

# 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



B-STLINK-VOLT



STM32HSM



B-STLINK-IS

### **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-speedcompatible 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 MIPI10, MIPI20, 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



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 MCUsn 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.

