



香港中文大學

The Chinese University of Hong Kong

CENG3430 Rapid Prototyping of Digital Systems

Lab00: Vivado Installation



- **Vivado ML Edition - 2023.2** will be used for the development of lab exercises and final project.
 - It is publicly available at:
<https://www.xilinx.com/support/download/index.html/content/xilinx/en/downloadNav/vivado-design-tools/2023-2.html>
 - It has an official **FREE** license.
 - You should register an online account and obtain a free license.
 - Register at: <https://www.xilinx.com/registration/create-account.html>
 - It supports Microsoft Windows and Linux.
 - If you are using Mac, you may install Windows using BootCamp, or Parallels Desktop, or VMware Fusion Player.
 - Make sure there is **90GB free space** reserved for Vivado.
 - This tutorial and all the lab sheets will be based on Windows.

Do it First!!!

Registration



- Use your email to register
 - Example:

Download Center - Name and Address Verification

1 U.S. Government Export Approval

- U.S. export regulations require that your First Name, Last Name, Company Name and Shipping Address be verified before AMD 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 *

Last Name *

E-mail *

Company Name *

CUHK

Address 1 *

The Chinese University of Hong Kong

Address 2

Location *

Hong Kong

State/Province

City *

Hong Kong

Postal Code

Phone

Job Function *

Student

- If you encounter this error

Product Licensing - Name and Address Verification

Please correct the errors and send your information again.

We cannot fulfill your request as your account has failed export compliance verification.

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.

Maybe you are using an old account.

Please **register a new account** and try the verification again.

(Any email is OK, e.g., gmail, link.cuhk.edu.hk, ...)

- Select the **2023.2** version

Version

2023.2

2023.1

2022.2

2022.1

[Vivado Archive](#)

[ISE Archive](#)

[CAE Vendor Libraries
Archive](#)

Vivado ML Edition - 2023.2 Full Product Installation

Important Information

Vivado™ ML 2023.2 is now available for download:

Meeting Fmax targets

- Increase performance of designs in Versal Premium and Versal HBM devices with automatic place & route of SLR crossings
- Faster device image generation with multi-threaded support

Ease of use enhancements in IPI, DFX, Debug and Simulation

- New GUI window added for address path visualization from source and sink for Versal devices in IPI
- Manually Assigned Address Locking Capability in BDs (IPI)

Download



- Select the installer based on your OS

The screenshot displays the AMD download page for the 2023.2 version of the Unified Installer. It lists three options:

- Windows Self Extracting Web Installer (EXE - 203.13 MB)**: This option is highlighted with a red box. Below it, the MD5 SUM Value is 50e8baea82f54dc8a83b86dce491ee80. It includes a 'Download Verification' section with buttons for 'Digests', 'Signature', and 'Public Key'.
- Linux Self Extracting Web Installer (BIN - 270.64 MB)**: This option is also highlighted with a red box. Below it, the MD5 SUM Value is b8c785d03b754766538d6cde1277c4f0. It includes a 'Download Verification' section with buttons for 'Digests', 'Signature', and 'Public Key'.
- SFD (TAR/GZIP - 103.92 GB)**: This option is not highlighted. Below it, the MD5 SUM Value is 64d64e9b937b6fd5e98b41811c74aab2. It includes a 'Download Verification' section with buttons for 'Digests', 'Signature', and 'Public Key'.

Windows

Linux

Download



- Click “Download” and open the installation file

Phone

Job Function *

Student

Filename:

FPGAs_AdaptiveSoCs_Unified_2023.2_1013_2256_Win64.exe

If you are downloading the Vivado / Vitis unified installer, you will receive a follow-up confirmation email with a notice regarding our Developer Program.

You can read about how we handle your personal data, your personal data rights, and how you can contact us in our [privacy policy](#).

Download

Installation



- **Sign in** with User ID (email address) and Password
- Choose either
 - Download and Install
 - Download Image

Download and install (If failed in the middle, you need to start over)

or

Download the image first, and then you install afterward

AMD Unified Installer for FPGAs & Adaptive SoCs 2023.2 - Select Install Type

Select Install Type

Please select install type and provide your AMD.com E-mail Address and password for authentication.

User Authentication

Please provide your AMD user account credentials to download the required files.
If you don't have an account, [please create one](#). If you forgot your password, you can [reset it here](#).

E-mail Address

Password

☒ Download and Install ...

Select your desired device and tool installation options and the installer will download and install just what is required.

☐ Download Image (Install Separat...)

The installer will download an image containing all devices and tool options for later installation. Use this option if you wish to install a full image on a network drive or allow different users maximum flexibility when installing.

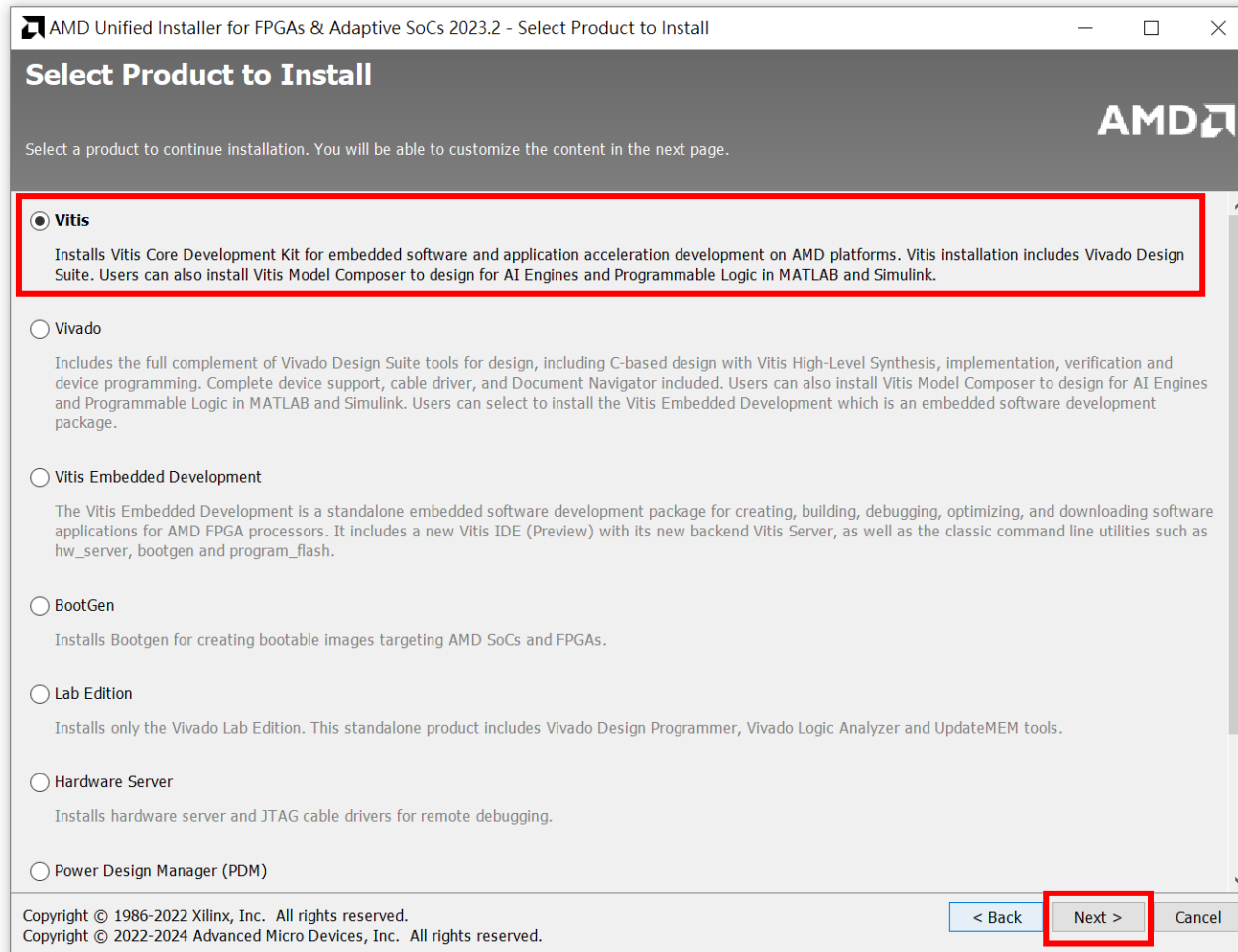
Copyright © 1986-2022 Xilinx, Inc. All rights reserved.
Copyright © 2022-2024 Advanced Micro Devices, Inc. All rights reserved.

< Back Next > Cancel

Installation



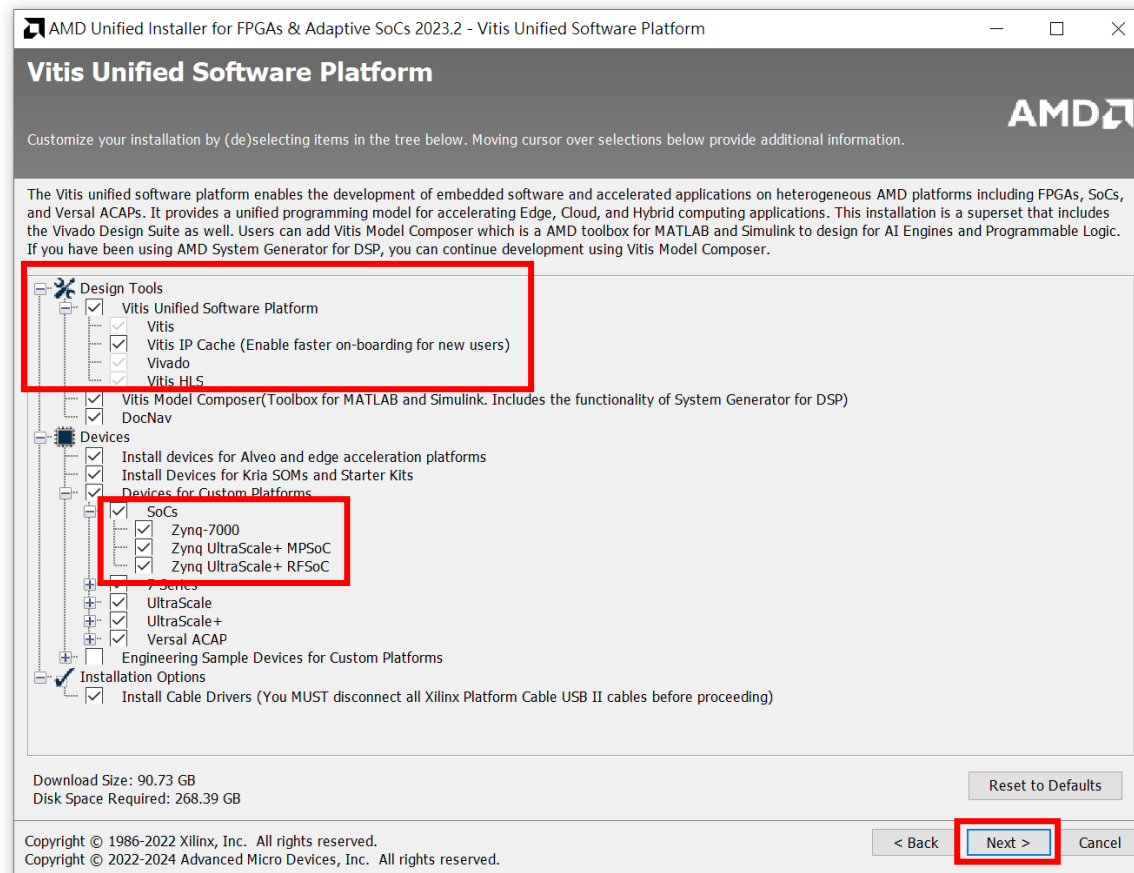
- Select “**Vitis**” and then click “Next”



Installation



- Select all the “Vitis Unified Software Platform” and all the “SoCs” and then click “Next”



Installation



- Select all “**I Agree**” and click “**Next**”

AMD Unified Installer for FPGAs & Adaptive SoCs 2023.2 - Accept License Agreements

Accept License Agreements

Please read the following terms and conditions and indicate that you agree by checking the I Agree checkboxes.

End User License Agreement for Vitis

By checking "I Agree" below, or OTHERWISE ACCESSING, DOWNLOADING, INSTALLING or USING THE SOFTWARE, I AGREE on behalf of licensee to be bound by the agreement, which can be viewed by [clicking here](#).

☒ I Agree

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☒ I Agree

End User License Agreement for Model Composer

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☒ I Agree

Third Party Software End User License Agreement for Vitis

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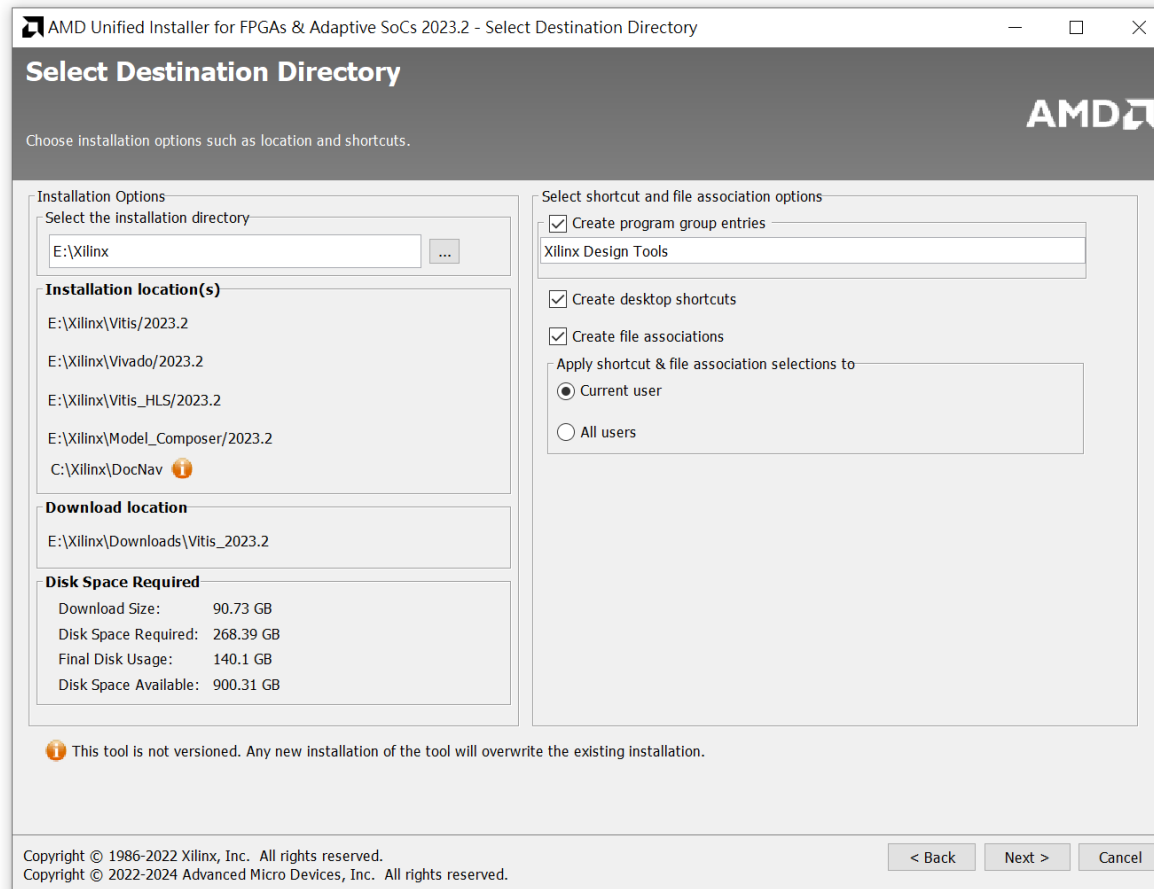
< Back Next > Cancel

More in below

Installation



- Make sure you have enough free disk space to install
- Then wait until finish (Might > 2-3hrs)





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Thank You!

