STM32 System Workbench

When you intall the STM32 Sytem Workbench either in Windows or Ubuntu, it will install also the ST-Link/V2 driver. In Ubuntu, the respective udev rules for ST-Link will be installed as well.
And if “gksudo” is not installed in your system, installation will be done in terminal not in GUI. Installation in terminal is pretty straight forward anyway.

```
rudy@rudy-dell:~$ ./install_sw4stm32_linux_64bits-v2.9.run
Checking integrity... (could take a while, -m to bypass)
Extracting JRE... done
Warning : gksudo has not been found and is required to launch the installer in GUI mode.
Do you want to run installation in console mode? [N/y] y
Logging initialized at level 'INFO'
Commandline arguments: -console
Detected platform: ubuntu_linux,version=4.15.0-122-generic,arch=x64,symbolicName=null,javaVersion=1.8.0_151
```

Link to STM32 System Workbench Installer
www.openstm32.org

Downloading the System Workbench for STM32 installer

Documentation » System Workbench for STM32 » Installing System Workbench for STM32 » Installing System Workbench for STM32 with installer » Downloading the System Workbench for STM32 installer

The installer is available for different host environments; please select the appropriate installer depending on your host machine.

Latest version

We advise you to always install the latest System Workbench for STM32 version, to benefit from all enhancements and have support for all the newest STM32 chips.

Note this installer is only meant to be used for initial installation. To upgrade an existing System Workbench for STM32, you should rather go to “Help >> Search for Updates...” in System Workbench for STM32; doing this will upgrade all the components for which a new release exist, including all the Eclipse infrastructure.

Windows 7 & 10

The Windows version is available for 32 and 64 bit systems. Note that we will need to install a device driver to communicate with the ST-Link debug probe, so you **must** select the installer that fits your system. Installing the 32 bit version on a 64 bit Windows system will **not** work.If you have problems downloading an executable file (.exe), try downloading and extracting the

Linux

The Linux version is currently available for 32 and 64 bit Linux versions, although the 32 bit version support is no more available in version 2.x. In all cases you are advised to also download the MD5 or SHA256 checksum to validate the integrity of your download.
It is currently validated on Ubuntu 14.04 but should work on any Ubuntu version as well as other distributions, like Fedora Core.
(From version 1.9.0, due to incompatibility with OpenOCD features, Ubuntu 12.04 is no longer supported)

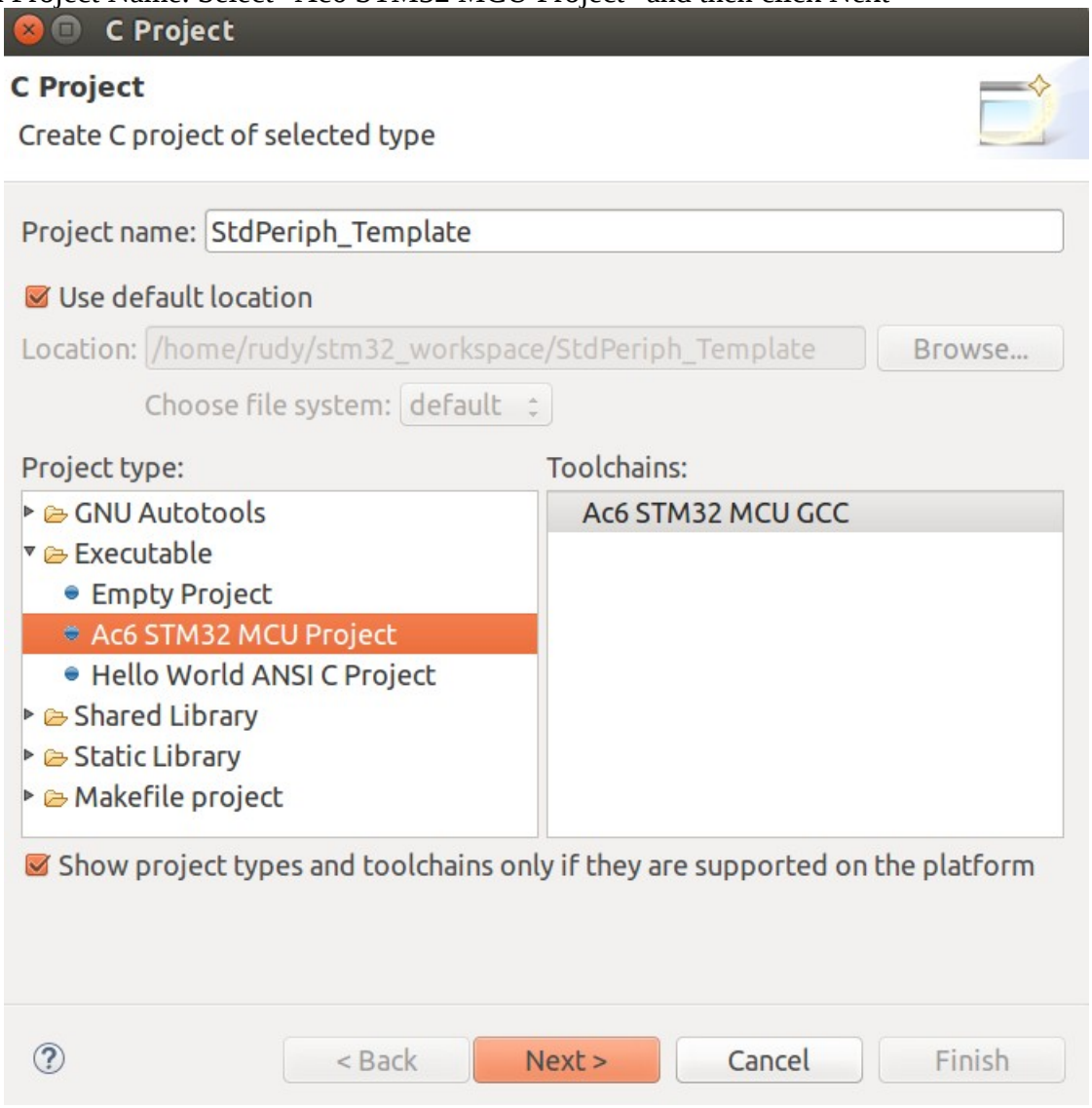
- Latest Linux 64 bit installer Version v2.9, updated on Friday, April 12, 2019 at 16:40:36 CEST):
  - Installer: install_sw4stm32_linux_64bits-v2.9.run
    - MD5 sum 670be5ab4b336a118aaa4179a499fcac in install_sw4stm32_linux_64bits-v2.9.run.md5
    - SHA256 sum 0824e1342a0faef4ff99f27a63a310efec9af19b1dc741ab8dfcc05c67bbf32c in install_sw4stm32_linux_64bits-v2.9.run.sha256
  - The latest Linux 64 bit installer can always be retrieved from
    - Installer: install_sw4stm32_linux_64bits-latest.run
      - MD5 sum of the installer: install_sw4stm32_linux_64bits-latest.run.md5
      - SHA256 sum of the installer: install_sw4stm32_linux_64bits-latest.run.sha256
- Latest Linux 32 bit installer (note this is an old, **no more maintained**, version) Version v1.14.0, updated on Friday, March 10, 2017 at 09:14:47 CET):
  - Installer: install_sw4stm32_linux_32bits-v1.14.0.run
    - MD5 sum 499863e682869550c74c399babb746c3 in install_sw4stm32_linux_32bits-v1.14.0.run.md5
    - SHA256 sum 8b5c6a032a27774054f605fd7573af800e59248c4ecbdc24d0aaf34429242e16 in install_sw4stm32_linux_32bits-v1.14.0.run.sha256
  - The latest Linux 32 bit installer can always be retrieved from
    - Installer: install_sw4stm32_linux_32bits-latest.run
      - MD5 sum of the installer: install_sw4stm32_linux_32bits-latest.run.md5
      - SHA256 sum of the installer: install_sw4stm32_linux_32bits-latest.run.sha256

Note: If you download the Ubuntu installer on Windows OS and then copy it to Ubuntu, you might experience problem like installation is not possible. To resolve the issue, download the installer on Ubuntu OS. It seems when the Ubuntu installer is downloaded on Windows, the format is somehow different and Ubuntu won't recognize it.

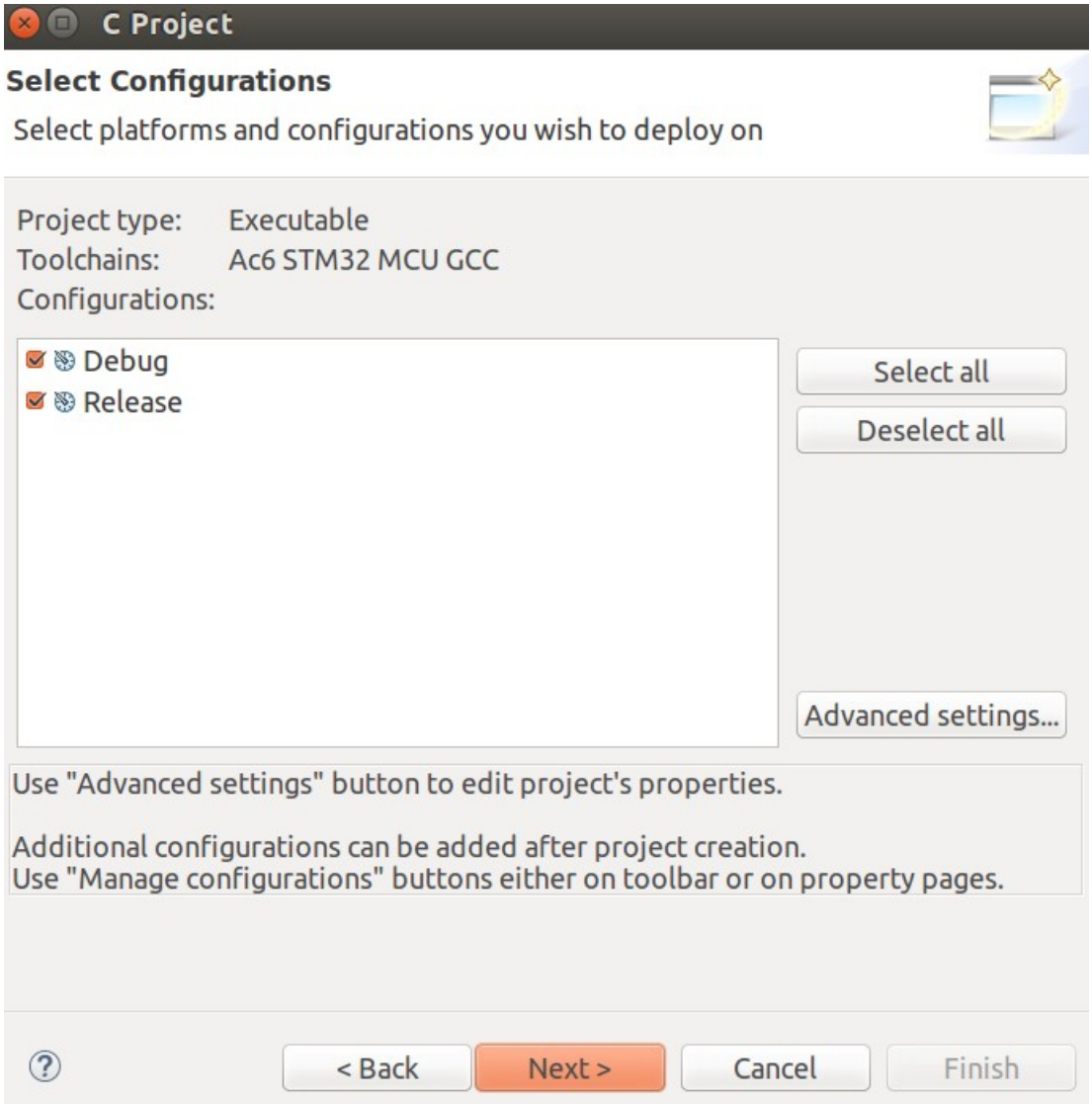
Standard Peripheral Library(StdPeriph)

1. File -> New -> C Project

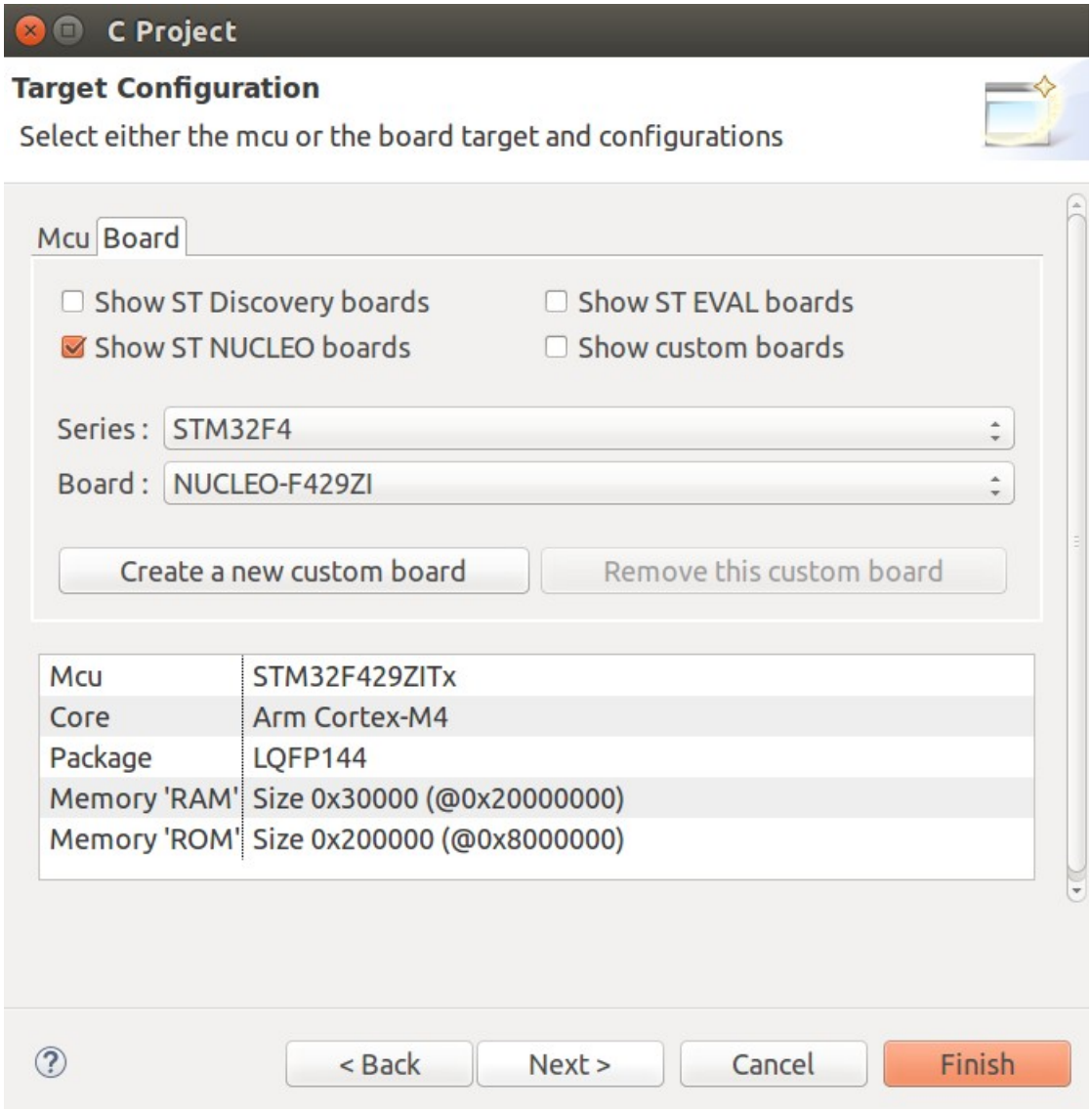
2. Add Project Name. Select “Ac6 STM32 MCU Project” and then click Next



3. Click Next

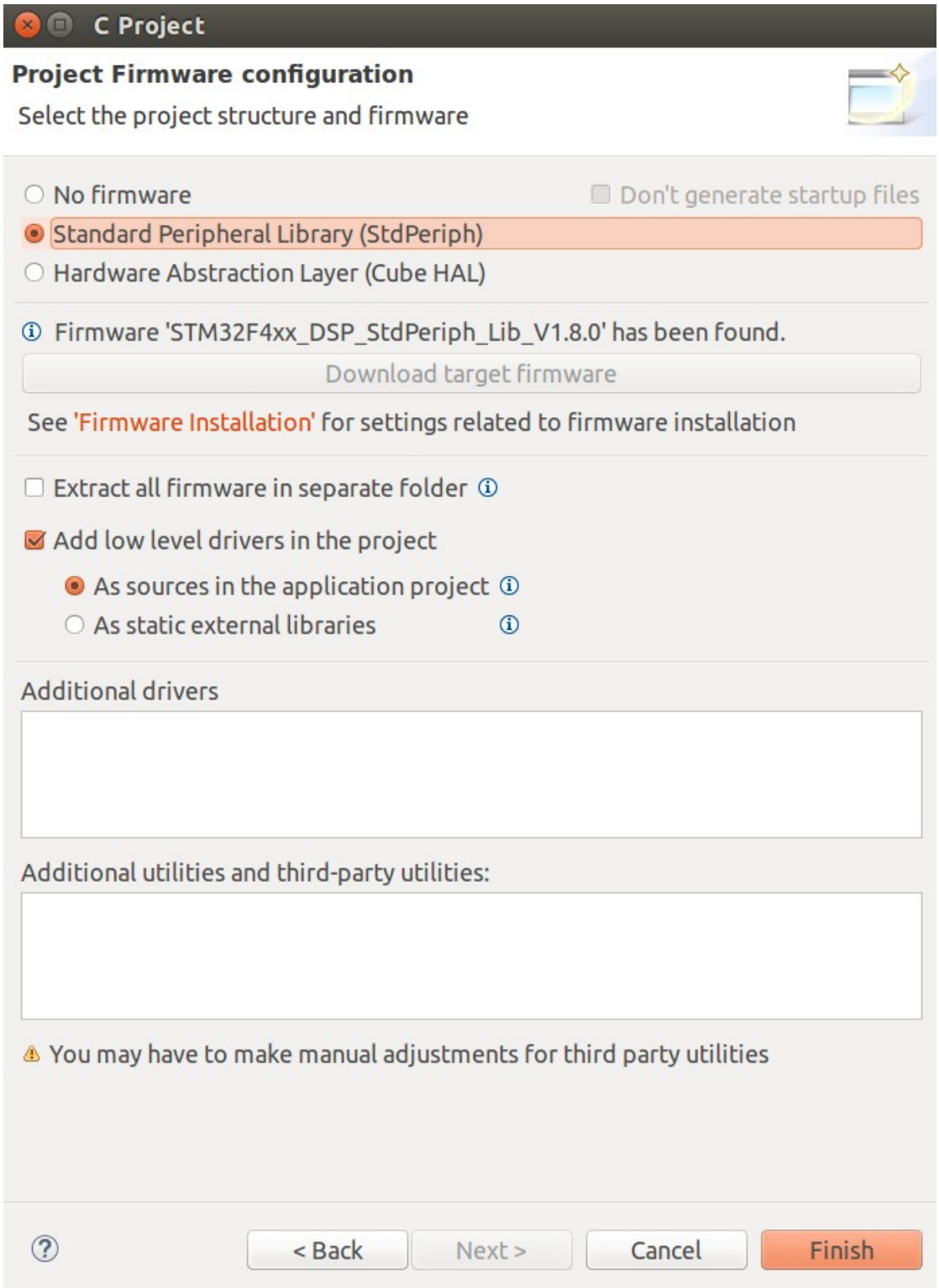

C Project
Select Configurations
Select platforms and configurations you wish to deploy on
Project type: Executable
Toolchains: Ac6 STM32 MCU GCC
Configurations:
Debug
Release
Select all
Deselect all
Advanced settings...
Use "Advanced settings" button to edit project's properties.
Additional configurations can be added after project creation.
Use "Manage configurations" buttons either on toolbar or on property pages.
< Back
Next >
Cancel
Finish

4. Select the board or MCU you will be using and then click Next
Note: For my case, I'm using STM32F429ZI.

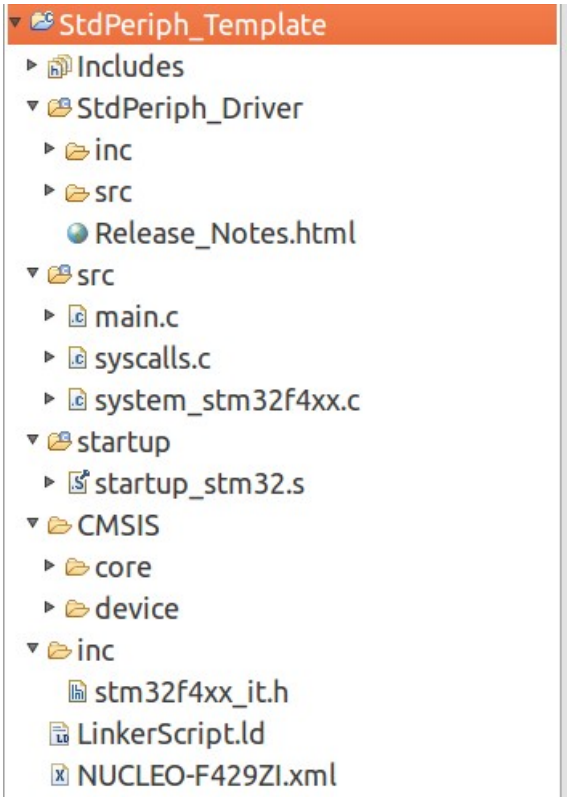


5. Select the “Standard Peripheral Library”. If there is no available library, just simple click the “Download target firmware” to download it.
Click the “Add low level drivers in separate folder”. This will give you the necessary files to start a project(e.g. statrtup, main, linker, drivers, etc..).

Click Finish



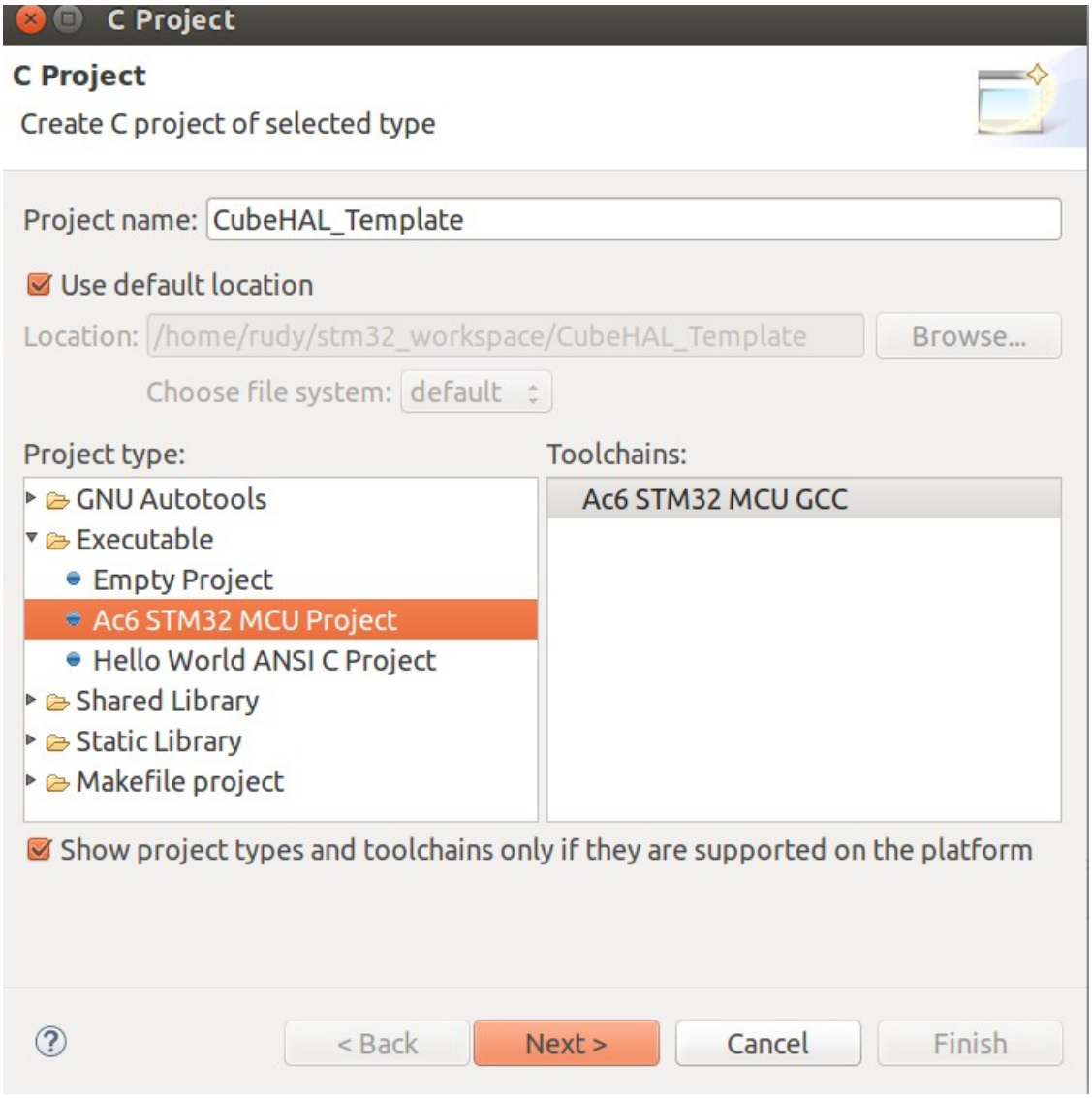
A new project is created.



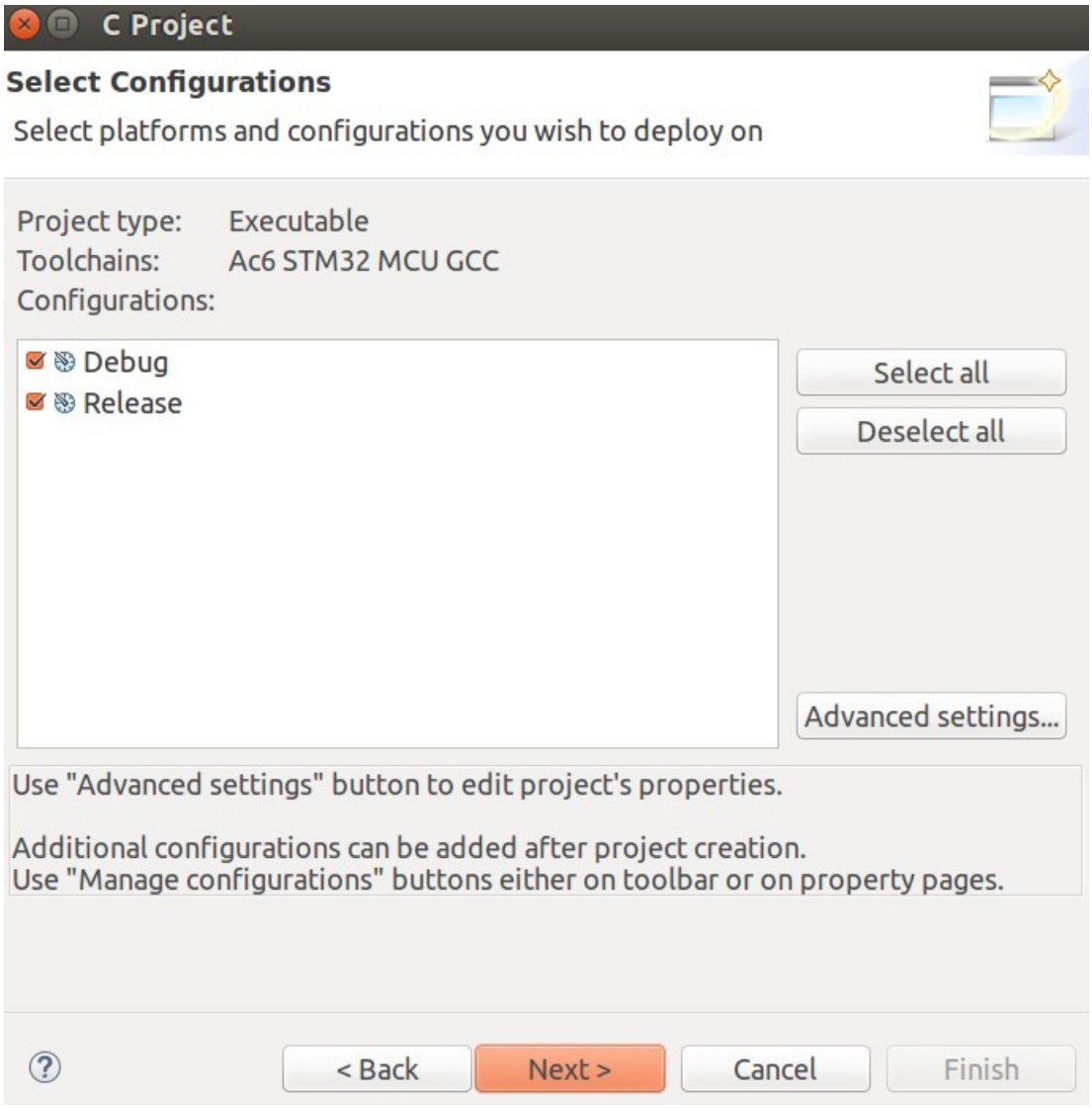
Hardware Abstraction Layer (Cube HAL)

1. File -> New -> C Project

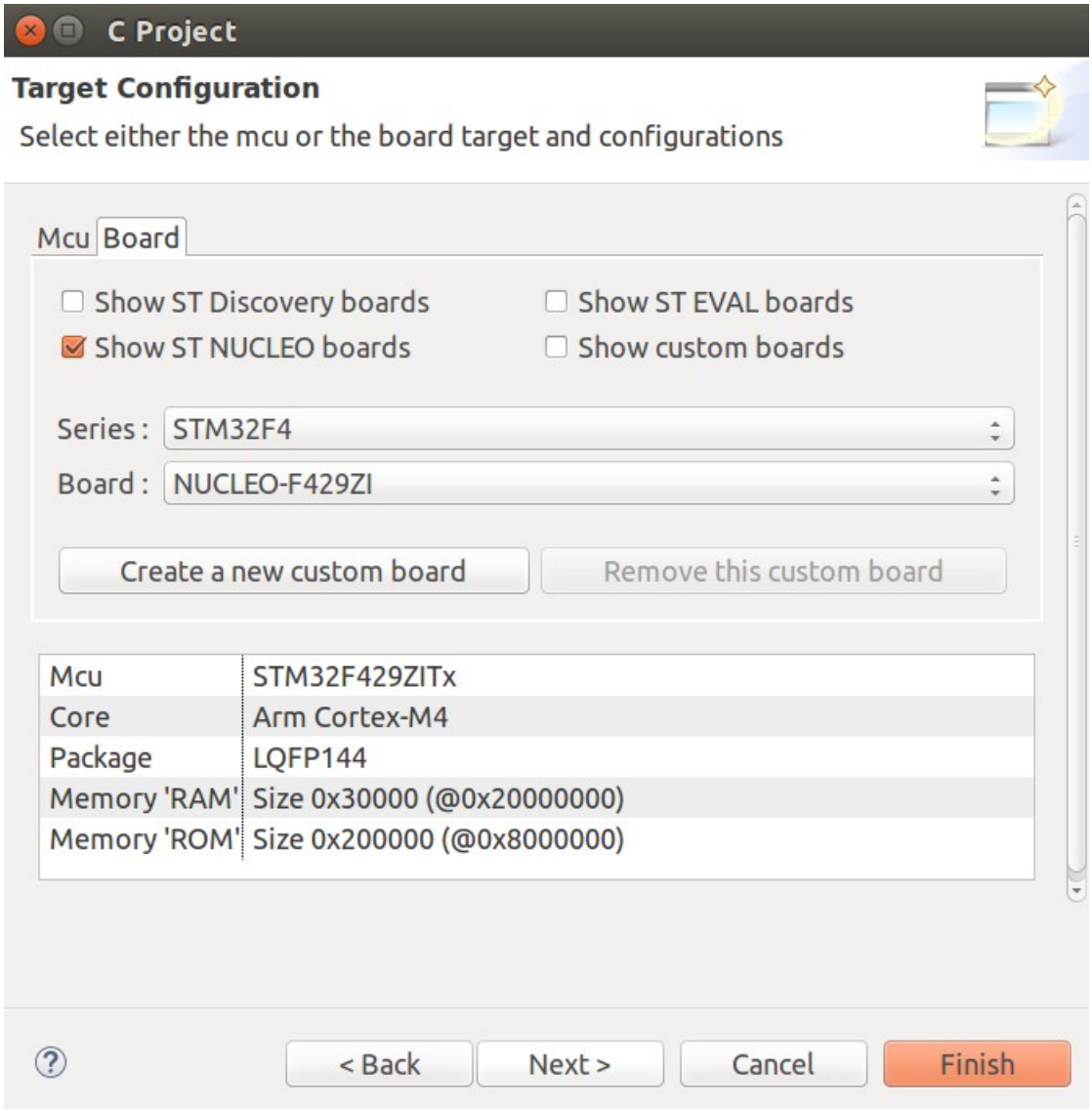
2. Add Project Name. Select “Ac6 STM32 MCU Project” and then click Next



3. Click Next

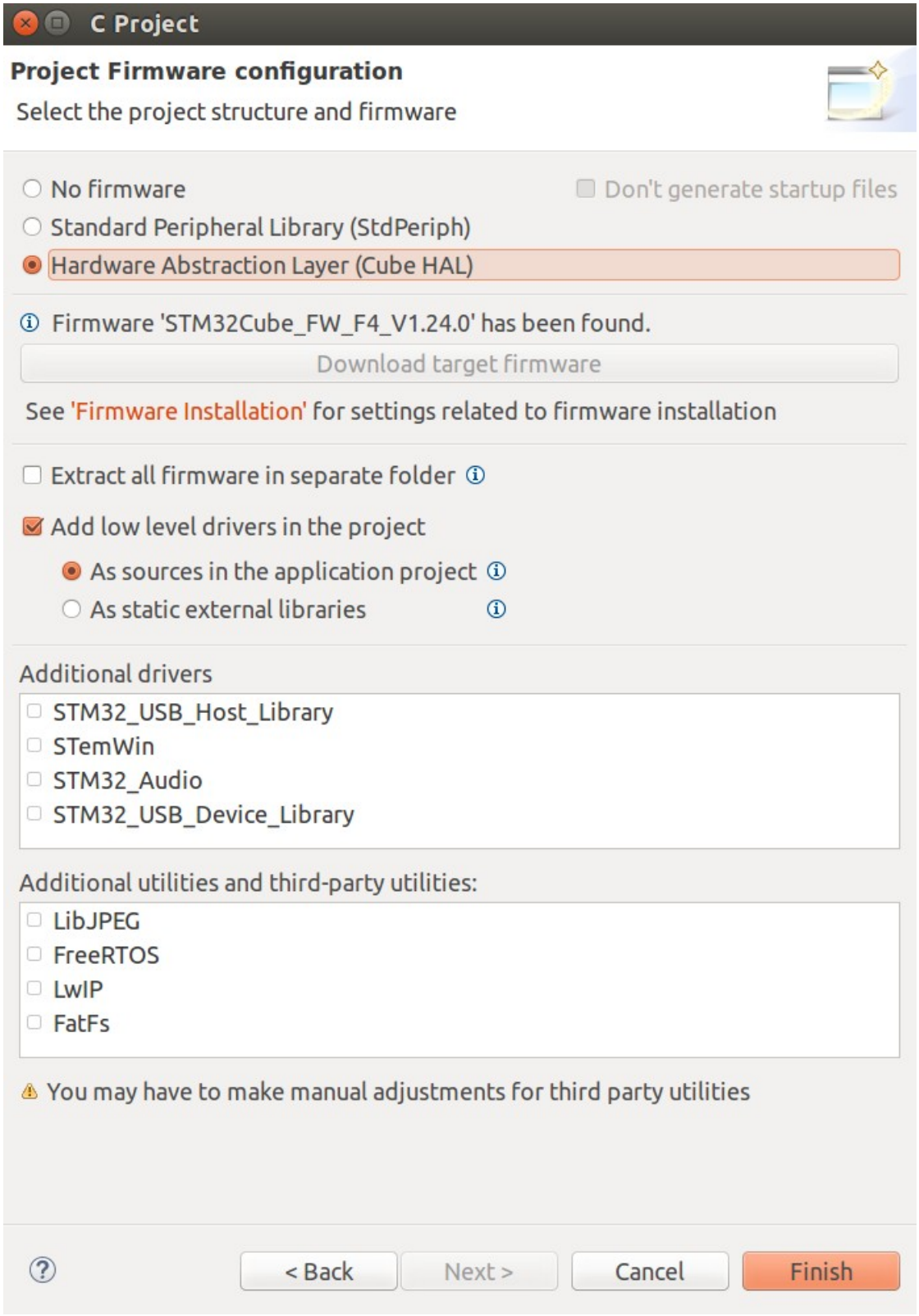

C Project
Select Configurations
Select platforms and configurations you wish to deploy on
Project type: Executable
Toolchains: Ac6 STM32 MCU GCC
Configurations:
Debug
Release
Select all
Deselect all
Advanced settings...
Use "Advanced settings" button to edit project's properties.
Additional configurations can be added after project creation.
Use "Manage configurations" buttons either on toolbar or on property pages.
< Back
Next >
Cancel
Finish

4. Select the board or MCU you will be using and then click Next
Note: For my case, I'm using STM32F429ZI.



5. Select the “Hardware Abstraction Layer”. If there is no available library, just simple click the “Download target firmware” to download it.
Click the “Add low level drivers in separate folder”. This will give you the necessary files to start a project(e.g. statrtup, main, linker, drivers, etc..).

Click Finish



A new project is created.