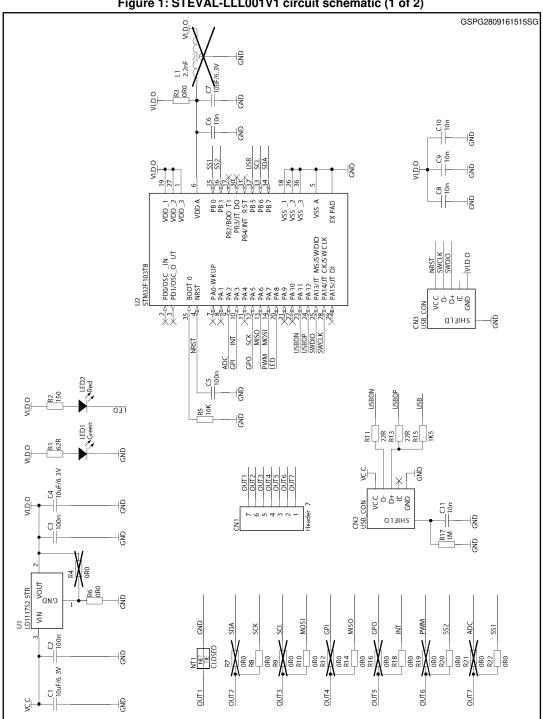
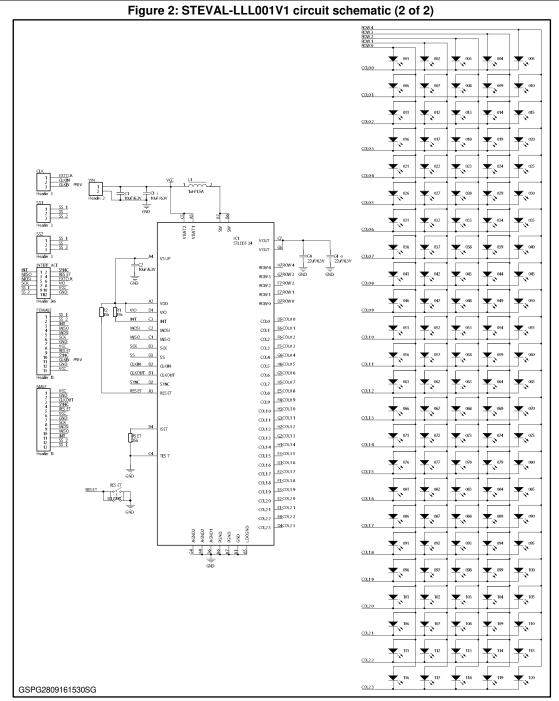


Figure 1: STEVAL-LLL001V1 circuit schematic (1 of 2)

DocID029803 Rev 2



57

## 2 Revision history

Table 1: Document revision history

| Date        | Version | Changes   |
|-------------|---------|---|
| 07-Oct-2016 | 1       | Initial release.  |
| 09-Nov-2016 | 2       | Updated: title, features and description on the cover page. |



57

#### STEVAL-LLL001V1

#### **IMPORTANT NOTICE – PLEASE READ CAREFULLY**

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2016 STMicroelectronics - All rights reserved

