

Vivado Installation on Linux

Supported Platforms

Vivado is only available for amd64 architecture. Officially supported Linux distributions include Ubuntu 22.04 LTS, Red Hat Enterprise Linux 8.5, and SUSE Enterprise Linux 15.4. Vivado works fine on more recent versions of Ubuntu and other Linux distributions, including Debian, Fedora, and Arch Linux, though minor tweaks may be required. A minimum of about 60 GB of free disk space is required for the installation.

Download Vivado

Download the latest version of **Vivado™ Edition** Self Extracting Web Installer from:
<https://www.xilinx.com/support/download/index.html/content/xilinx/en/downloadNav/vivado-design-tools.html>

At the time of writing this guide, the latest available version is 2024.1.

<https://www.xilinx.com/support/download/index.html/content/xilinx/en/downloadNav/vivado-design-tools/2024-1.html>

Choose: **AMD Unified Installer for FPGAs & Adaptive SoCs 202x.x Linux Self Extracting Web Installer.**

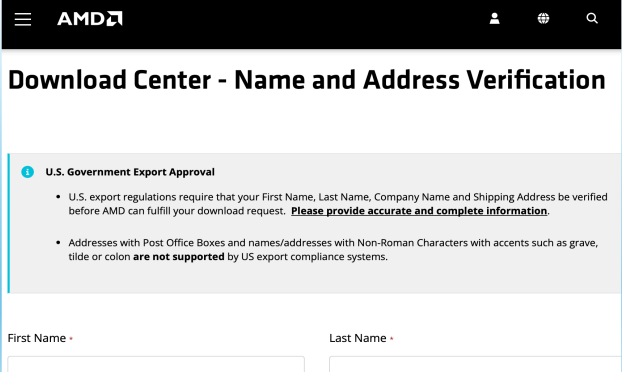
📄 AMD Unified Installer for FPGAs & Adaptive SoCs 2024.1: Linux Self Extracting Web Installer (BIN - 291.7 MB)

MD5 SUM Value : 8b0e99a41b851b50592d5d6ef1b1263d

Direct link:

https://www.xilinx.com/member/forms/download/xef.html?filename=FPGAs_AdaptiveSoCs_Unified_2024.1_0522_2023_Lin64.bin

You need to register an account and sign into your account to be able to download. You also may need to fill out a name and address verification form.



The screenshot shows the AMD Download Center interface. At the top is the AMD logo and navigation icons. The main heading is "Download Center - Name and Address Verification". Below this is a section titled "U.S. Government Export Approval" with two bullet points: "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." and "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." At the bottom, there are input fields for "First Name" and "Last Name".

Install Dependencies

On Ubuntu/Debian:

```
> sudo apt install libtinfo5 libncurses5 libncursesw5  
> sudo apt install libglib2.0-dev libgtk2.0-dev zlib1g  
> sudo apt install python3-dev python3-pip python3-gi  
> sudo apt install default-jre default-jdk libswt-gtk-4-jni  
> sudo apt install locales tar gzip gcc g++ make build-essential
```

Prepare the Installation Path

Create a directory for the installation and add write access for the Linux user running the installer. Make sure you have at least 60 GB of free disk space available.

```
> sudo mkdir -p /opt/Xilinx  
> sudo chown -R $USER /opt/Xilinx
```

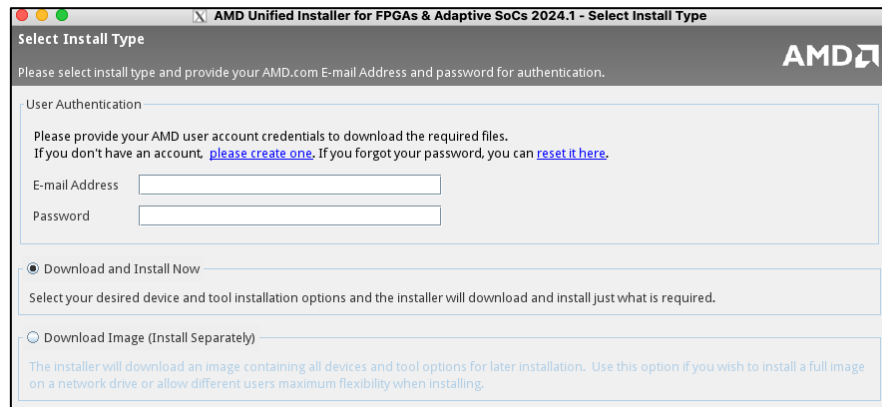
Run The Installer

Open a terminal and go to the folder where you have downloaded the installer. Run the installer:

```
> sh FPGAs_AdaptiveSoCs_Unified_2024.1_0522_2023_Lin64.bin
```

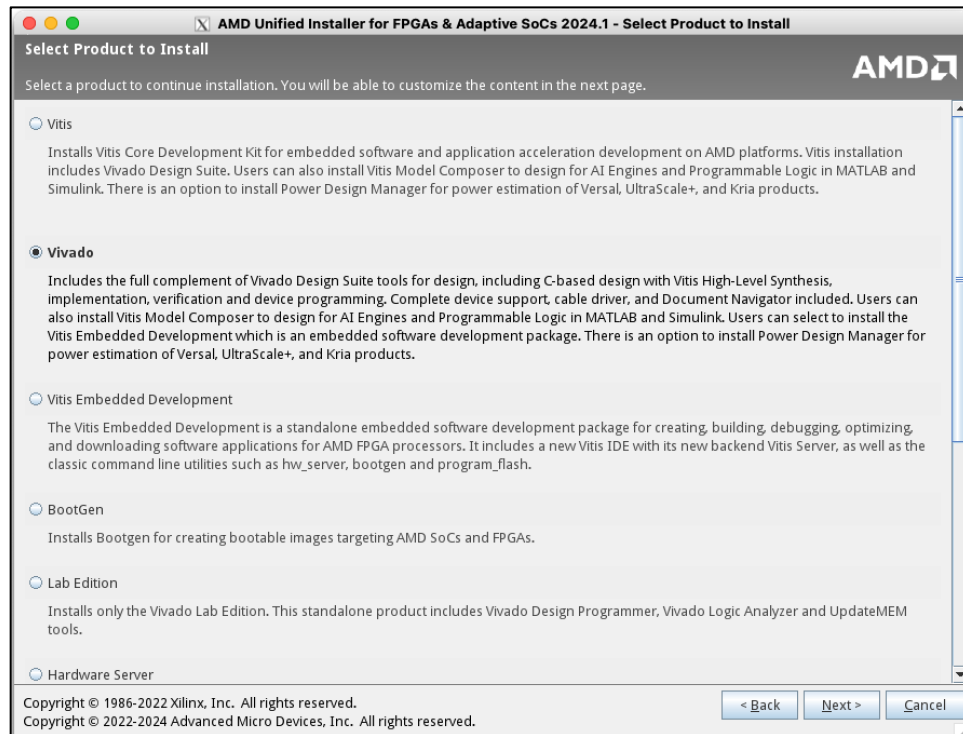
You may be presented with a warning message if your Linux distribution or its version is not on the officially supported list of operating systems. In most cases, you can safely click 'Next'.

Enter your AMD login credentials on the following page.

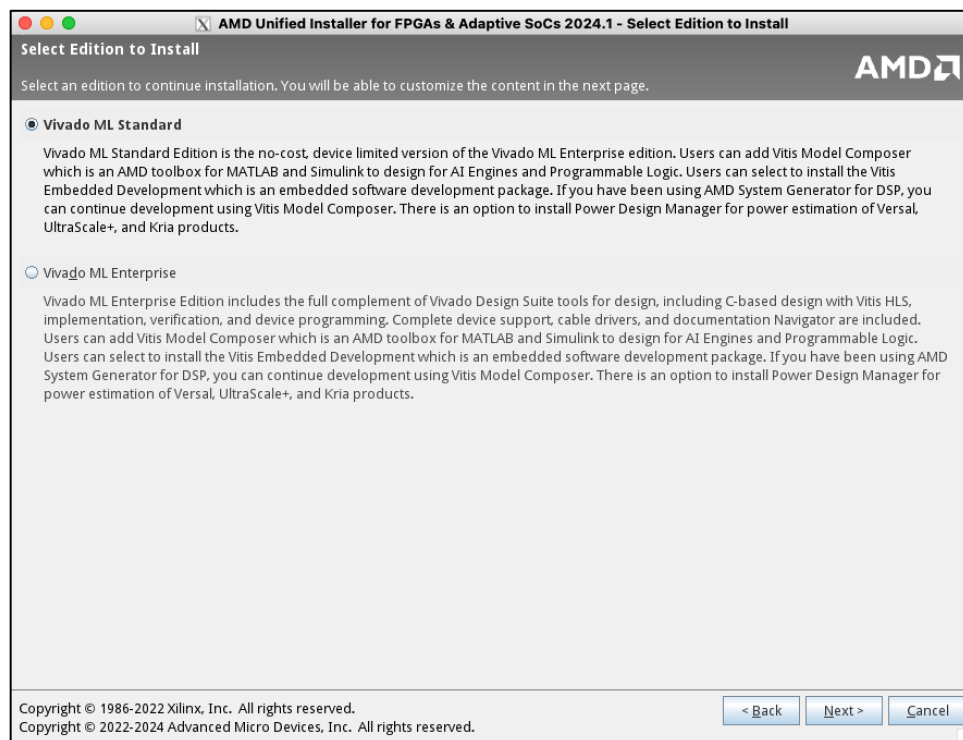


The screenshot shows a window titled "AMD Unified Installer for FPGAs & Adaptive SoCs 2024.1 - Select Install Type". The window has a dark header bar with the AMD logo on the right. Below the header, the text "Select Install Type" is displayed. A message states: "Please select install type and provide your AMD.com E-mail Address and password for authentication." The main content area is divided into two sections. The first section, "User Authentication", contains a message: "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](#)." Below this are two input fields: "E-mail Address" and "Password". The second section contains two radio button options. The first option, "Download and Install Now", is selected. Below it is a message: "Select your desired device and tool installation options and the installer will download and install just what is required." The second option, "Download Image (Install Separately)", is unselected. Below it is a message: "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."

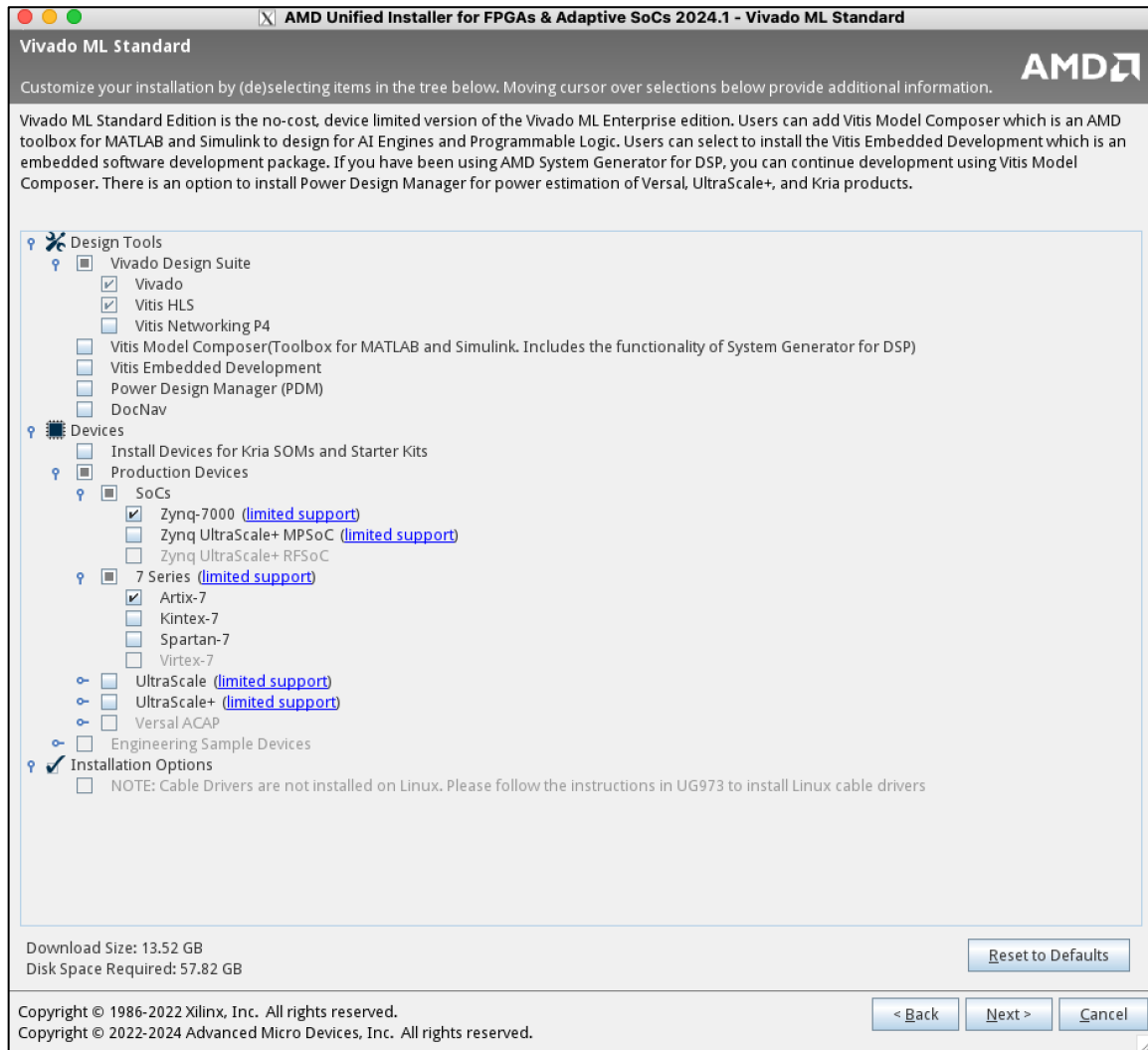
Choose **Vivado** as the product to be installed.



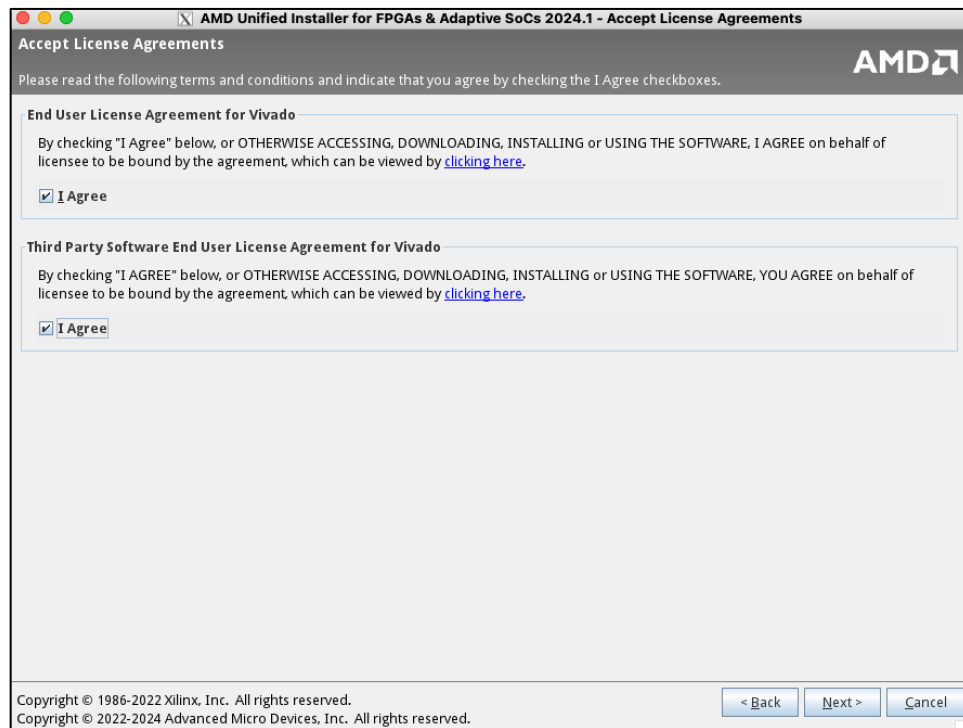
Select **Vivado ML Standard** edition:



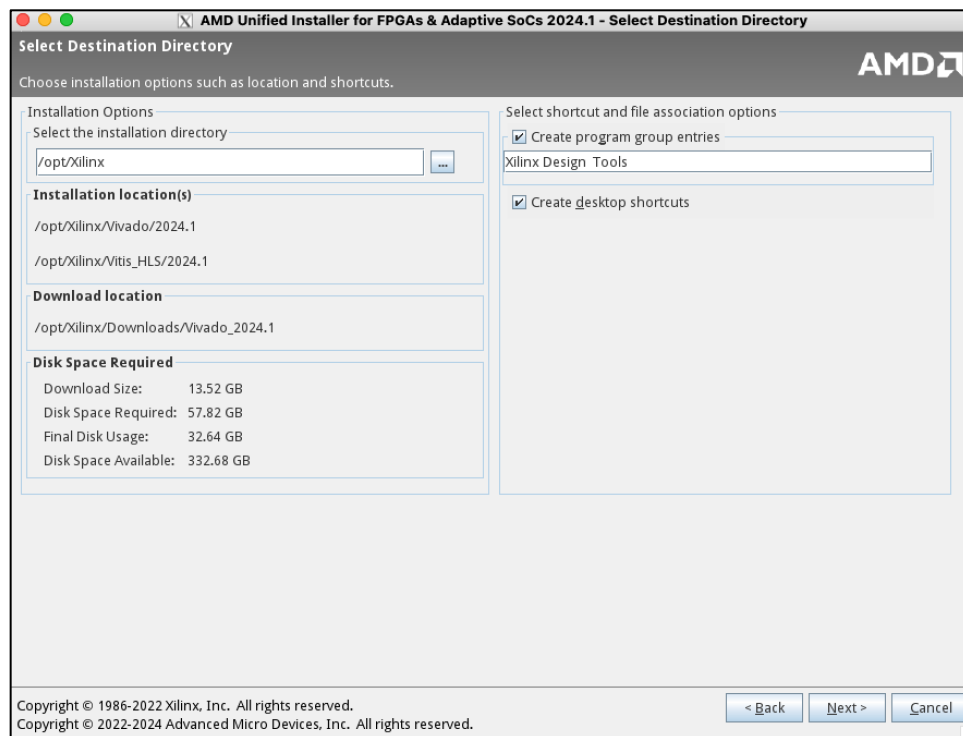
Customize the installation by selecting only the tools Vivado and Vitis (and possibly DocNav). You only need Artix-7 devices for this course.



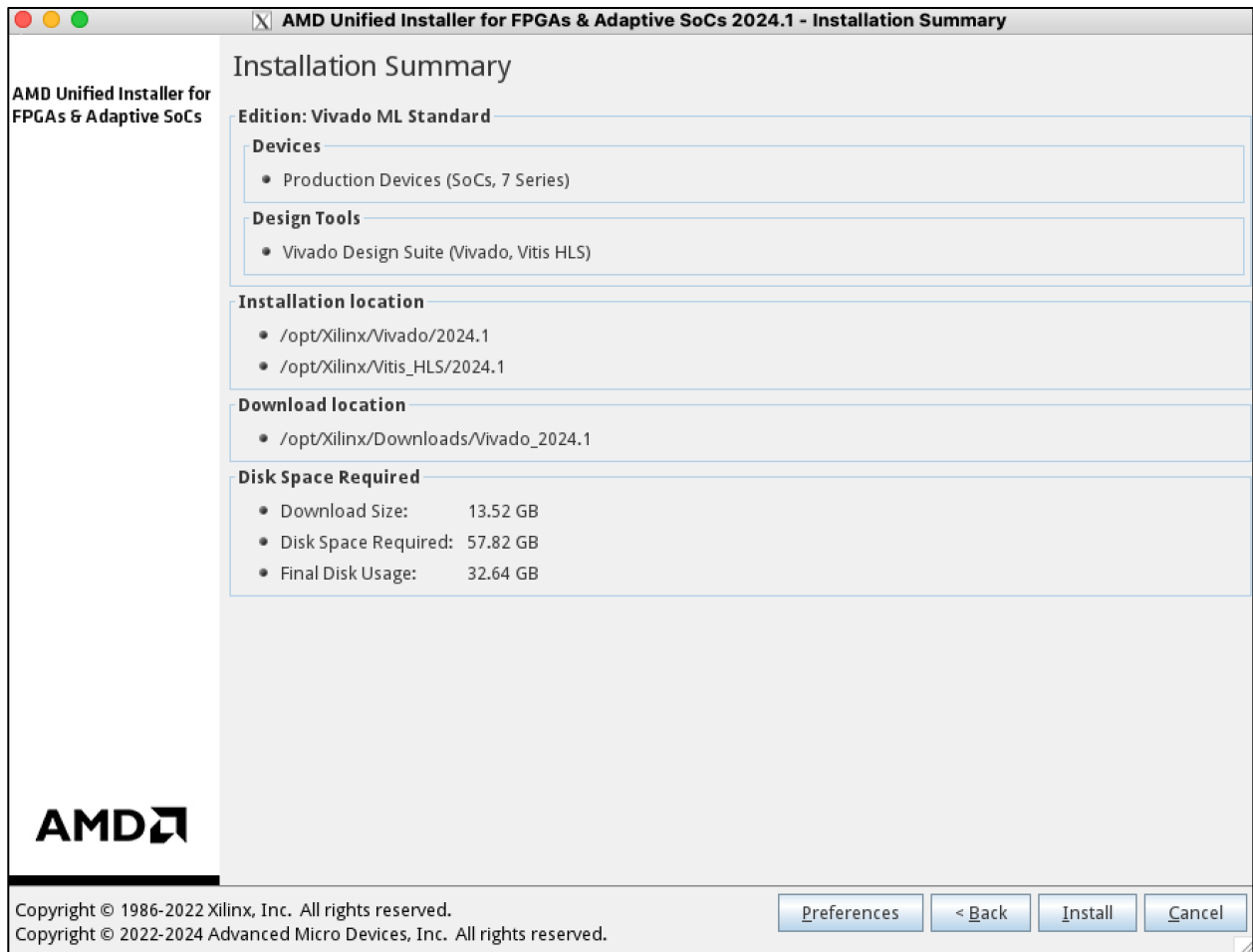
Accept the license agreements:



Select the destination directory:



After clicking 'Install,' the installation will begin.



For more details please see:

<https://docs.amd.com/r/en-US/ug973-vivado-release-notes-install-license/Download-and-Installation>