
STLINK-V3 bridge API release v1.0.0

Introduction

This release note is updated periodically to keep abreast of the STLINK-V3 bridge API ([STLINK-V3-BRIDGE](#)) evolution, problems and limitations. Check the product webpage in STMicroelectronics website at www.st.com for the latest version. For the latest release summary, refer to [Table 1](#).

Table 1. STLINK-V3 bridge API v1.0.0 release summary

Type	Summary
Major release	<p>Initial release:</p> <ul style="list-style-type: none">• C++ source code implementing the bridge interface of STLINK-V3 on a personal computer• Routines for configuring the SPI, I²C, CAN, and GPIO connections of STLINK-V3• Routines for transferring data through the SPI, I²C, and CAN interfaces between STLINK-V3 and a running target

Customer support

For more information or help concerning STLINK-V3 bridge API, contact the nearest STMicroelectronics sales office. For a complete list of STMicroelectronics offices and distributors, refer to the www.st.com webpage.

Software updates

For software updates and latest documentation, refer to the [STLINK-V3-BRIDGE](#) product webpage.

1 General information

1.1 Overview

The bridge API ([STLINK-V3-BRIDGE](#)) is a set of source files allowing the development of personal computer applications exercising the STLINK-V3 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 I²C, SPI, and CAN interfaces. 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 [STLINK-V3-BRIDGE](#) is built for use with the STLINK-V3 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.*



1.2 Host PC system requirements

Supported operating systems and architectures

- Windows[®] 7, 8, and 10: 32 bits (x86) and 64 bits (x64)
- Linux[®] (tested on Ubuntu[®], 32 and 64 bits)
- macOS[®] (minimum version OS X[®] Yosemite)

Note: *Ubuntu[®] is a registered trademark of Canonical Ltd.*
macOS[®] is a trademark of Apple Inc. registered in the U.S. and other countries.

Software requirements

STLINK-V3 bridge API relies on the following libraries:

- Windows[®]: `STLinkUSBDriver.dll`
- Linux[®]: `STLinkUSBDriver.so`
- macOS[®]: `STLinkUSBDriver.dylib`

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.

1.3 Setup procedure

1. Unzip the software package.
2. Import the source files provided in the `src` subdirectory into the C++ project.
3. Study the files provided in `example/bridge` as guidelines for integration into an application.
4. On Linux[®] and macOS[®], link the application respectively with `STLinkUSBDriver.so` and `STLinkUSBDriver.dylib`. Note that `libusb` is required at runtime and must be installed separately.
5. On Windows[®], make sure to locate `STLinkUSBDriver.dll` so that `STLinkInterface::LoadStlinkLibrary()` finds it at runtime. The proper location depends on the application calling context.

1.4 Licensing

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

2 STLINK-V3 bridge API v1.0.0 release information

2.1 New features

- C++ source code implementing the bridge interface of STLINK-V3 on a personal computer
- Routines for configuring the SPI, I²C, CAN, and GPIO connections of STLINK-V3
- Routines for transferring data through the SPI, I²C, and CAN interfaces between STLINK-V3 and a running target

2.2 Known problems and limitations

Refer to the `STLink_Bridge_API.chm` file in the delivery package.

Revision history

Table 2. Document revision history

Date	Version	Changes
10-May-2019	1	Initial release.

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