

STLINK-V3 PROBES

For STM32 MCUs and MPUs



STM32 hardware tools for faster, more flexible debugging and programming

The STLINK-V3SET and STLINK-V3PWR are high-performance, debugging and programming probes for STM32 MCUs and MPUs. The JTAG/SWD interfaces let developers easily communicate with any STM32 target on an application board. Both STLINK-V3 probes also provide a Virtual COM port interface allowing the host PC to communicate with the target through a UART. They also feature several bridge interfaces for programming the target through the bootloader. The B-STLINK-VOLT extension card is used for voltage adaptation.

The B-STLINK-ISOL is designed for galvanic isolation and voltage adaptation.

The STLINK-V3PWR energy profiler allows you to seamlessly optimize the dynamic current consumption in any STM32 application.



STLINK-V3SET



STM32HSM



B-STLINK-VOLT

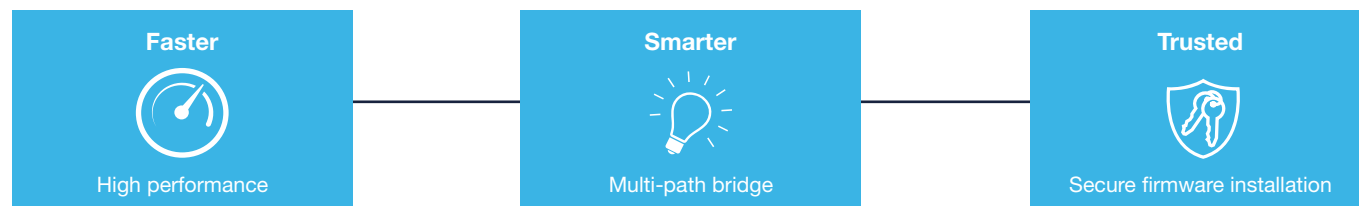


B-STLINK-ISOL

KEY FEATURES

- STLINK-V3SET probes with modular extension cards
- STLINK-V3PWR energy profiler with wide dynamic range nA-500mA
- Self-powered through a USB connector and USB high-speed-compatible interface
- JTAG/SWD debug interfaces
- Virtual COM port
- Drag-and-drop flash programming
- Multi-path USB bridge to SPI/UART/I2C/CAN/GPIOs
- Secure firmware installation using the STM32HSM

Standalone probes



Two form factors with standalone simplicity

The STLINK-V3SET directly supports JTAG/SWD debug interfaces and a Virtual COM port with an STDC14 connector coupled with MIP110, MIP120, and STDC14 flat cables.

The complimentary adapter board adds a multi-path bridge with a variety of communication protocols (SPI, UART, I2C, CAN, and GPIOs) which helps you easily reprogram devices anywhere.

The STLINK-V3PWR adds voltage adaptation and energy profiling to enable developers to optimize the dynamic current consumption in any STM32 MCU application.

The STLINK-V3MINIE probe is a subset of the V3SET, which provides JTAG/SWD debug interfaces, a Virtual COM Port and voltage adaptation. It comes in a compact form factor and is available for \$11.

The STLINK-V3MODS module enables developers to debug and add a multi-path bridge to a custom board.

| Reference | Target voltage | Casing | Bridge | Virtual COM Port | Drag-and-drop | Energy profiler |
|----------------|----------------|----------|--------|------------------|---------------|-----------------|
| STLINK-V3SET | 3.3V | • | • | • | • | |
| STLINK-V3PWR | 1.6-3.6V | • | • | • | | • |
| STLINK-V3MINIE | 1.65-3.3V | STL file | | • | • | |
| STLINK-V3MODS | 3.3V | | • | • | • | |



Order code: STLINK-V3PWR
www.st.com/stlink-v3pwr



Order code: STLINK-V3MINIE
www.st.com/stlink-v3minie



Order code: STLINK-V3SET
www.st.com/stlink-v3set



Order code: STLINK-V3MODS
www.st.com/stlink-v3mods

Software tools

STM32CubeProgrammer (www.st.com/stm32cubeprog) is an all-in-one multi-OS software tool for programming STM32 MCUs and MPUs. It is available in GUI (graphical user interface) and CLI (command-line interface) versions.

- easy-to-use and efficient environment for reading, writing and verifying device memory through both the debug interface (JTAG/SWD) and the bootloader interface (SPI/UART/I2C/USB).
- wide range of features to program the internal (Flash, RAM, OTP) and external memories of STM32 MCUs.
- enables option programming and uploading, program verification, and STM32 device programming automation through scripting
- includes the STM32 Trusted Package Creator tool to perform secure firmware installation using the STM32HSM.



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