

## STLINK-V3SET debugger/programmer for STM8 and STM32

Data brief

### Features

- Stand-alone probe with modular extensions
- Self-powered through a USB connector (Micro-B)
- USB 2.0 high-speed compatible interface
- Direct firmware update support (DFU)
- JTAG / serial wire debugging (SWD) specific features:
  - 3 V to 3.6 V application voltage support and 5 V tolerant inputs
  - Flat cables STDC14 to MIPI10 / STDC14 / MIPI20 (connectors with 1.27 mm pitch)
  - JTAG communication support
  - SWD and serial wire viewer (SWV) communication support
- SWIM specific features (only available with adapter board MB1440):
  - 1.65 V to 5.5 V application voltage support
  - SWIM header (2.54 mm pitch)
  - SWIM low-speed and high-speed modes support
- Virtual COM port (VCP) specific features:
  - 3 V to 3.6 V application voltage support on the UART interface and 5 V tolerant inputs
  - VCP frequency up to 15 MHz
  - Available on STDC14 debug connector (not available on MIPI10)
- Multi-path bridge USB to SPI/UART/I<sup>2</sup>C/CAN/GPIOs specific features:
  - 3 V to 3.6 V application voltage support and 5 V tolerant inputs
  - Signals available on adapter board only (MB1440)
- Drag-and-drop Flash programming
- Two color LEDs: communication, power



Picture is not contractual.

### Description

The STLINK-V3SET is a modular stand-alone debugging and programming probe for the STM8 and STM32 microcontrollers. It is composed of a main module and a complementary adapter board.

The SWIM and JTAG/SWD interfaces are used to communicate with any STM8 or STM32 microcontroller located on an application board.

The STLINK-V3SET also provides a Virtual COM port interface allowing the host PC to communicate with the target microcontroller through one UART, and bridge interfaces (SPI, I<sup>2</sup>C, CAN, GPIOs) allowing for instance the programming of the target through bootloader.

The modular architecture of STLINK-V3SET enables to extend its main features through additional modules such as the adapter board.

## General information

The STLINK-V3SET embeds an STM32 32-bit microcontroller based on the Arm<sup>®(a)</sup> Cortex<sup>®</sup>-M processor.



## System requirements

- Windows<sup>®</sup> OS (7, 8 and 10), Linux<sup>®</sup> 64-bit, or macOS<sup>®(b)</sup>
- USB Type-A to Micro-B cable

## Development toolchains

- Keil<sup>®</sup> MDK-ARM<sup>(c)</sup>
- IAR<sup>™</sup> EWARM<sup>(c)</sup>
- GCC-based IDEs

## Ordering information

To order the STLINK-V3SET, refer to [Table 1](#).

**Table 1. Ordering information**

Order code	Description
STLINK-V3SET	STLINK-V3 modular in-circuit debugger and programmer for STM8 and STM32.

- 
- a. Arm is a registered trademark of Arm Limited (or its subsidiaries) in the US and or elsewhere.
  - b. macOS<sup>®</sup> is a trademark of Apple Inc. registered in the U.S. and other countries.
  - c. On Windows<sup>®</sup> only.

## Revision history

**Table 2. Document revision history**

Date	Revision	Changes
6-Sep-2018	1	Initial release.

**IMPORTANT NOTICE – PLEASE READ CAREFULLY**

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2018 STMicroelectronics – All rights reserved