Installation guide

for STM32 software and drivers

Option 1: Unified toolchain STM32CubeIDE (suggested)

Download the software from https://www.st.com/en/development-tools/stm32cubeide.html (registration required).

Get Software

	Part Number	General Description	Latest version	Download	All versions
+	STM32CubeIDE-DEB	STM32CubeIDE Debian Linux Installer	1.7.0	Get latest	Select version
+	STM32CubeIDE-Lnx	STM32CubeIDE Generic Linux Installer	1.7.0	Get latest	Select version
+	STM32CubeIDE-Mac	STM32CubeIDE macOS Installer	1.7.0	Get latest	Select version
+	STM32CubeIDE-RPM	STM32CubeIDE RPM Linux Installer	1.7.0	Get latest	Select version
+	STM32CubeIDE-Win	STM32CubeIDE Windows Installer	1.7.0	Get latest	Select version

Installation packages are available for Windows, Mac OS and different Linux distributions.

This package includes microcontroller configuration software, IDE, required drivers and a debugger.

Option 2: STM32CubeMX + ARM Keil (supported)

NOTE: Keil tools are designed for Windows only. So, in case you have a different operating system you should install a Virtual Machine.

CubeMX (configuration software)

1. Download STM32CubeMX from https://www.st.com/en/development-tools/stm32cubemx.html#getsoftware-scroll
   You need to provide your name and e-mail.

2. **Installing STM32CubeMX**

To install STM32CubeMX, follow the steps below:

Extract (unzip) the whole content of the latest STM32CubeMX installation package from http://www.st.com/stm32cubemx into the same directory

on Windows

Make sure you have administrators rights

Double click on the SetupSTM32CubeMX-6.3.0.exe file

On Linux

Make sure you have access rights to the target installation directory, you can run the installation as root (or sudo) to install STM32CubeMX on shared directories

Double click (or launch from the console window) on the SetupSTM32CubeMX-6.3.0.linux file

On MacOS

Make sure you have access rights to the target installation directory, you can run the installation as root (or sudo) to install STM32CubeMX on shared directories

Double click (or launch from the console window) on the SetupSTM32CubeMX-6.3.0 application

After the installation you can safely remove the content of the zip from your disk.

Please refer to the STM32CubeMX user manual for more details on System requirements or other possible installations.

3. **Running STM32CubeMX**

on Windows

Select STM32CubeMX from Program Files > ST Microelectronics > STM32CubeMX.

Or double-click STM32CubeMX icon on your desktop.

on Linux

launch the STM32CubeMX executable from the STM32CubeMX installation directory

on MacOS

launch the STM32CubeMX application from the launchpad

Keil (IDE and debugger)

1. Download Keil from

   http://www2.keil.com/mdk5/

   use your POLIMI e-mail address if asked.

2. Install Keil using your POLIMI e-mail address. At the end of the installation procedure the "Pack Installer" will automatically open. Wait for the automatic updates to conclude.

You will receive an e-mail asking to your professor to contact Tecnologix, I am already in contact with them, so you don't have to do anything).

Note: Other software packages may be used to code, compile and debug STM32 software, but it is up to the student to ensure correct installation and configuration.

Additional software:

St-Link Driver

Download and install the St-Link driver that you find at:

https://www.st.com/en/development-tools/stsw-link009.html

Other

If required and not automatically downloaded:

https://my.st.com/content/my_st_com/en/products/embedded-software/mcus-embedded-software/stm32-embedded-software/stm32cube-mcu-packages/stm32cubef4.license=1538554923203.product=STM32CubeF4.html