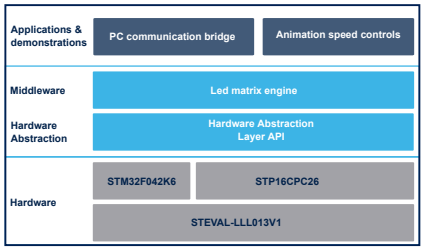
STSW-LLL013FW

Data brief

Firmware for STEVAL-LLL013V1 evaluation board for LED matrix applications



Features

- LED matrix engine for banner effects
  - <10 ms refresh rate
  - 32 brightness levels for each pixel
  - Horizontal scroll effects
- STSW-LLL013GUI communication for
  - Text based banner design with stickers
  - Mask design or selection
  - Banner effects selection

Product summary	
Firmware for STEVAL-LLL013V1 evaluation board for LED matrix applications	STSW-LLL013FW
GUI for STEVAL-LLL013V1	STSW-LLL013GUI
7x25 LED Matrix panel based on STP16	STEVAL-LLL013V1
Low voltage 16-bit constant current LED sink driver	STP16CPC26XTR
Mainstream Arm Cortex-M0 USB line MCU with 32 Kbytes of Flash memory, 48 MHz CPU, USB, CAN and CEC functions	STM32F042K6T6TR
Applications	Home and Professional Appliances

Description

The STSW-LLL013FW firmware implementation is based on the 32-bit STM32F042K6 microcontroller, allowing configuration and control of the two STP16CPC26 LED drivers over a SPI interface.

The firmware has been designed for the STEVAL-LLL013V1 evaluation kit to demonstrate the STP16CPC26 features as controller for several LED matrices applications.

The firmware communicates with the STSW-LLL013GUI for the generation of text based banners, enriched with mask and scroll effects.

Revision history

Table 1. **Document revision history**

Date	Revision	Changes
06-Feb-2023	1	Initial release.

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