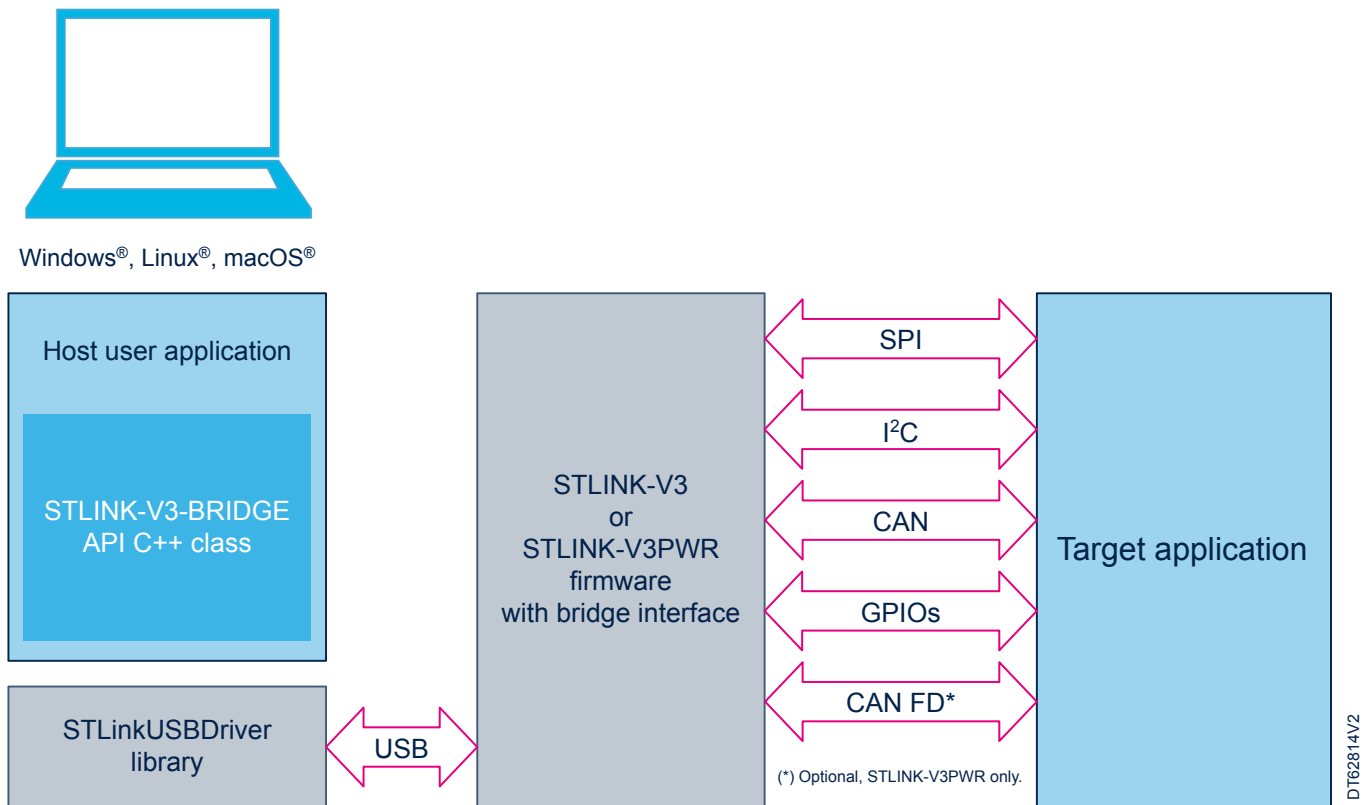


Software API compatible with the bridge interface of STLINK-V3 and STLINK-V3PWR



Product status link

[STLINK-V3-BRIDGE](#)

Features

- C++ source code implementing the bridge interface of STLINK-V3 and STLINK-V3PWR on a personal computer
- Routines for configuring the SPI, I²C, CAN or CAN FD or both, and GPIO connections of STLINK-V3 and STLINK-V3PWR
- Routines for transferring data through the SPI, I²C, CAN or CAN FD or both, and GPIO between STLINK-V3 or STLINK-V3PWR and a running target
- The CAN FD interface is only available on STLINK-V3PWR hardware
- User-friendly *ULTIMATE LIBERTY* license agreement

Description

The bridge API (STLINK-V3-BRIDGE) is a set of source files that allow the development of personal computer applications exercising the STLINK-V3 and STLINK-V3PWR bridge interface of a target board. Refer to the board user manual to check whether it features the STLINK-V3 bridge interface.

The bridge API initializes the microcontroller of the STLINK-V3 subsystem and controls the communication through its interfaces: I²C, SPI, CAN, and optionally CAN FD. It also allows the configuration of up to four additional signals (GPIOs). Besides, the communication through STLINK-V3 UARTs is controlled by means of the Virtual COM port dedicated USB interfaces.

The development of the embedded application in the target board is facilitated by the use of the STM32Cube MCU Packages. The user must ensure that the parameters, used by the target application to configure the I²C, SPI, CAN, and optionally CAN FD communication interfaces on the target side, match the STLINK-V3 or STLINK-V3PWR configuration done through the bridge API.

On the host PC, the bridge API source files rely on the `STLinkUSBDriver.dll` on Windows[®], `STLinkUSBDriver.so` on Linux[®], and `STLinkUSBDriver.dylib` on macOS[®]. Those libraries are usually provided with the tools supporting ST-LINK. They are also provided in the [STSW-LINK007](#) ST-LINK firmware upgrade package available at www.st.com.

1 General information

The **STLINK-V3-BRIDGE** is built for use with the **STLINK-V3** and **STLINK-V3PWR** bridge interface firmware, which runs on an STM32 microcontroller based on the Arm® Cortex®-M processor.

Note: Arm is a registered trademark of Arm Limited (or its subsidiaries) in the US and/or elsewhere.



1.1 Ordering information

STLINK-V3-BRIDGE is available for free download from the www.st.com website.

1.2 Licensing

STLINK-V3-BRIDGE is delivered under the *ULTIMATE LIBERTY* software license agreement (SLA0044).

Revision history

Table 1. Document revision history

Date	Revision	Changes
10-May-2019	1	Initial release.
10-Jan-2025	2	Added the compatibility with STLINK-V3PWR and optional CAN FD: <ul style="list-style-type: none">• Updated the title and cover image• Updated Features and Description• Updated General information and removed <i>Contents</i>

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