

# Xilinx Vivado installation tutorial

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# Intro. to Xilinx Vivado

- The tool which we used in this class was usually Modelsim, but it is currently unavailable due to US federal regulations. We don't know when it will be available again. As a result, we choose to use Xilinx Vivado this semester.
- Xilinx Vivado is a design suite for Xilinx FPGA design flow. It has many functions to implement a design entry on a FPGA, and supports many simulation types. In this course, we only need to use the behavioral simulation to complete the homework.

# Note

- Xilinx Vivado is the same as Modelsim, which they only support Windows and Linux operating systems. For those who use **MAC OS**, we recommend you to install **virtual machine** with Windows or Linux OS and install Xilinx Vivado.
- The following installation tutorial is for Windows. You can install it on Linux OS, too.

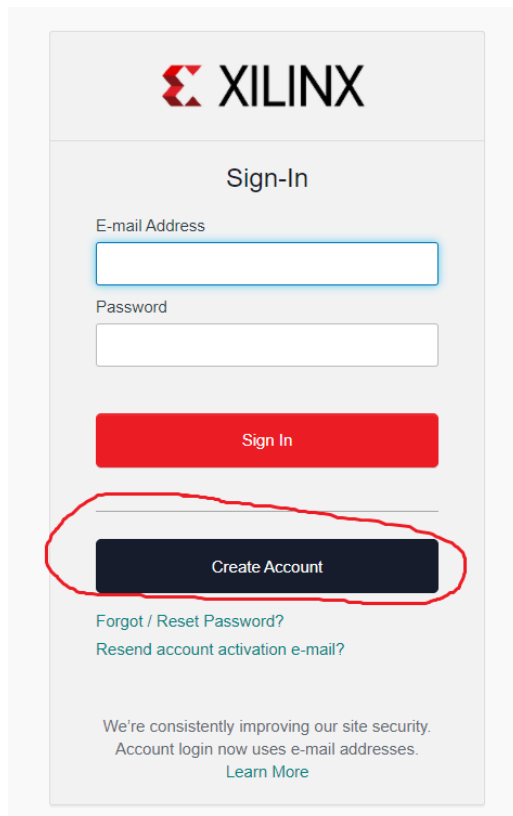
# Step 1

- Goto

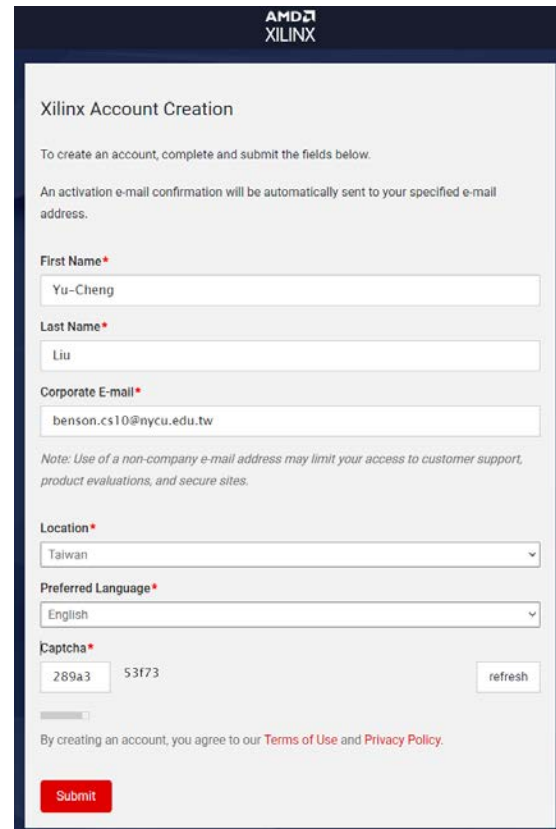
<https://www.xilinx.com/support/download/index.html/content/xilinx/en/downloadNav/vivado-design-tools/2020-3.html>

# Step2

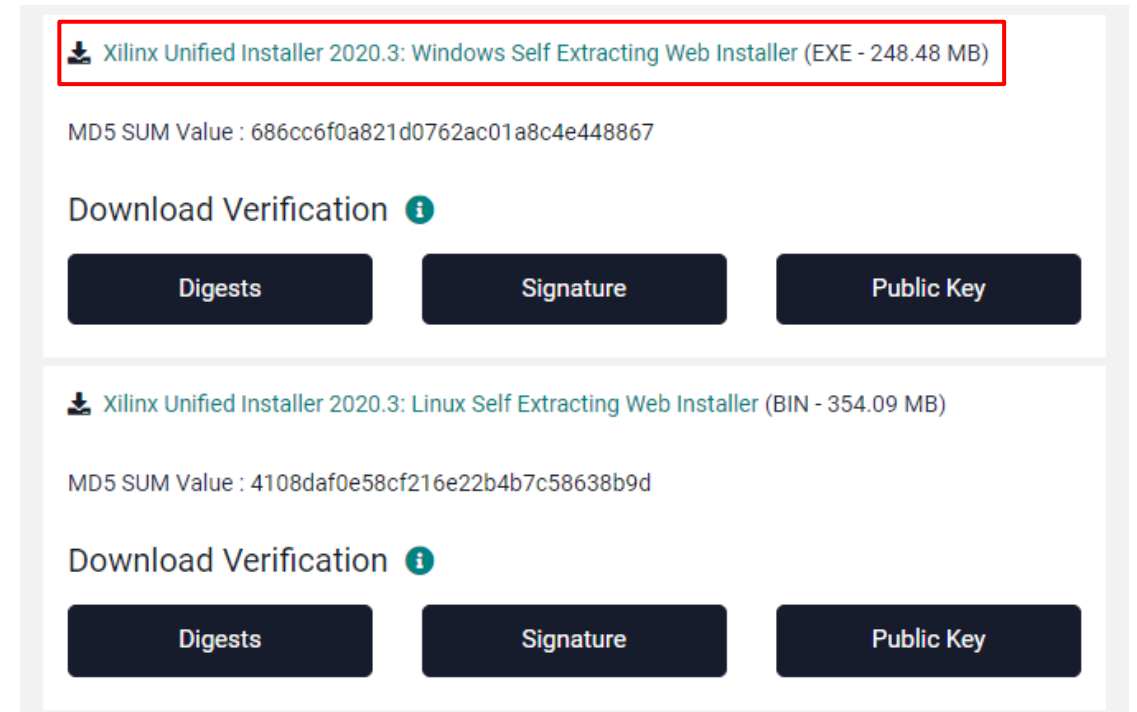
- Create and active an account, and download the Xilinx Unified Installer **2020.3**: Windows Self Extracting Web Installer. (we choose the old version because the latest one requires more than 100G disk space...)



The Xilinx Sign-In page features the Xilinx logo at the top. Below it, the 'Sign-In' heading is centered. There are two input fields: 'E-mail Address' and 'Password'. A red 'Sign In' button is positioned below the password field. At the bottom, a dark blue 'Create Account' button is circled in red. Links for 'Forgot / Reset Password?' and 'Resend account activation e-mail?' are located below the 'Create Account' button. A footer note states: 'We're consistently improving our site security. Account login now uses e-mail addresses. [Learn More](#)'.



The Xilinx Account Creation page has a dark blue header with the AMD and Xilinx logos. The title 'Xilinx Account Creation' is at the top. Below it, instructions state: 'To create an account, complete and submit the fields below. An activation e-mail confirmation will be automatically sent to your specified e-mail address.' The form includes fields for 'First Name\*' (Yu-Cheng), 'Last Name\*' (Liu), and 'Corporate E-mail\*' (benson.cs10@nycu.edu.tw). A note mentions that non-company email addresses may limit access to support. There are dropdown menus for 'Location\*' (Taiwan) and 'Preferred Language\*' (English). A 'Captcha\*' field shows '289a3' and '53f73' with a 'refresh' button. A 'Submit' button is at the bottom. A footer note says: 'By creating an account, you agree to our [Terms of Use](#) and [Privacy Policy](#)'.



The download page shows two options for the Xilinx Unified Installer 2020.3. The first option, 'Windows Self Extracting Web Installer (EXE - 248.48 MB)', is highlighted with a red border. Below it, the MD5 SUM Value is 686cc6f0a821d0762ac01a8c4e448867. The second option is 'Linux Self Extracting Web Installer (BIN - 354.09 MB)' with an MD5 SUM Value of 4108daf0e58cf216e22b4b7c58638b9d. Both options have a 'Download Verification' section with buttons for 'Digests', 'Signature', and 'Public Key'.

# Step 3

## • Get US Government Export Approval

### U.S. Government Export Approval

- U.S. export regulations require that your First Name, Last Name, Company Name and Shipping Address be verified before Xilinx can fulfill your download request. [Please provide accurate and complete information.](#)
- Addresses with Post Office Boxes and names/addresses with Non-Roman Characters with accents such as grave, tilde or colon **are not supported** by US export compliance systems.

**First Name\***

Yu-Cheng

**Last Name\***

Liu

**Business E-mail\***

benson.cs10@nycu.edu.tw

**Company Name\***

NYCU

Please enter the name of your business or institution.

**Address 1\***

1001 University Road, Hsinchu, Taiwan 300, ROC

Please enter your Company Address.

**Address 2**

**Location\***

Taiwan

**State/Province**

**City\***

Hsinchu

**Postal Code**

**Phone**

**Job Function\***


Student

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Download

# Step 4

- If it doesn't start downloading, close the page and press the link, fill the approval again.

 **Xilinx Unified Installer 2020.3: Windows Self Extracting Web Installer (EXE - 248.48 MB)**


MD5 SUM Value : 686cc6f0a821d0762ac01a8c4e448867

Download Verification 


Digests

Signature

Public Key

 **Xilinx Unified Installer 2020.3: Linux Self Extracting Web Installer (BIN - 354.09 MB)**

MD5 SUM Value : 4108daf0e58cf216e22b4b7c58638b9d

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First Name\*

Last Name\*

Business E-mail\*

Company Name\*   
Please enter the name of your business or institution.

Address 1\*   
Please enter your Company Address.

Address 2

Location\*

State/Province

City\*

Postal Code

Phone

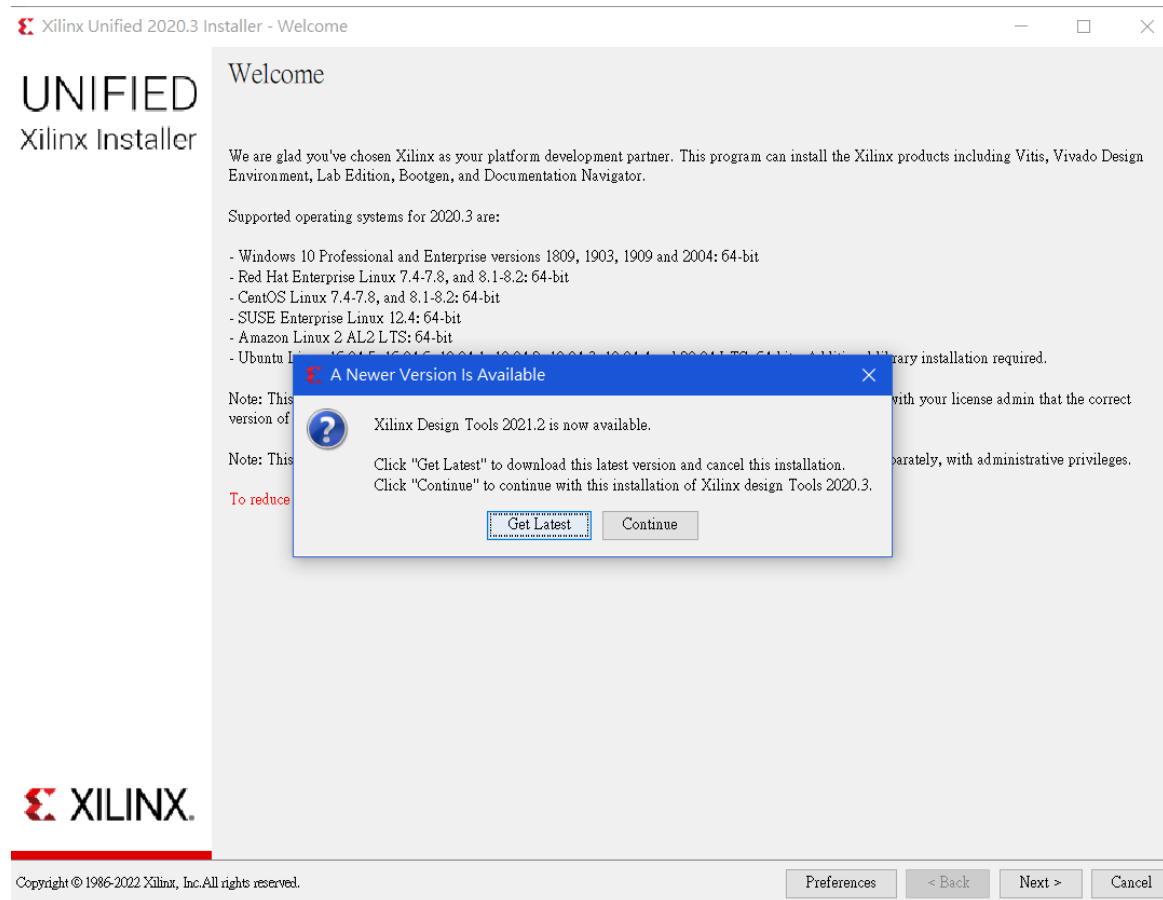
Job Function\*

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**Download**

# Step 5

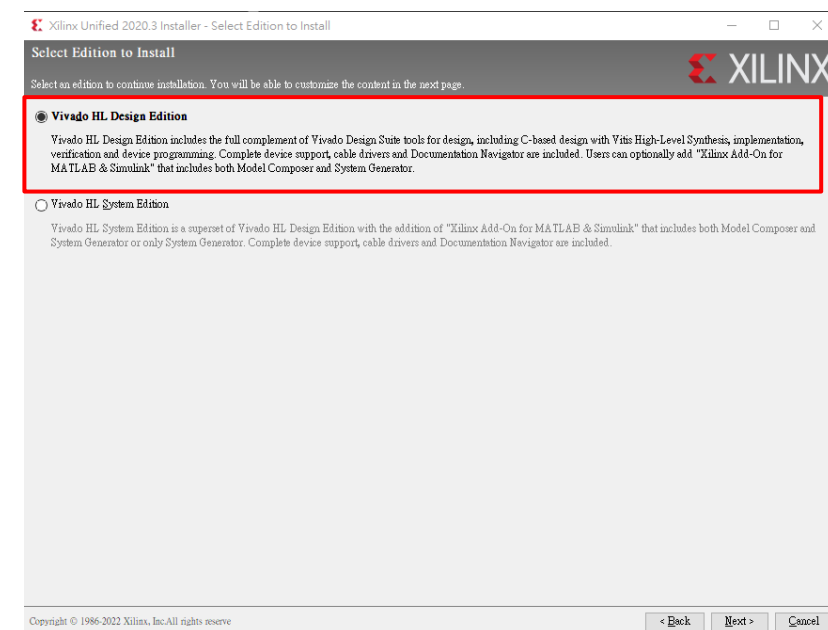
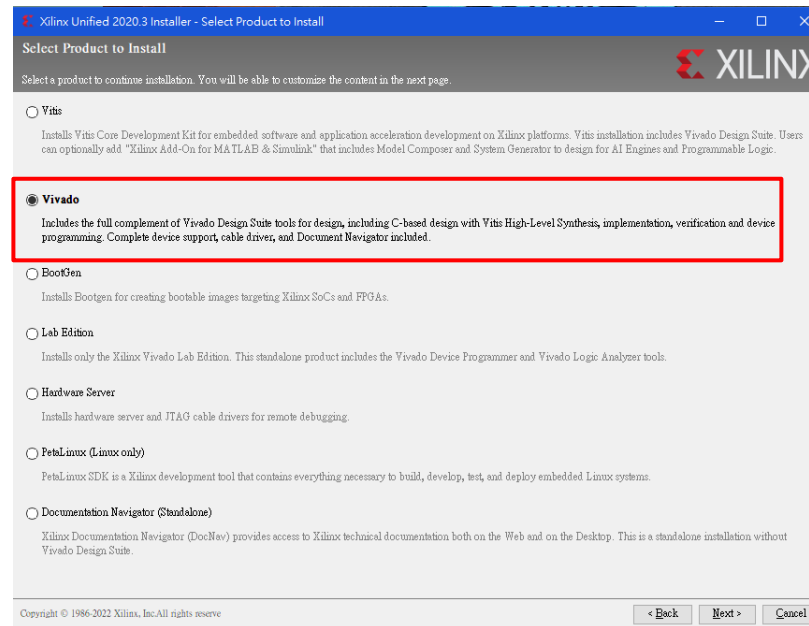
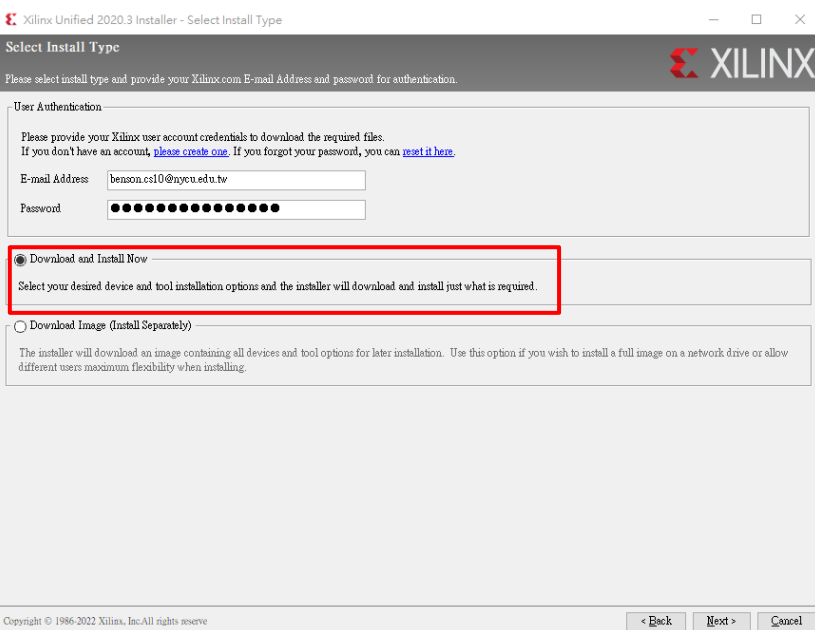
- Click “continue”





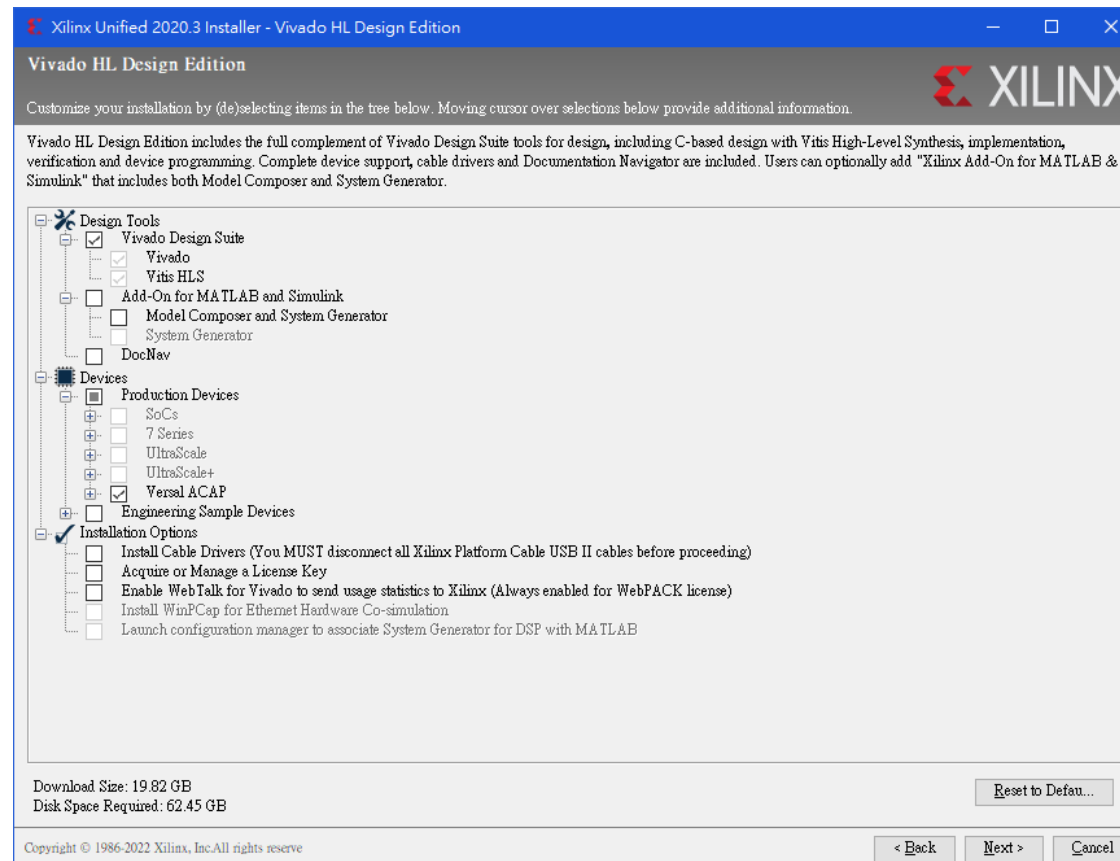
# Step 6

- Execute the file you download and choose the option like the following pictures.



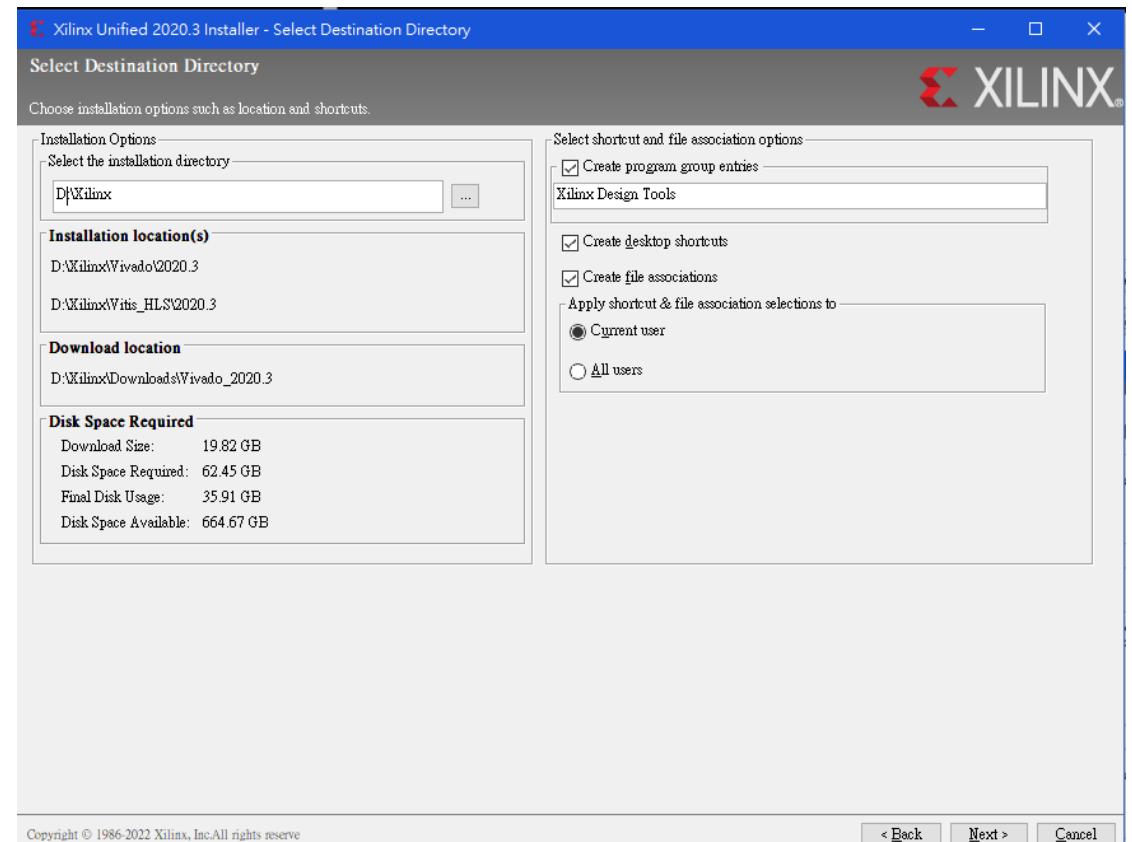
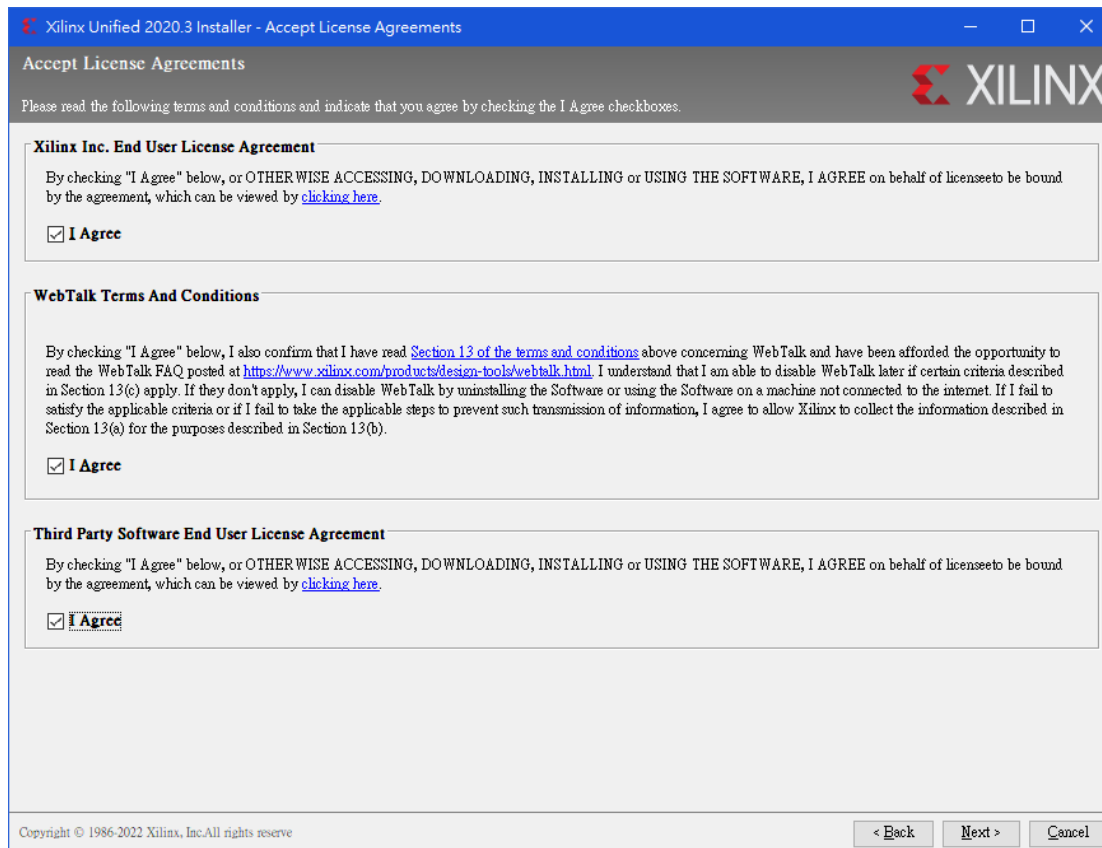
# Step 7

- We only need behavioral simulation function, so I disabled other unnecessary functions.



# Step 8

- You can decide your own installation directory.



## Step 9

- Finally, wait the installer to install the software. Note that the installer needs to take much time to install it.
- You may need to reboot the computer after the installation.

# QA

- If you have any question, feel free to post your question on the Facebook discussion forum.