

Accelerating Applications with the Vitis Unified Software Environment 2019.2 Training

Computer Requirements

The development environment for this course requires a substantial host PC to avoid undesired side-effects. It is recommended to use a Windows host PC with at least an Intel® Core™ i7 quad-core processor (or equivalent) and **16GB of memory** (32GB for best results). You will need **~300GB hard drive space** to facilitate all the downloads and the final installations. Note: A registered xilinx.com user ID is required.

Please note a few hours are needed to facilitate the downloads and installations. We encourage you to complete these steps as early as possible before the class start date in order to address any technical challenges that may arise.

Step 1

- Download and extract the Accelerating Applications with the Vitis Unified Software Environment 2019.2 lab file archives to **C:\training** on your host PC. It is important to maintain this directory location and structure as some of the tools and project files use absolute file locations. Ignoring this warning will lead to erratic tool behavior.
 - o [AI-ACCEL-2019.2 Lab Files](#)

Step 2

- Download and extract the Ubuntu virtual machine (VM) environment appliance.

The lab environment for this embedded course is delivered as a VM appliance on a Windows host PC. This VM contains 9 parts and contains a complete host operating system, and all of the associated material necessary to complete the lab exercises. Benefits of this approach include a massively reduced course setup time and a guarantee of a reliable lab environment. Download and extract all 9 .7z files.

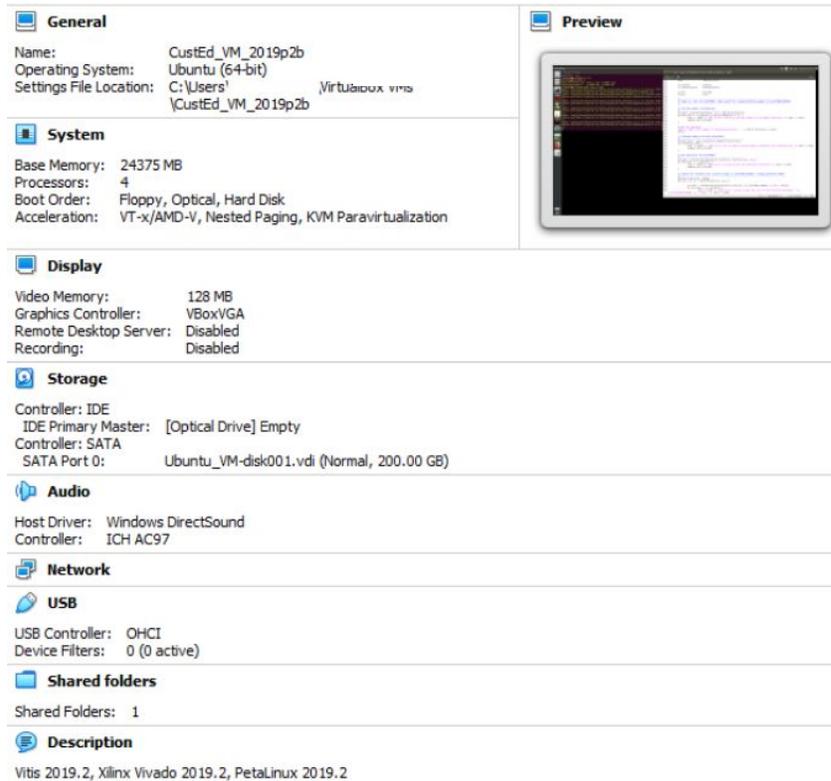
- o [Part 1](#)
- o [Part 2](#)
- o [Part 3](#)
- o [Part 4](#)
- o [Part 5](#)
- o [Part 6](#)
- o [Part 7](#)
- o [Part 8](#)
- o [Part 9](#)

Step 3

- Download and install the 6.0.16 VM manager and the VirtualBox Extension Pack.
 - o [Oracle VirtualBox Manager](#)

Step 4

- Import the VirtualBox Ubuntu image and adjust optional settings.
 - a. Launch the **Oracle VM VirtualBox Manager** application.
 - b. Select **File > Import Appliance**
 - c. Browse to the folder where the image was extracted to from above and select the **Ubuntu_VM.ova**
 - d. Make sure that the virtual machine is named **Ubuntu_VM**
 - e. Click **Import**. This will take approximately 5 minutes.
 - f. (Optional for slower host PCs) Select **System** in the main Settings left pane then the **Acceleration** tab. Change the **Paravirtualization Interface** to **None**.
 - g. Click **OK** in the Settings window. You should see something like the figure below.



h. Start the **Ubuntu_VM** virtual machine.

Step 5

- License Vitis using the Vivado License Manager
 - a. Double-click the Vivado Design Suite icon to open the Vivado Design Suite
 - b. Select Help > Manage License to open the Vivado License Manager (VLM).
 - c. Select Obtain License from the navigation panel on the left.
 - d. Select the 30 Day Trial License
 - e. Click Connect Now to connect to the Xilinx license server.
 - A web browser window opens. Follow the steps to generate your trial license.
 - f. Open Vitis and check that it runs.

Step 6

- Create a Nimbix account to run the design on the Alveo™ U200 board in the Nimbix Cloud.

If you do not already have one:

- Register at www.nimbix.net/alveotrial
- You will then receive an email with your Trial Coupon Code
- Follow the link in the email to the platform where you finalize your registration by setting up payment and entering your Trial Coupon Code
- With your Trial Coupon Code, you will receive up to 100 hours of free time on the Nimbix Cloud using Xilinx tools and accelerators
- Registering in Nimbix Cloud will take approximately 5 minutes