

How to view the ST3 0 interface

Article Overview

You can view and interact with the ST3.0 interface using the STLINK-V3MINIE probe via its JTAG/SWD or Virtual COM port interfaces on a host PC.

Connecting the STLINK-V3MINIE

- o **Hardware Setup:** Connect the STLINK-V3MINIE to your STM32 target board using the JTAG/SWD interface or the STDC14 flat cable for board-to-board connections. Ensure the probe is powered via USB from your host PC, as it does not supply power to the target application .
- o **Virtual COM Port:** The STLINK-V3MINIE provides a Virtual COM port over UART, allowing the host PC to communicate with the microcontroller for debugging or serial monitoring .

Software Tools

- o **ST-Link Utility / STM32CubeProgrammer:** Install STM32CubeProgrammer or the ST-Link utility on your PC. These tools allow you to:
 - o Detect the connected STM32 device
 - o View memory and registers
 - o Program firmware
 - o Debug using the SWD/JTAG interface
- o **Firmware Updates:** Ensure the STLINK-V3MINIE firmware is up to date by downloading the latest version from the STMicroelectronics website. Updated firmware enables new features and fixes communication issues .
- o **APIs for Advanced Access:** For programmatic access, you can use:
 - o ST's C++ API for direct communication with the ST-Link bridge interface
 - o Unofficial Python API for scripting and automation of debugging tasks

Indicators and Status

- o **LED Indicators:** The STLINK-V3MINIE has LEDs to indicate status:
 - o Blinking red: USB enumeration with the PC
 - o Red: Communication established
 - o Blinking green/red: Data exchange between target and PC

Viewing the Interface

Once connected and the software is running:

- o Open STM32CubeProgrammer or ST-Link Utility



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- o Select the STLINK-V3MINIE as the debug probe
 - o Access the memory viewer, peripheral registers, and debug console
 - o Use the Virtual COM port to monitor UART output from the target microcontroller
- By following these steps, you can fully view and interact with the ST3.0 interface for programming, debugging, and monitoring STM32 microcontrollers .

Description ST Visual Programmer (STVP) is a full-featured software interface for programming ST Flash microcontrollers. It provides

Learn Linux command to list and show/display network interfaces cards (NIC) using commands such as nmcli, ip,

In this tutorial, we'll discuss how to debug your projects using the ST-Link debugger SWD and the Serial Wire Viewer

STLINK-V3SET also provides a Virtual COM port interface allowing the host PC to communicate with the target microcontroller

Integrated R help and documentation. View Python data, publish and render in Python and share objects with R.

Intention ARM provides the possibility to use a printf() like a serial output, using the SWD interface (ITM port 0). This

Learn how to use the STM32 ST-LINK utility for programming STM32 microcontrollers. This manual covers features, interface, and CLI.

STM32CubeIDE also includes standard and advanced debugging features including views of CPU core registers, memories, and

A software application that lets you access any release of the Site Management Portal (SMP) or System

The STLINK-V3SET provides a proprietary USB interface allowing communication with any STM8 or STM32 target with several

View and Download ST STLINK-V3SET user manual online. Debugger/programmer for STM8 and STM32.

STLINK-V3MINIE is a stand-alone debugging and programming tiny probe for STM32 microcontrollers. The JTAG/SWD interfaces

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When working with the STM32 ST-LINK utility, it is recommended to download the ST-LINK in-circuit debugger/programmer user

Guide: Connecting your debugger This small guide will explain how to connect your debugger to your development board. There are

The JTAG/SWD interfaces are used to communicate with any STM32 microcontroller located on an application board. The STLINK

Wondering which microcontrollers STM32 ST-Link V2 can debug? This guide covers supported STM32 families,

Web: <https://www.kremgroup.co.za>

