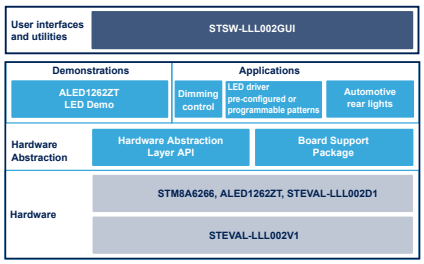
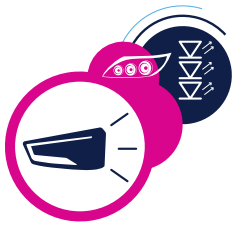
STSW-LLL002FW

Data brief

Firmware for the STEVAL-LLL002V1 evaluation kit





Features

- Various pre-configured LED patterns based on ALED1262ZT
- Brightness and speed control
- ALED1262ZT LED demo
- STSW-LLL002GUI graphical user interface with three operating modes:
  - Basic mode, replicating on-board control buttons, to write/read control registers, and with open circuit error detection at different frequencies
  - Advanced mode for individual channel brightness control
  - Frame programming mode with programmable and pre-configured LED patterns
- USB-UART bridge (STEVAL-LLL002D1) for PC-MCU communication
- Source code freely available with developer-friendly license terms

Description

The STSW-LLL002FW firmware implementation is based on the 8-bit automotive grade STM8AF6266 microcontroller, allowing configuration and control of the ALED1262ZT LED driver over I²C interface.

The firmware has been designed for the STEVAL-LLL002V1 evaluation kit to demonstrate ALED1262ZT features and is used for application development in automotive rear lights with pattern animations.

The embedded GUI (STSW-LLL002GUI) allows you to control buttons, write/read configuration registers and individual channel brightness, as well as to program up to 20 LED patterns with variable transition speed or use four preconfigured patterns.

Product summary	
Firmware for the STEVAL-LLL002V1 evaluation kit	STSW-LLL002FW
Evaluation kit for automotive rear lights with pattern animations based on ALED1262ZT and STM8AF6266	STEVAL-LLL002V1
Automotive-grade 12-channel LED driver	ALED1262ZT
FW download method	ST-LINK (SWIM Connector)
Other utilities and applications	STSW-LLL002GUI

1 How to download the firmware

The 8-bit automotive MCU mounted on the STEVAL-LLL002M1 board can be programmed using the tool "ST Visual Programmer STM8 (STVP-STM8)", which is available on www.st.com.

On connecting the ST-LINK/V2 debugger to the STEVAL-LLL002M1 over SWIM interface, the STSW-LLL002FW.hex file can be loaded.

Revision history

Table 1. **Document revision history**

Date	Version	Changes
03-Jun-2019	1	Initial release.