

STM32CubeIDE release v1.0.1

Introduction

This release note is updated periodically to keep abreast of STM32CubeIDE evolution, problems and limitations. Check the STMicroelectronics support website at www.st.com/stm32softwaretools for the latest version. For the latest release summary, refer to Table 1.

Table 1. STM32CubeIDE v1.0.1 release summary

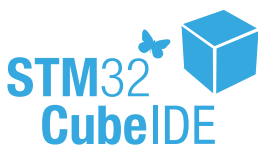
Type	Summary
Minor release	<ul style="list-style-type: none">• STM32CubeMX v5.2.1 integration including latest MCUFinder evolution• Bug correction

Customer support

For more information or help concerning STM32CubeIDE, contact the nearest STMicroelectronics sales office. For a complete list of STMicroelectronics offices and distributors, refer to the www.st.com webpage.

Software updates

Software updates and all the latest documentation can be downloaded from the STMicroelectronics support webpage at www.st.com/stm32softwaretools.



1 General information

1.1 Overview

STM32CubeIDE is an integrated development environment (IDE) based on the ECLIPSE™ framework. It is aimed at users developing embedded software in C/C++ for the STMicroelectronics STM32 products. It uses an enhanced GNU tool chain for STM32, based on *GNU Arm Embedded*. It has an integrated version of **STM32CubeMX** and MCUFinder, which allows easy project configuration as well as the generation of the corresponding initialization C code through a step-by-step process. Furthermore, **STM32CubeIDE** integrates the command-line version of STM32CubeProgrammer (**STM32CubeProg**) for Flash memory handling while using the ST-LINK GDB server. This allows the STM32 device programming through debug interfaces (JTAG and SWD).

STM32CubeIDE is based on the following technology, with STMicroelectronics-specific enhancements:

- ECLIPSE™ 2019-03 and CDT version 9.7.0
- GNU Tools for STM32, based on *GNU Tools for Arm Embedded Processors 7-2018-q2-update 7.3.1 20180622 (release) [ARM/embedded-7-branch revision 261907]*
- GNU gdb (GNU Tools for STM32 7-2018-q2-update.20190328-1800) 8.1.0.20180315-git
- GNU Tools for Arm Embedded Processors 7-2018-q2-update 7.3.1 20180622 (release) [ARM/embedded-7-branch revision 261907]
- GNU gdb (GNU Tools for Arm Embedded Processors 7-2018-q2-update) 8.1.0.20180315-git
- AdoptOpenJDK Runtime Environment (build 1.8.0_202, 64-bit)
- ST-LINK_gdbserver 5.2.2, supporting ST-LINK/V2 and STLINK-V3
- OpenOCD 0.10.0+dev00021-g524e8c8

Windows® specific build tools:

- BusyBox v1.31.0.st_20191513-1013_longpath_windows: `mkdir.exe`, `rm.exe`, `echo.exe`
- Make 4.2.1_st_20190204-1507: `make.exe`

Linux® specific build tools:

- Make 4.2.1_st_20190204-1510: `make.exe`

macOS® specific build tools:

- Make 4.2.1_st_20190204-1510: `make.exe`

STM32CubeIDE supports STM32 32-bit products based on the Arm® Cortex® processor.

Note:

- *ECLIPSE is a registered trademark of the Eclipse foundation.*
- *macOS® is a trademark of Apple Inc. registered in the U.S. and other countries.*
- *Arm is a registered trademark of Arm Limited (or its subsidiaries) in the US and/or elsewhere.*

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1.2 Host PC system requirements

Supported operating systems and architectures

- Windows® 7, 8, and 10: 64 bits (x64)
- Linux® (tested on Ubuntu® LTS 14.04, LTS 16.04, LTS 18.04, and Fedora® 29, 64 bits)
- macOS® 10.12 (Sierra), 10.14 (Mojave)

Note:

- *Ubuntu® is a registered trademark of Canonical Ltd.*
- *Fedora® is a trademark of Red Hat, Inc.*

1.3 Setup procedure

Refer to the *STM32CubeIDE installation guide* (UM2563) and *STM32CubeIDE quick start guide* (UM2553) available at www.st.com.

1.4 Licensing

STM32CubeIDE is delivered under the *Mix Ultimate Liberty+OSS+3rd-party V1* software license agreement (SLA0048).

The open-source and third-party software components used in the development of STM32CubeIDE and their licenses are listed in a zip file available from the product page in STMicroelectronics www.st.com web site.

Table 2 provides the description of the licenses of additional components in STM32CubeIDE.

Table 2. Complementary component licenses

Name	Version	License detail
STLink-USB-Driver	-	<i>Image</i> V2 software license agreement (SLA0047)
STLink-USB-Driver-lib	-	<i>Ultimate Liberty</i> software license agreement (SLA0044)
ST-LINK Server	v1.2.0-2	www.gnu.org/licenses/old-licenses/gpl-2.0.en.html
jacl	1.4.1	fossies.org/linux/jacl/docs/license.html
Tcl/Java	1.4.1	tcljava.sourceforge.net/docs/website/index.html
MigLayout	v3.7	www.miglayout.com
Velocity	v2.0	velocity.apache.org/engine/2.0/license.html
slf4j	v1.7.26	www.slf4j.org/license.html
commons-io	2.5	www.apache.org/licenses
commons-lang	3.6	www.apache.org/licenses

1.5 Cross-selector data disclaimer

The information presented in the cross-reference tool is intended to help the users narrow their search of STMicroelectronics products based on similarity to other available products. The information is based on data published by other semiconductor manufacturers and might contain errors. STMicroelectronics provides the information “as is” and does not make any representations or warranties as to its accuracy or suitability for any particular purpose. STMicroelectronics recommends that the users make their purchase decision based on their review of STMicroelectronics datasheets and other product documentation. Any pricing information is an estimate for budgetary purposes only.

2 STM32CubeIDE v1.0.1 release information

2.1 New feature

STM32CubeMX v5.2.1 integration including latest MCUFinder evolution.

2.2 Fixed issues

Table 3. Main issues fixed in STM32CubeIDE v1.0.1

ID	Summary
59230	X-CUBE-AI links properly.
65403 65897 67661	On Windows®: BusyBox <code>sh.exe pwd</code> command fixed.
66212	Fixed loss of source files upon regeneration of code with dependencies on STM32Cube Expansion Packages.
66986	Integrated STM32CubeMX 5.2.1 supporting latest <code>.ioc</code> file format.
67014	Fixed project nature warning message when importing SW4STM32 projects.
67155	Fixed <code>_estack</code> value on newly generated projects to be correctly aligned.
67664	Removed shortcut to non-existing <code>readme.txt</code> from Windows® start menu.

2.3 Known problems and limitations

- Changing from HAL to LL driver or vice versa in the ioc editor does not save the ioc file.
- The [Run] button is not yet implemented and has therefore been hidden from the toolbar menu and *Run* menu.
- Te creation of static libraries with the option *add libraries as reference* leads to the unintended generation of the *Drivers* folder.
- The `USE_HAL_DRIVER` symbol is not properly removed when switching from HAL to LL driver, which can cause build failure.
- Creating BOARD projects with *Code generator options == add necessary library files as reference..* and *Initialise all peripherals with default settings* can cause build errors if BOARD depends on the USB library.
- The user cannot change Application Structure from Basic to Advanced or vice versa without losing user code.
- Importing the ioc file created by stand-alone STM32CubeMX is not fully supported.
- Editor hyperlinks sometimes jump to declaration instead of definition.
- It is not possible to open an SW4STM32 or TrueSTUDIO® workspace with STM32CubeIDE. Refer to *Migration guide from TrueSTUDIO® to STM32CubeIDE* (UM2578) and *Migration guide from System Workbench to STM32CubeIDE* (UM2579).
- The font size menu is not available for ioc editor content.
- The [Help]>[Data refresher] can be invoked several times without pop-up dialog.
- The uninstaller sometimes does not work on non-English Windows® installations.
- Some Linux® installers install a few packages before the license agreement has been accepted.
- The macOS® installer displays incompatible version dialog when installing the stlink-server package. This can safely be ignored.
- Some STM32CubeMX pop-up dialogs are not opened in front of the STM32CubeIDE workbench on all OS.
- On macOS®, the ioc editor does not show the *Peripheral categories* frame on the left side by default.

- [STM32CubeIDE](#) does not support switching from one MCU to another once the project is created.
- The Additional Software UI in the ioc editor is not updated after software install until the user closes and opens [STM32CubeIDE](#) again.
- Opening one ioc file and trying to open a second ioc-file while the first one loads causes the IDE to crash.
- Anti-virus tools may be sensitive to STM32CubeIDE and bundled exe files despite the addition of vendor certificates since it is not yet deployed widely.
- STM32CubeIDE SWV selecting large amounts of data to copy to the clipboard may crash STM32CubeIDE.
- Conditional breakpoints do not work.
- The project importer for [SW4STM32](#) cannot import all settings in projects from very old versions (older than 2.0).
- The *Generate code* operation re-includes *excluded files* in folders that are created by [STM32CubeMX](#)
- Creating a C project after having created a C++ project results in C++ nature set in all future projects in the active workspace
- Having a space or non-ascii character in the `project/workspace` path or installation path is not fully supported
- Updating field [HCLK] in tab *Clock Configuration* tab is difficult

3 Previous release information

3.1 STM32CubeIDE v1.0.0 release information

3.1.1 Features

- Integration of [STM32CubeMX](#) that provides services for:
 - STM32 microcontroller selection
 - Pinout, clock, IP, and middleware configuration
 - Project creation and generation of the initialization code
- Based on ECLIPSE™/CDT, with support of ECLIPSE™ add-ons
- GNU C/C++ for Arm® toolchain and GDB debugger:
 - *GNU Arm Embedded*
 - GNU tools for STM32, with enhancements compared to the standard toolchain
- Additional advanced features including:
 - Build Analyzer view
 - Static Stack Analyzer view
 - CPU core, IP register, and memory views
 - Live Expressions view
 - System analysis and real-time tracing views (SWV)
 - Fault Analyzer view
 - ITM software tracing
 - SFR view
- Support of STMicroelectronics ST-LINK/V2 and STLINK-V3:
 - ST-LINK_gdbserver 5.2.2
 - OpenOCD 0.10.0+dev00021-g524e8c8
- Support of SEGGER J-Link
 - SEGGER J-Link gdbserver v6.44c
- Import of projects from Atollic® TrueSTUDIO® and AC6 System Workbench for STM32

Revision history

Table 4. Document revision history

Date	Version	Changes
19-Apr-2019	1	Initial release.
11-Jun-2019	2	Added information related to STM32CubeIDE v1.0.1: <ul style="list-style-type: none"> • STM32CubeIDE v1.0.1 release information • Cross-selector data disclaimer

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