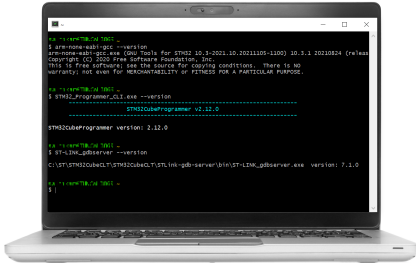


Command-line toolset for STM32 MCUs



Product status link

[STM32CubeCLT](#)



Features

- Distribution of command-line tools and system view descriptors (SVD) extracted from **STM32CubeIDE**
- STM32Cube MCU Packages support for STM32 microcontrollers (MCU) at the following development steps:
 - Compile and link
 - Target board programming
 - Application run
 - Application debugging
- The **STM32CubeCLT** toolset includes:
 - GNU C/C++ for Arm® toolchain executables such as `arm-none-abi-gcc` (compiler), `arm-none-abi-nm` (symbol viewer), and many more
 - GDB debugger client and server
 - STM32CubeProgrammer (**STM32CubeProg**) utility
 - System view descriptor files (.SVD) for the entire STM32 MCU portfolio
 - Map file associating STM32 MCUs and MCU development boards to the appropriate SVD
- Multi-OS support: Windows®, Linux®, and macOS®, 64-bit versions only

Description

STM32CubeCLT is an all-in-one multi-OS command-line toolset, which is part of the STM32Cube ecosystem.

STM32CubeCLT is a toolset for third-party integrated development environment (IDE) providers, allowing the use of STMicroelectronics proprietary tools within their own IDE frameworks.

STM32CubeCLT includes GNU C/C++ for Arm® toolchain executables, GDB debugger, and STM32CubeProgrammer (**STM32CubeProg**) utility. It provides system view descriptors for the entire STM32 MCU portfolio and associate each STM32 MCU and development board with the appropriate SVD.

1 General information

STM32CubeCLT supports STM32 products 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.



1.1 Ordering information

STM32CubeCLT is available for free download from the www.st.com website.

1.2 What is STM32Cube?

STM32Cube is an STMicroelectronics original initiative to improve designer productivity significantly by reducing development effort, time, and cost. STM32Cube covers the whole STM32 portfolio.

STM32Cube includes:

- A set of user-friendly software development tools to cover project development from conception to realization, among which are:
 - [STM32CubeMX](#), a graphical software configuration tool that allows the automatic generation of C initialization code using graphical wizards
 - [STM32CubeIDE](#), an all-in-one development tool with peripheral configuration, code generation, code compilation, and debug features
 - [STM32CubeCLT](#), an all-in-one command-line development toolset with code compilation, board programming, and debug features
 - STM32CubeProgrammer ([STM32CubeProg](#)), a programming tool available in graphical and command-line versions
 - STM32CubeMonitor ([STM32CubeMonitor](#), [STM32CubeMonPwr](#), [STM32CubeMonRF](#), [STM32CubeMonUCPD](#)), powerful monitoring tools to fine-tune the behavior and performance of STM32 applications in real time
- [STM32Cube MCU and MPU Packages](#), comprehensive embedded-software platforms specific to each microcontroller and microprocessor series (such as STM32CubeU5 for the STM32U5 Series), which include:
 - STM32Cube hardware abstraction layer (HAL), ensuring maximized portability across the STM32 portfolio
 - STM32Cube low-layer APIs, ensuring the best performance and footprints with a high degree of user control over hardware
 - A consistent set of middleware components such as ThreadX, FileX / LevelX, NetX Duo, USBX, USB-PD, touch library, network library, mbed-crypto, TFM, and OpenBL
 - All embedded software utilities with full sets of peripheral and applicative examples
- [STM32Cube Expansion Packages](#), which contain embedded software components that complement the functionalities of the STM32Cube MCU and MPU Packages with:
 - Middleware extensions and applicative layers
 - Examples running on some specific STMicroelectronics development boards

1.3 License

STM32CubeCLT is delivered under the *Mix Ultimate Liberty+OSS+3rd-party V1* software license agreement (SLA0048).

For more details about the license agreement of each component, refer to the release note ([RN0132](#)).

Revision history

Table 1. Document revision history

Date	Revision	Changes
7-Dec-2022	1	Initial release.

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