

一、硬件配置

CPU x86架构

内存 $\geq 16G$

硬盘空余空间 $\geq 300G$

二、系统配置

Xilinx® supports the following operating systems on x86 and x86-64 processor architectures.

- Microsoft **Windows** Professional/Enterprise 10.0 1903 Update; 10.0 1909 Update; 10.0 2004 Update: 10.0 20H2 Update; 10.0 21H1 Update
- **Red Hat** Enterprise Workstation/Server 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 8.1, 8.2, 8.3, and 8.4 (64- bit), English/Japanese
- **CentOS** 7.4, 7.5, 7.6, 7.7, 7.8, 8.1, 8.2, and 8.3 (64-bit), English/Japanese
- **SUSE Linux** Enterprise 12.4 and 15.2 (64-bit), English/Japanese
- **Amazon** Linux 2 AL2 LTS (64-bit)
- **Ubuntu** Linux 16.04.5 LTS; 16.04.6 LTS; 18.04.1 LTS; 18.04.2 LTS, 18.04.3 LTS; 18.04.4 LTS; 18.04.5 LTS; and 20.04 LTS, 20.04.1 LTS, 20.04.2 LTS (64-bit), English/Japanese

具体要求详见[Xilinx官方文档](#)。

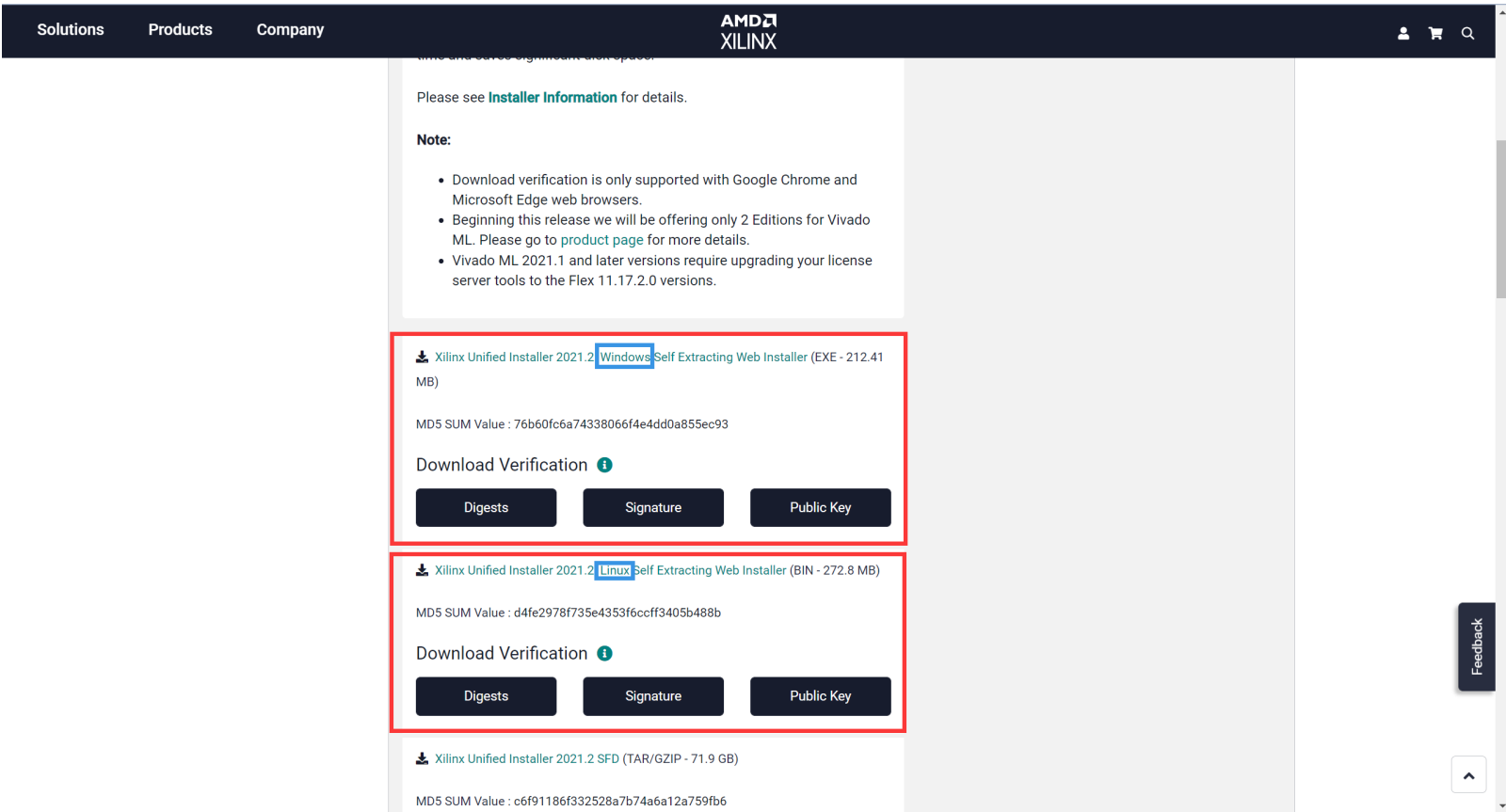
建议使用Linux系统。当然，只是建议。用Windows也没多大问题，就是有些bug。

三、下载在线安装包

下载地址

推荐下载Vivado 2021或者Vivado 2022。

1. 选择对应操作系统的安装包



2. 注册账户

如果是第一次进入下载，网页会弹出登录界面，我们需要注册一个账号。尽量不要使用学校的邮箱，用你自己的QQ邮箱即可，另外工作单位什么的不要填华科全称，地址随便填一个美国的地方就行。

Download Center - Name and Address 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.

First Name*

Xiangyu

Last Name*

Zhou

Business E-mail*

1248023674@qq.com

Company Name*

HUST

Please enter the name of your business or institution.

Address 1*

HUST

Please enter your Company Address.

Address 2

Location*

China

State/Province

City*

Wuhan

Postal Code

Phone

Job Function*


Student

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

3. 下载完成

- Windows下安装包

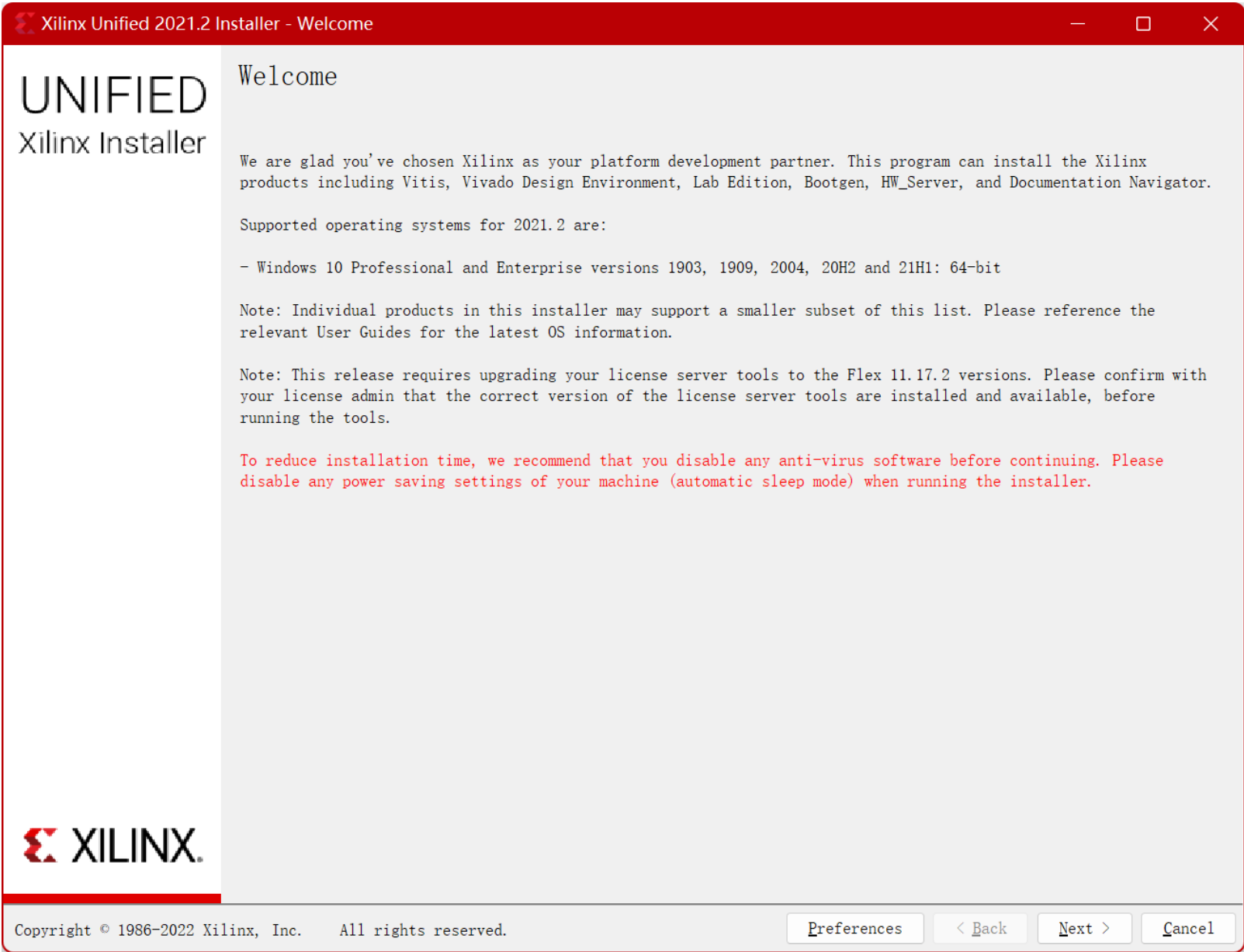
 Xilinx_Unified_2021.2_1021_0703_Win64.exe

- Linux下安装包

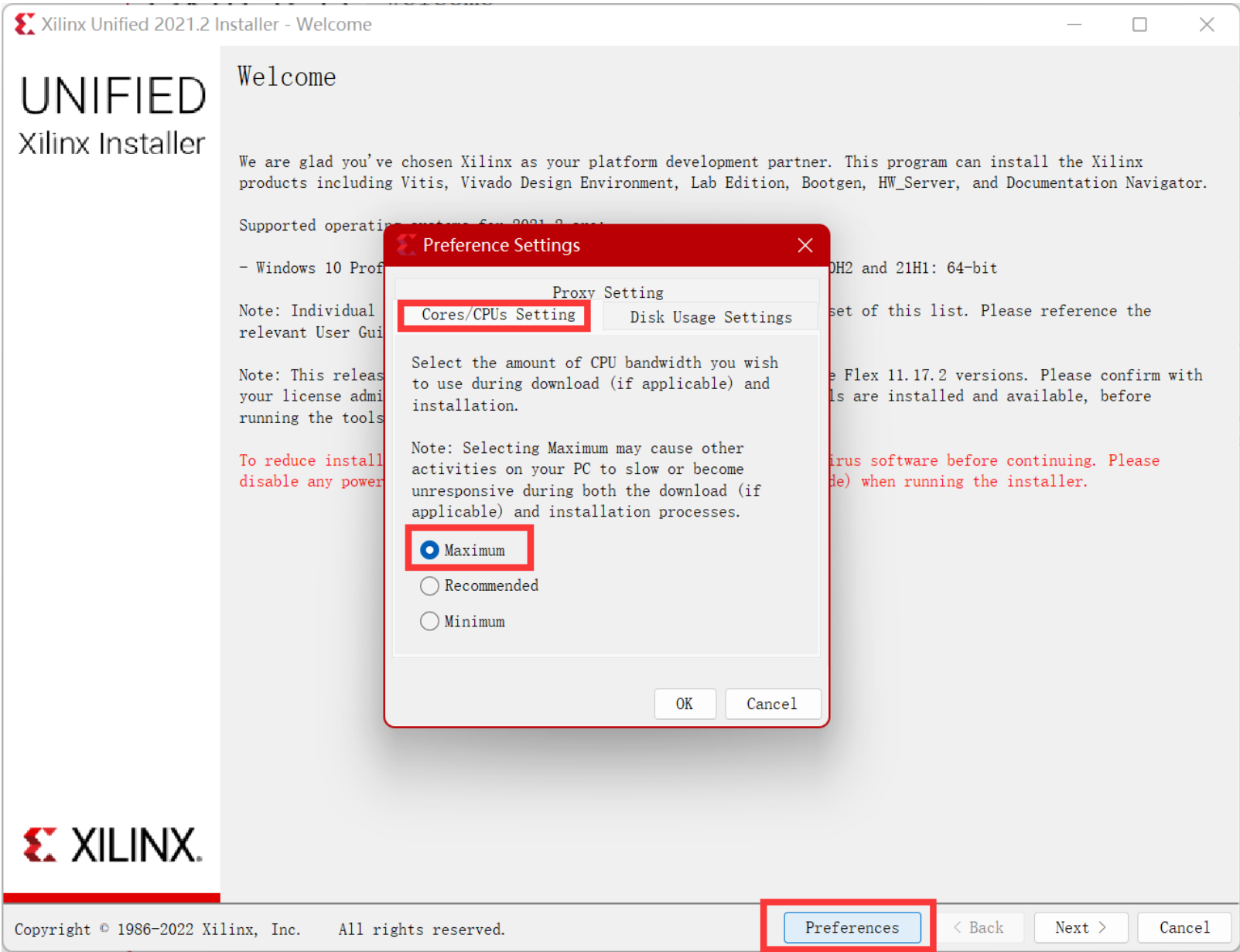
 Xilinx_Unified_2021.2_1021_0703_Lin64.bin

四、安装（保持网络畅通）

1. 运行安装程序



2. 更改下载时CPU设置




点击Next。

3. 登录

输入你注册的账户。

Xilinx Unified 2021.2 Installer - Select Install Type

Select Install Type



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

User Authentication

Please provide your Xilinx 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 Now

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

☐ Download Image (Install Separately)

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.

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Next >

Cancel


点击Next。

4. 勾选安装组件

勾选**Vitis**，千万莫勾错了。

Xilinx Unified 2021.2 Installer - Select Product to Install

Select Product to Install



Select a product to continue installation. You will be able to customize the content in the next page.

☒ Vitis

Installs Vitis Core Development Kit for embedded software and application acceleration development on Xilinx platforms. Vitis installation includes Vivado Design Suite. Users can also install Vitis Model Composer to design for AI Engines and Programmable Logic in MATLAB and Simulink.

☐ Vivado

Includes the full complement of Vivado Design Suite tools for design, including C-based design with Vitis High-Level Synthesis, implementation, verification and device programming. Complete device support, cable driver, and Document Navigator included. Users can also install Vitis Model Composer to design for AI Engines and Programmable Logic in MATLAB and Simulink.

☐ BootGen

Installs Bootgen for creating bootable images targeting Xilinx SoCs and FPGAs.

☐ Lab Edition

Installs only the Xilinx Vivado Lab Edition. This standalone product includes the Vivado Device Programmer and Vivado Logic Analyzer tools.

☐ Hardware Server

Installs hardware server and JTAG cable drivers for remote debugging.

☐ Documentation Navigator (Standalone)

Xilinx Documentation Navigator (DocNav) provides access to Xilinx technical documentation both on the Web and on the Desktop. This is a standalone installation without Vivado Design Suite.

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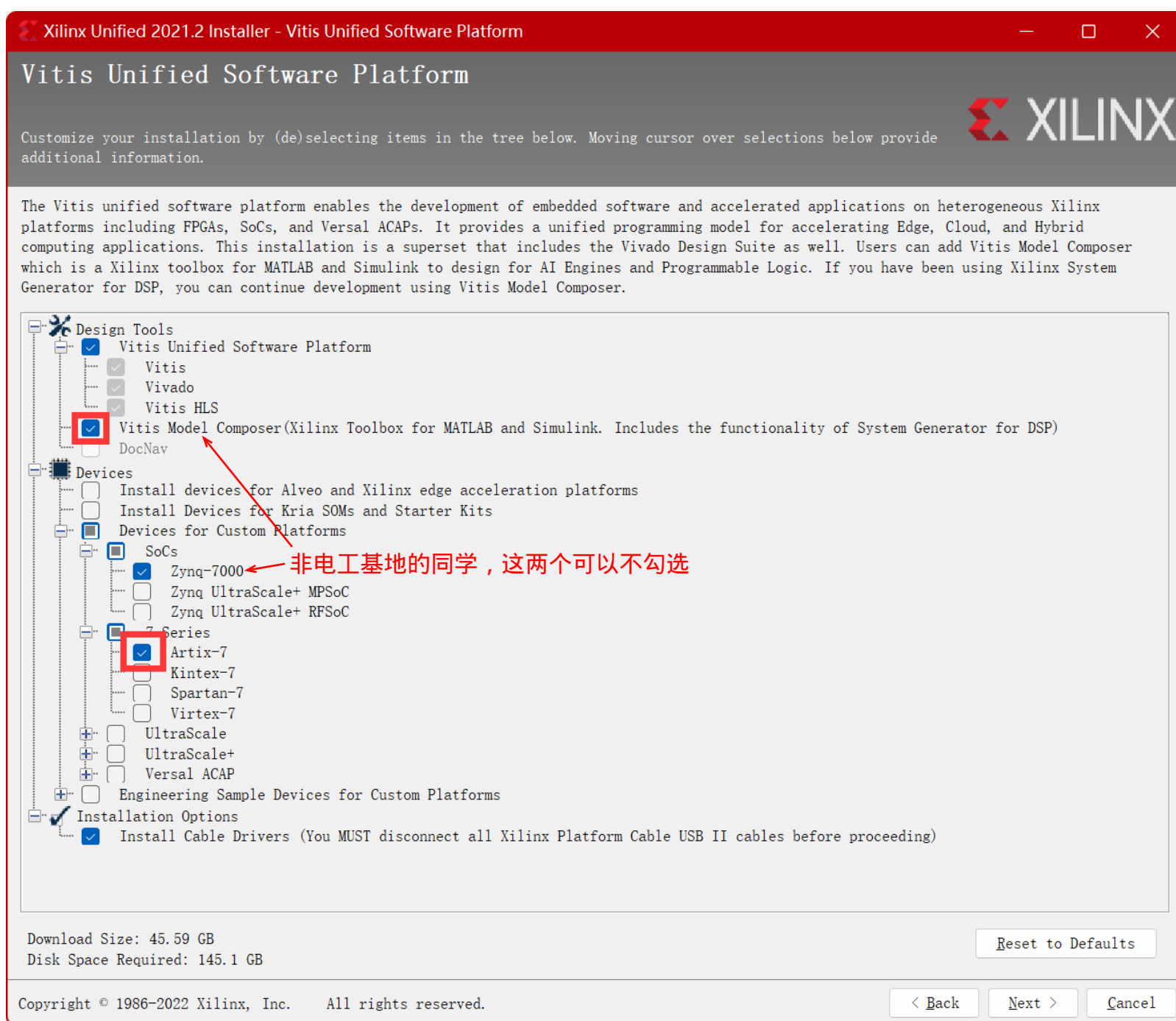
Next >

Cancel

点击Next。

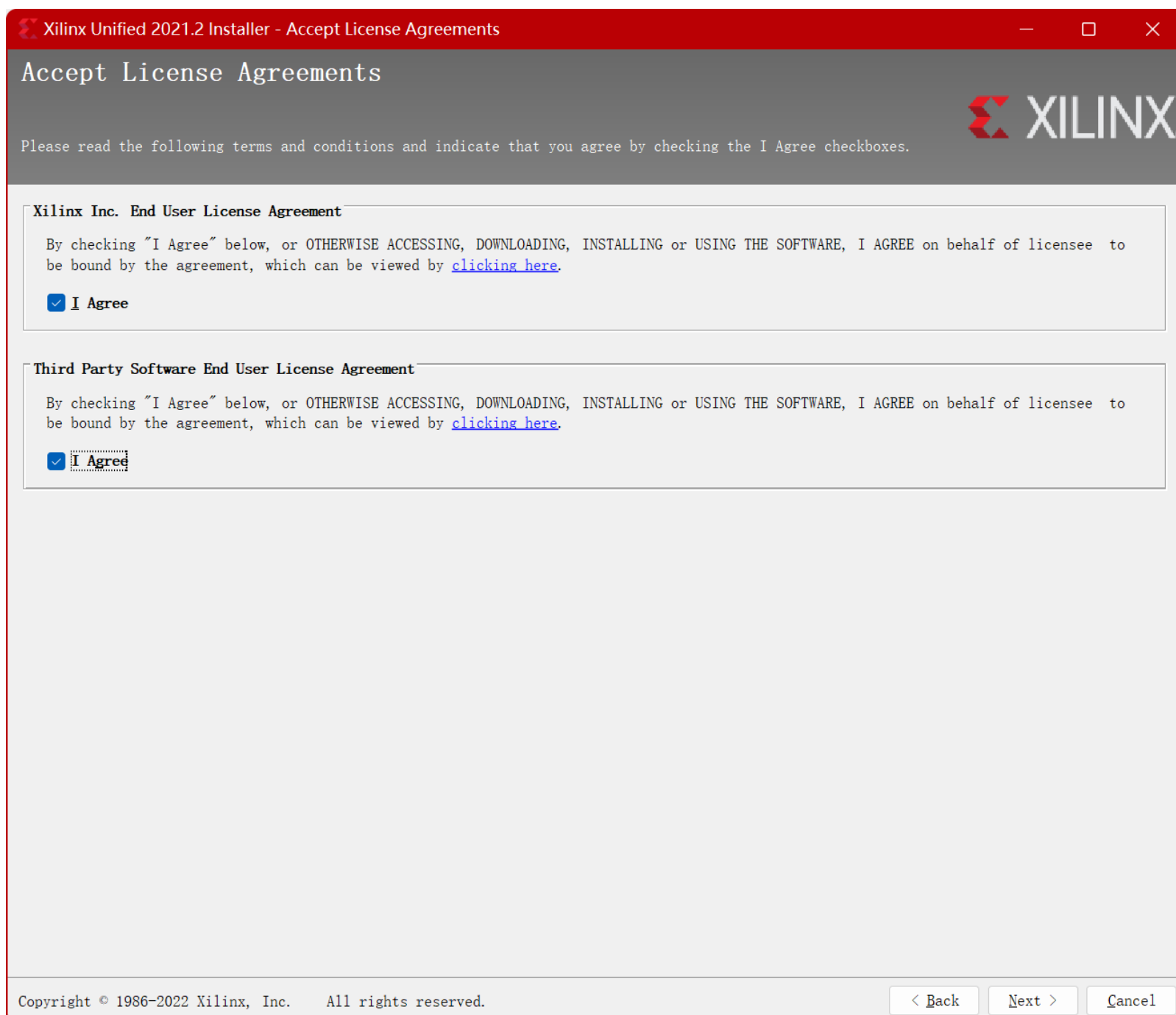
5. 勾选器件支持

仅需勾选图中勾上的这些，其中红框框出来的根据自身需要来选择。Artix-7可能在你们的数电实验课上会用到。



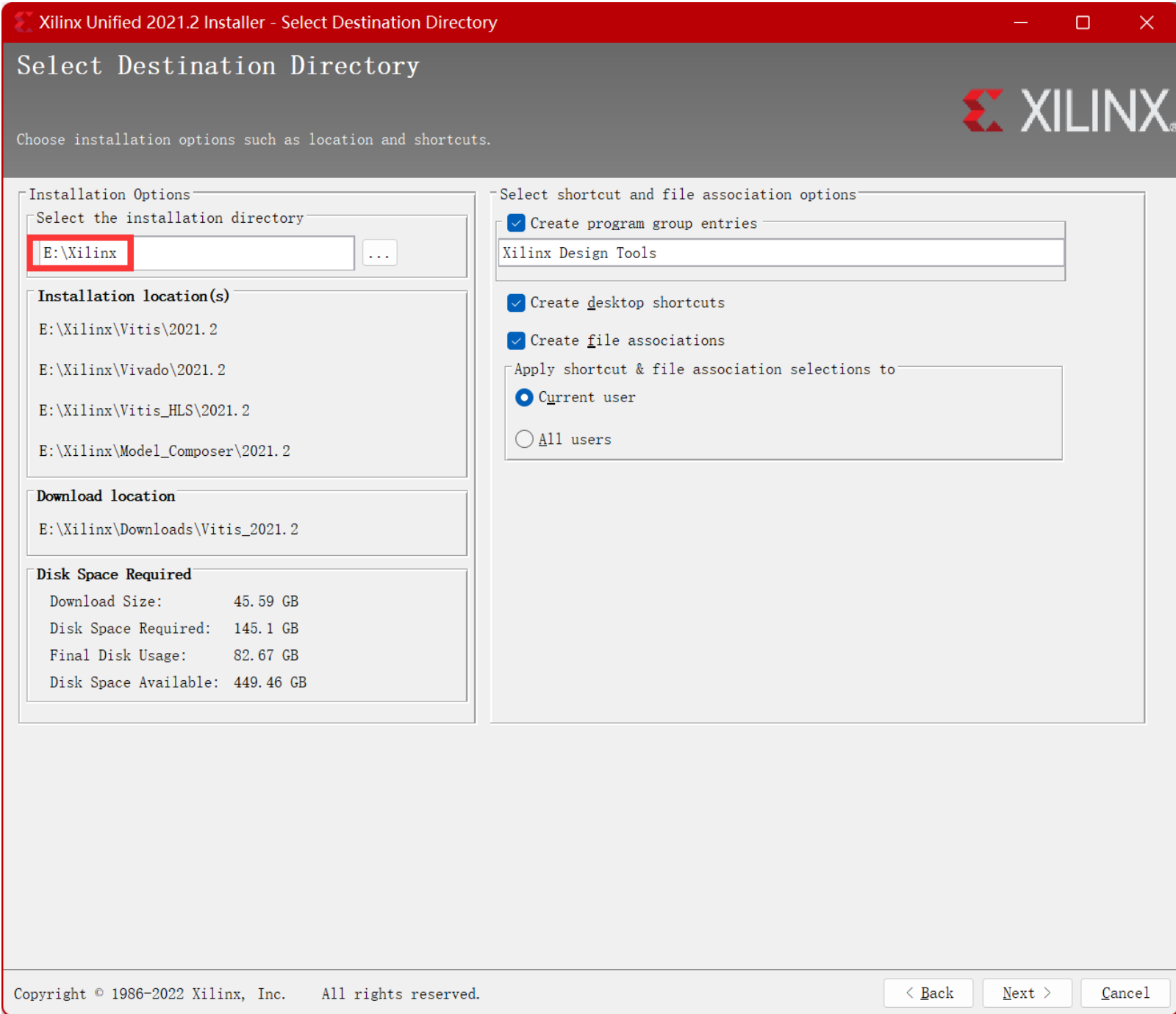
点击Next。

6. 同意条款



点击Next。

7. 选择安装位置

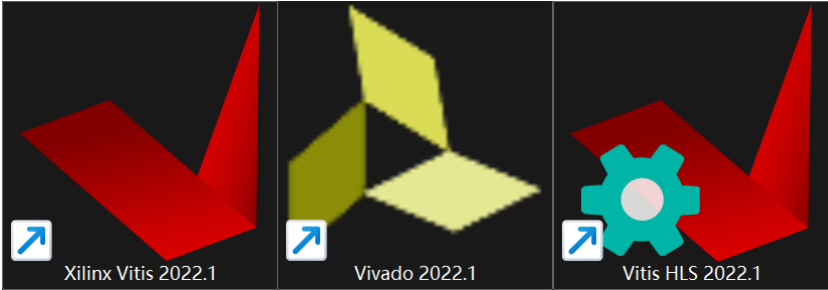


点击Next。自动创建文件夹并开始下载安装。

8. 等待安装完成

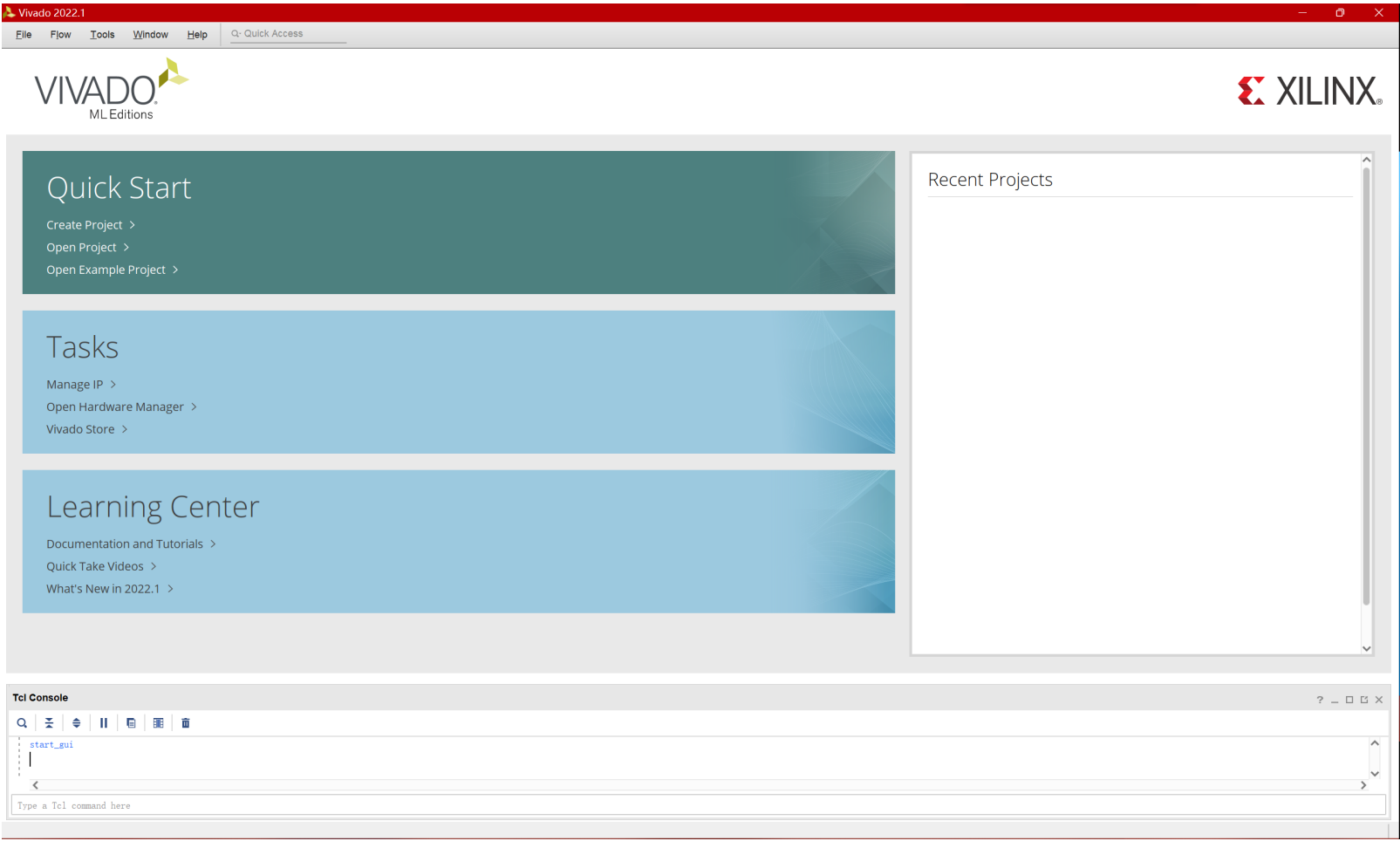
随后进入漫长的等待安装环节，此时我们可以泡一杯咖啡，悠闲地等待它下载安装完成。

安装结束后桌面会出现Vitis、Vivado等多个图标。



五、结束

双击Vivado图标，打开后如图。



六、推荐资料

- [正点原子](#)
 - 资料比较旧，使用的Vivado都是2018年的版本，但是资料比较齐全。
- [小梅哥](#)
 - FPGA老牌培训机构，如果想深入学习FPGA开发的，可以看他的资料。
- [FPGADesigner《学会Zynq》系列目录与传送门](#)
- [你好，FPGA——记录我的FPGA学习历程](#)