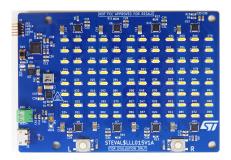


Data brief

96 LEDs Panel Evaluation Board based on LED1202



Features

- Eight devices with 12-channel each
- STM32L072 on-board microcontroller
- USB connector for communication with the STSW-LED1202GUI PC SW
- Programmable with basic scripts

Description

The STEVAL-LLL015V1 is a board with 96 individually driven LEDs controlled by eight LED1202 LED drivers. The drivers are connected to the same I2C bus and share a master clock for common sequence timing. Each LED can be programmed to perform an individual 8-step pattern sequence (single shot or repeated). The panel is configured using the STSW-LED1202GUI, and the user can program several light effects using a basic language interpreted by the firmware. The scripts are written in a dedicated area of the GUI and can be debugged before downloading them onto the board. Once downloaded, the board can execute the scripts without requiring the use of PC software.

The LED1202 is a 12-channel low quiescent current LED driver; it guarantees 5 V output driving capability and each channel is able to provide up to 20 mA with a headroom voltage of 350 mV (typ.) only. The output current can be adjusted separately for each channel by 8-bit analog and 12-bit digital dimming control.

Product summary				
96 LEDs Panel Evaluation Board based on LED1202	STEVAL-LLL015V1			
Firmware for STEVAL- LLL015V1 evaluation board for 8 LED1202 implementation	STSW-LLL015FW			
GUI for LED1202 LED driver evaluation boards	STSW-LED1202GUI			
12-Channel Low Quiescent Current LED Driver	LED1202QTR			
Applications	LED lighting system			



Figure 1. STEVAL-LLL015M1 schematic diagram (1 of 3)

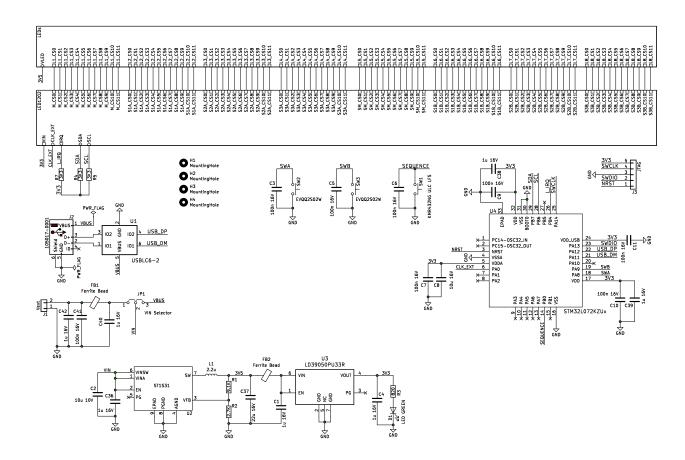
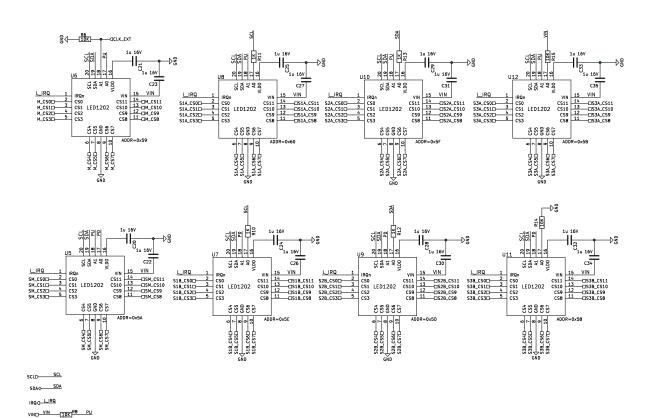


Figure 2. STEVAL-LLL015D1 schematic diagram (2 of 3)

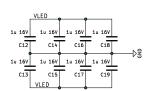




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Figure 3. STEVAL-LLL015D1 schematic diagram (3 of 3)

VLEDD 02 02 01.1_CS0 VLED 03 01.1_CS1 VLED 0400777 01.1_CS2	VLED 1988022777 □L1_CS4	VLED 1026 11_CS6 VLED 1027 17 11_CS7 VLED 1028 17 17 11_CS8	VLED 184001227777 □L1_CS10	VLED 186901277777	VLED 198301227,7171 □L2_CS4	VLED ************************************	VLED 1980012277777
VLED 18601277.777 □L3_CS1	VLED 19830327777 □L3_CS4	VLED 10,29 CL3, CS6 VLED 10,29 CL3, CS7 VLED 10,20 CL3, CS7 VLED 10,20 CL3, CS7 D30 CL3, CS8	VLED ************************************	VLED D54 CS1	VLED 198501227777 □L4_CS4	VLED 1977 01.4_CS6 VLED 1979 17.77 01.4_CS6 VLED 1979 17.77 01.4_CS8	VLED DOO DL4_CS10
VLED 09 01 01.5.CS0 VLED 09 01 01.5.CS1 VLED 09 01.5.CS1 VLED 01.5.CS2	VLED 198301227,71,71 □L5_CS4	VLED 198301227777 □L5_CS7	VLED 1994-1777 GL5_CS9 VLED 1994-1777 GL5_CS10 VLED 1994-1777 GL5_CS10 VLED 1994-1777 GL5_CS11	VLED 186012277777 □L6_CS1	VLED 198391277777 □L6_CS4	VLED 188027777 □L6_C\$6 VLED 188027777 □L6_C\$7 VLED 188027777 □L6_C\$8	VLED DOX DL6_CS10
VLED 186001277777 □L7_CS1	VLED 1983803277777 □L7_CS4	VLED 198501277777 □L7_CS7	VLED 18890127777	VLED D60 DL8_CS1	VLED 19890127777 □L8_CS4	VLED 1083/77/77	VLED 184001227777 □L8_CS10





2 Board versions

Table 1. STEVAL-LLL015V1 versions

PCB version	Schematic diagrams	Bill of materials		
STEVAL\$LLL015V1A (1)	STEVAL\$LLL015V1A schematic diagrams	STEVAL\$LLL015V1A bill of materials		

^{1.} This code identifies the STEVAL-LLL015V1 evaluation board first version. It is printed on the board PCB.

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Revision history

Table 2. Document revision history

Date	Revision	Changes
21-Oct-2024	1	Initial release.

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