Manuals+ — User Manuals Simplified.

STEVAL-LLL011V1 12 Channel LED driver Evaluation Board User Guide

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Contents

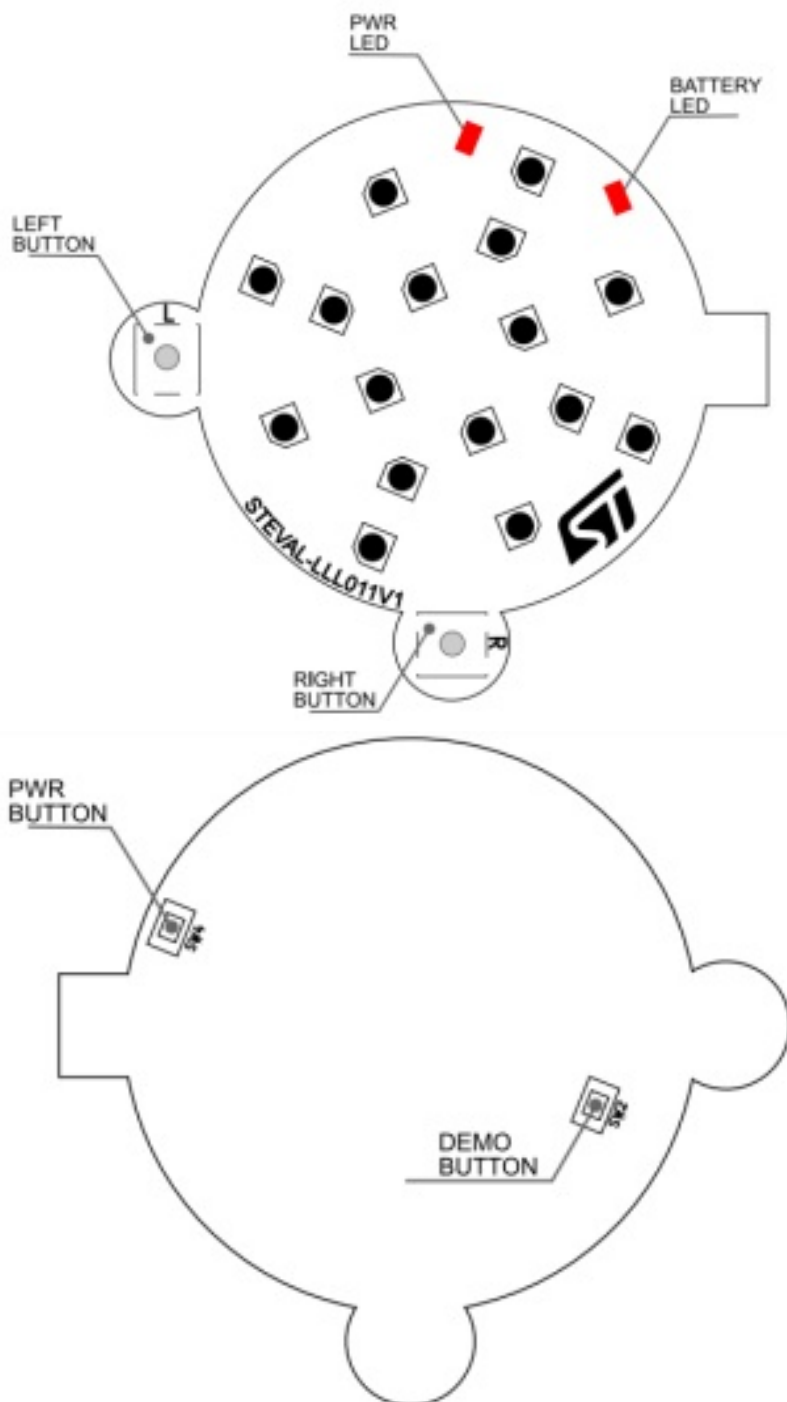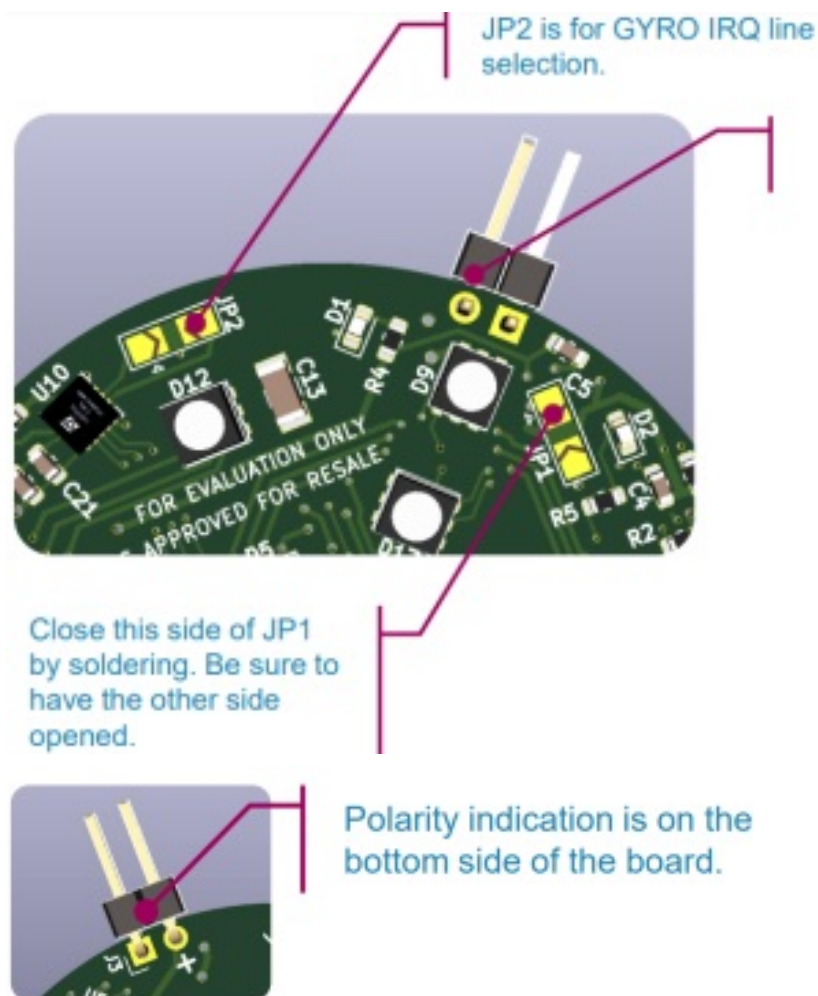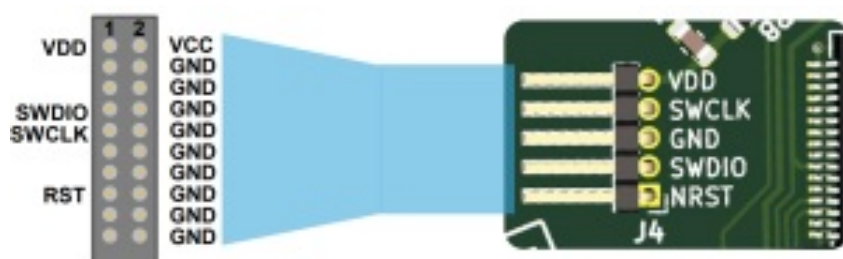## Hardware overview

STEVAL-LLL011V1 Hardware Description

- The STEVAL-LLL011V1 contains 4 LED1202 ICs and 16 RGB LEDs. It can work in standalone mode or together with the STSW-LED1202GUI PC SW by the onboard USB connector. Two user buttons allow to interact with the board by implementing user scripts. Additionally, an external LiION battery can be connected to the board (see the slide 4).
- The PWR button is used to switch on/off:
    - A short press to switch the board on
    - A long press to switch the board off
- User scripts can be developed and uploaded on the board, using the SW GUI. Then, the scripts are launched by pressing the DEMO button. Each time the DEMO button is pressed, the next script is executed.
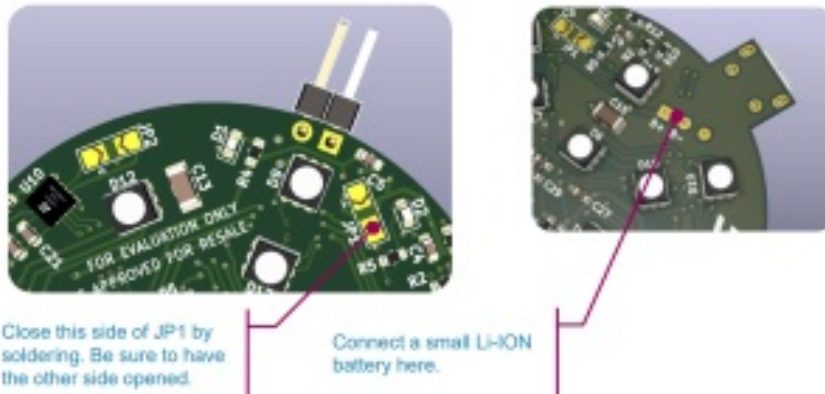
Configuration Setup

JP2 is for GYRO IRQ line selection.

Close this side of JP1 by soldering. Be sure to have the other side opened.

Polarity indication is on the bottom side of the board.

ST-LINK Connection for FW Programming

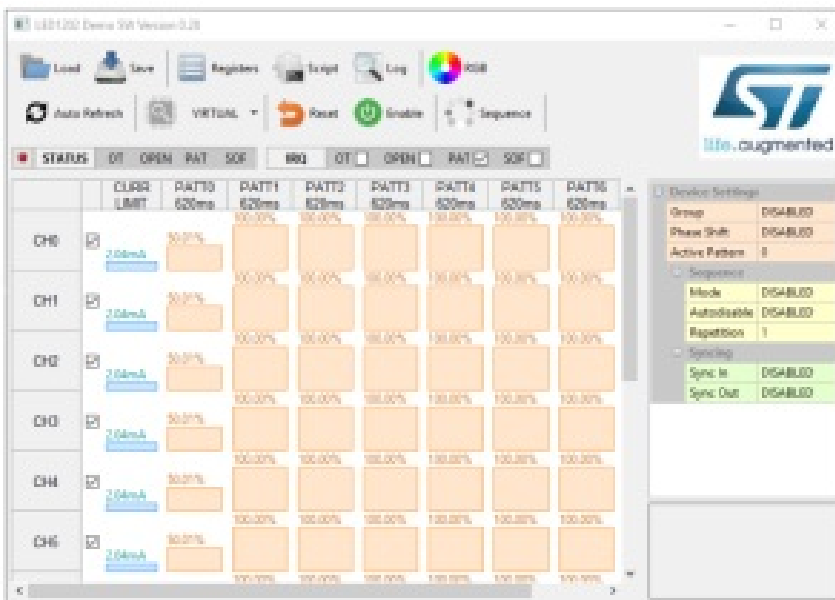| JTAG CONNECTOR	
NAME	NUMBER
VCC	1,2
SWDIO	7
SWCLK	9
RST	15
GND	2..20 Even Pins

Battery Option

- The STEVAL can be supplied by using an external Li-ION battery. Charge current is configured in order to

charge a 320mAh battery in about 80 minutes: D2 LED lights when charging.

Close this side of JP1 by soldering. Be sure to have the other side opened.

Connect a small Li-ION battery here.

STSW-LED1202GUI

- The STEVAL-LLL011V1 comes with a SW PC that gives the user a total access to the 4 LED drivers functionalities. For details about the use of the SW GUI, please refers to the SW user manual (UM2747).

STEVAL – GUI communication

The GUI title will show the SW version, together with the connection status of the STEVAL board.
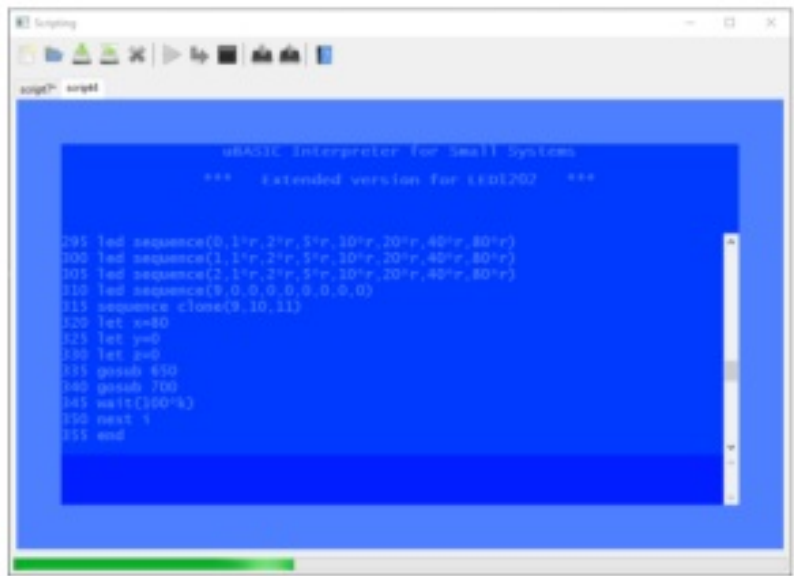
Once the STEVAL is supplied:

- Connect the USB cable.
- Press the Power Button (SW4) : the PWR LED lights up (D1).
- If the USB cable has been connected for the first time, please wait that OS registers and enumerates the new HW, as Virtual COM port.
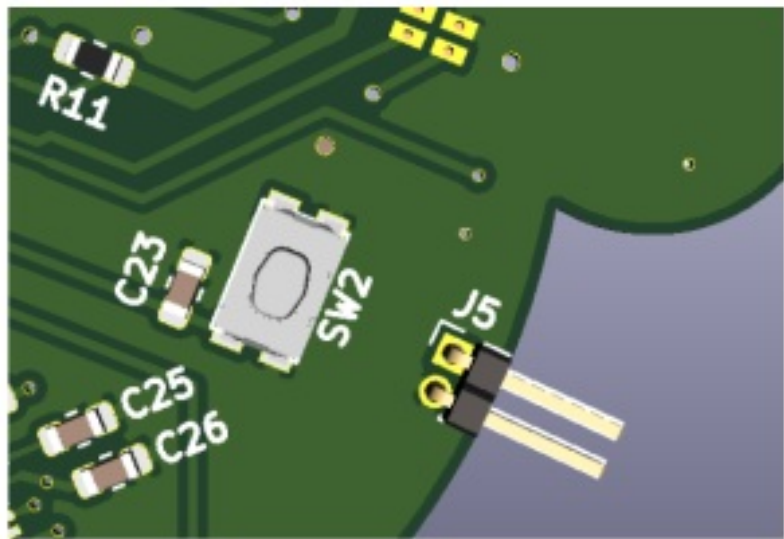- Launch the SW GUI.

STEVAL-LLL011V1 user scripts

The STEVAL-LLL011V1 can be programmed in order to launch small user scripts. These scripts are developed inside the SW GUI and then uploaded on the STEVAL.

Instructions on how to develop and upload the scripts are reported on the SW user manual (UM2747)

Once uploaded, the scripts are launched by pressing the SW2 button.

Revision History

Rev	Date	Description
1.0	12/07/2019	First Release
1.1	22/10/2019	First Review
1.2	02/12/2021	Added details on board startup

Documents / Resources

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STEVAL-LLL011V1, 12 Channel LED driver Evaluation Board