차세대 반도체 디지털 혁신공유대학 사업단

POLARIS

Vivado Installation Guide

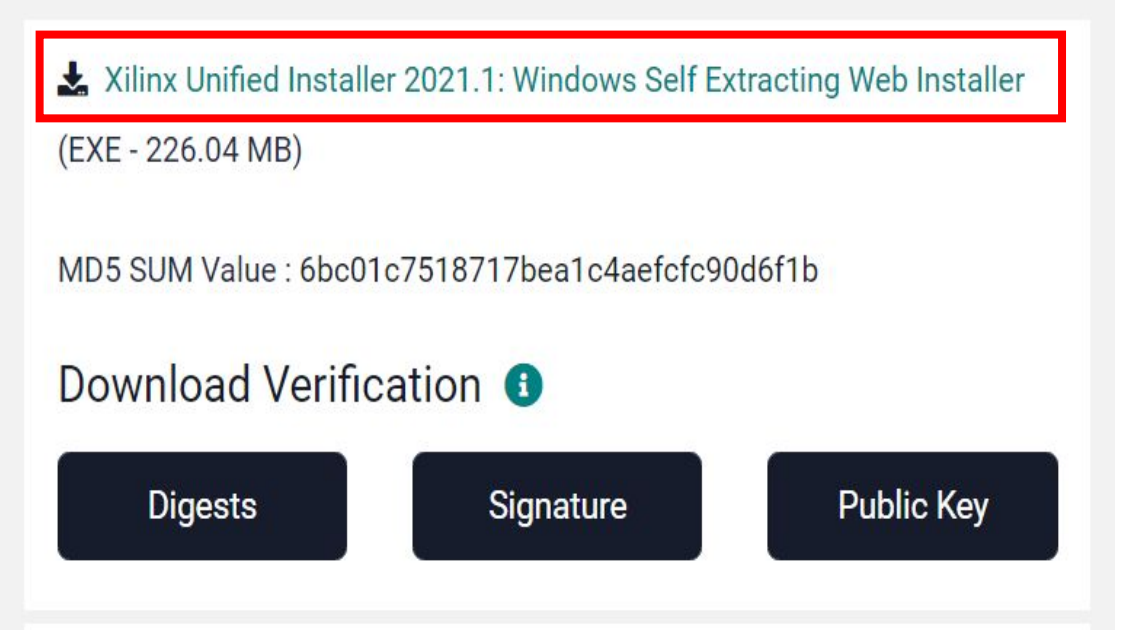
AIX 2024

Xilinx Vivado Design Suite

- Vivado is a tool we can use for **writing, simulating and implementing Verilog HDL projects.**
- This guide will explain how to install vivado, create a simple project and simulate it(windows)

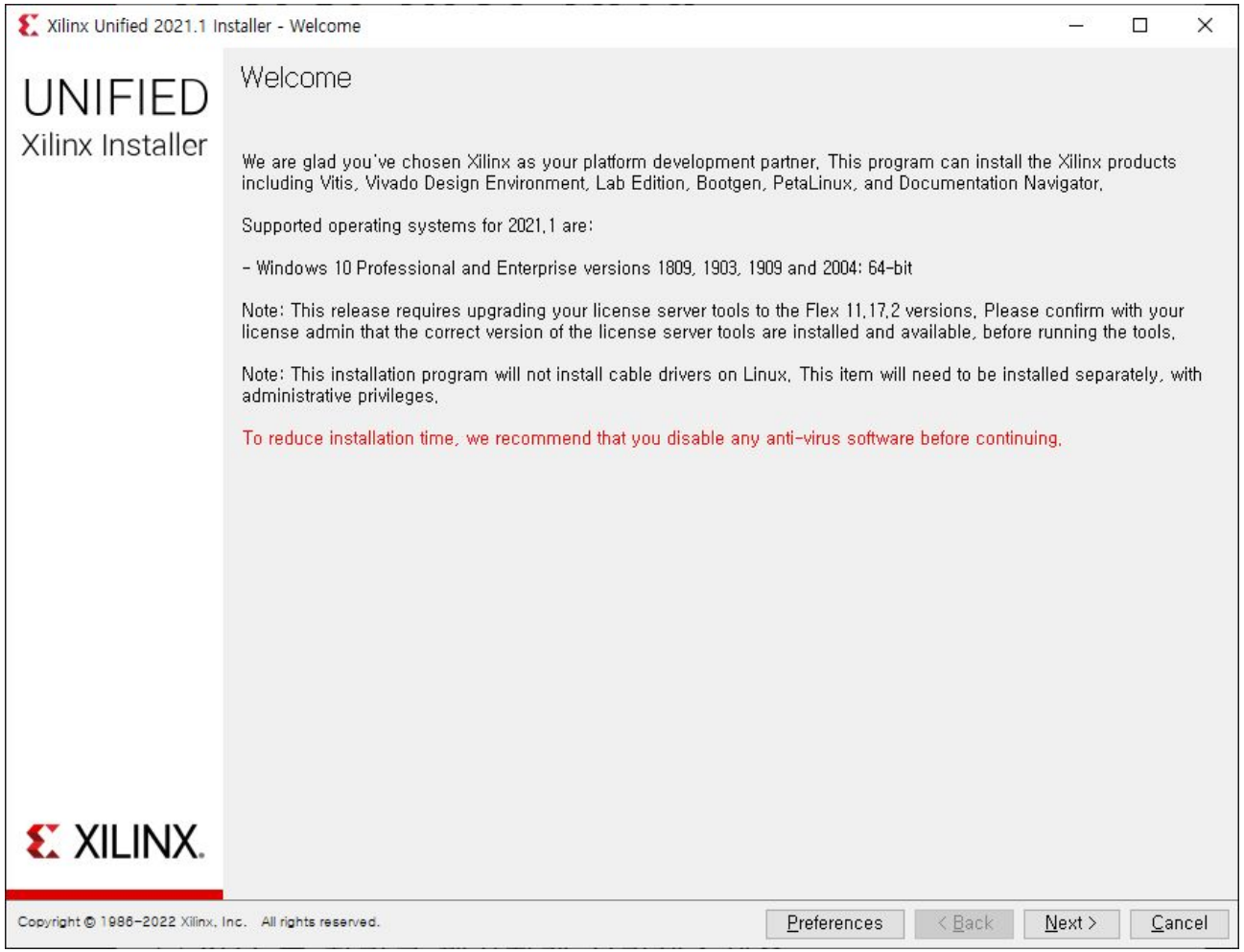
<Download Vivado>

- Visit Xilinx website to download vivado
  - https://www.xilinx.com/support/download.html
- Here, select a version and download
- This tutorial will explain using 2021.1 version
- You have to create a Xilinx account to install Vivado



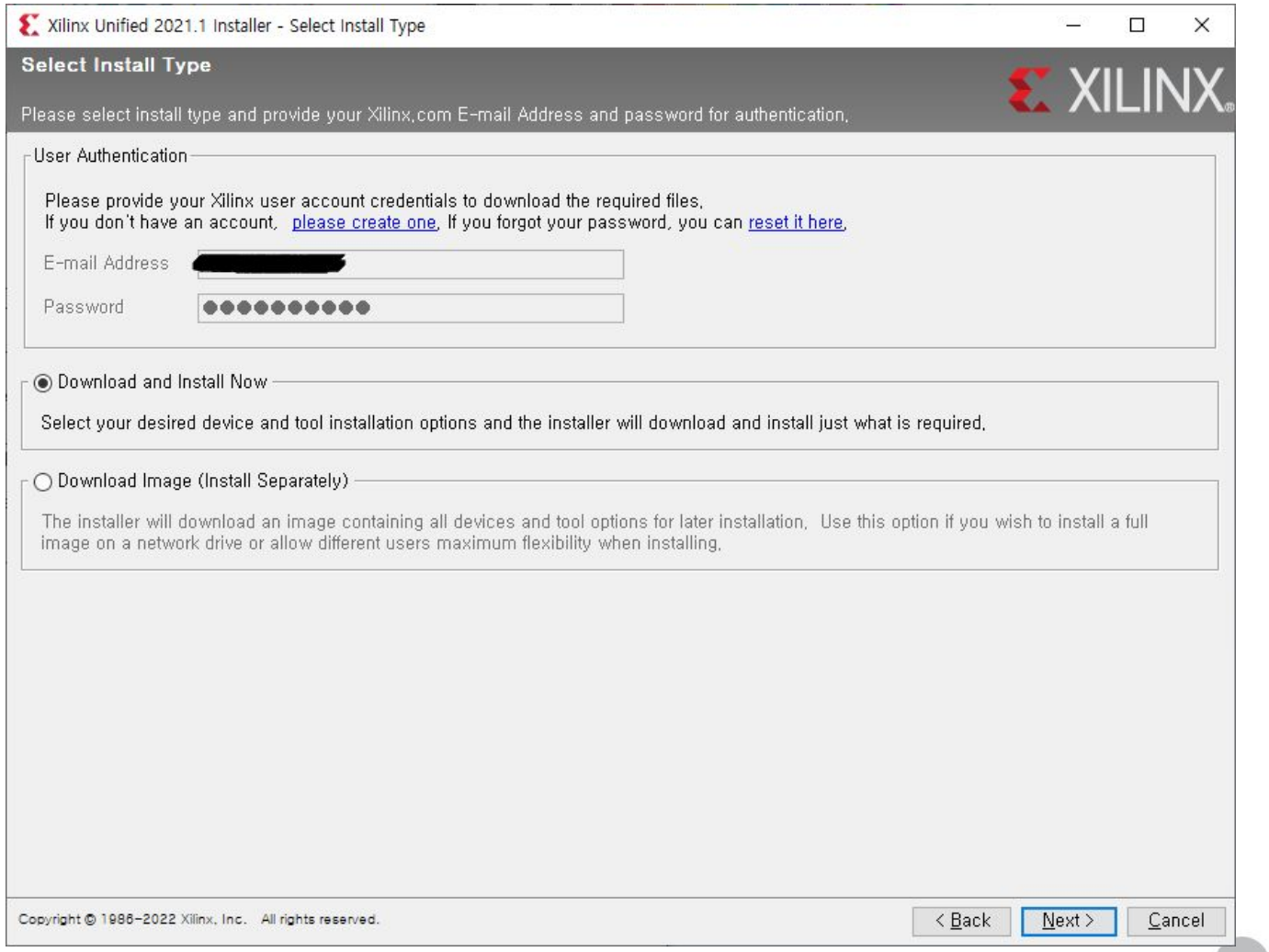
1. Installation

- After downloading, run the downloaded file



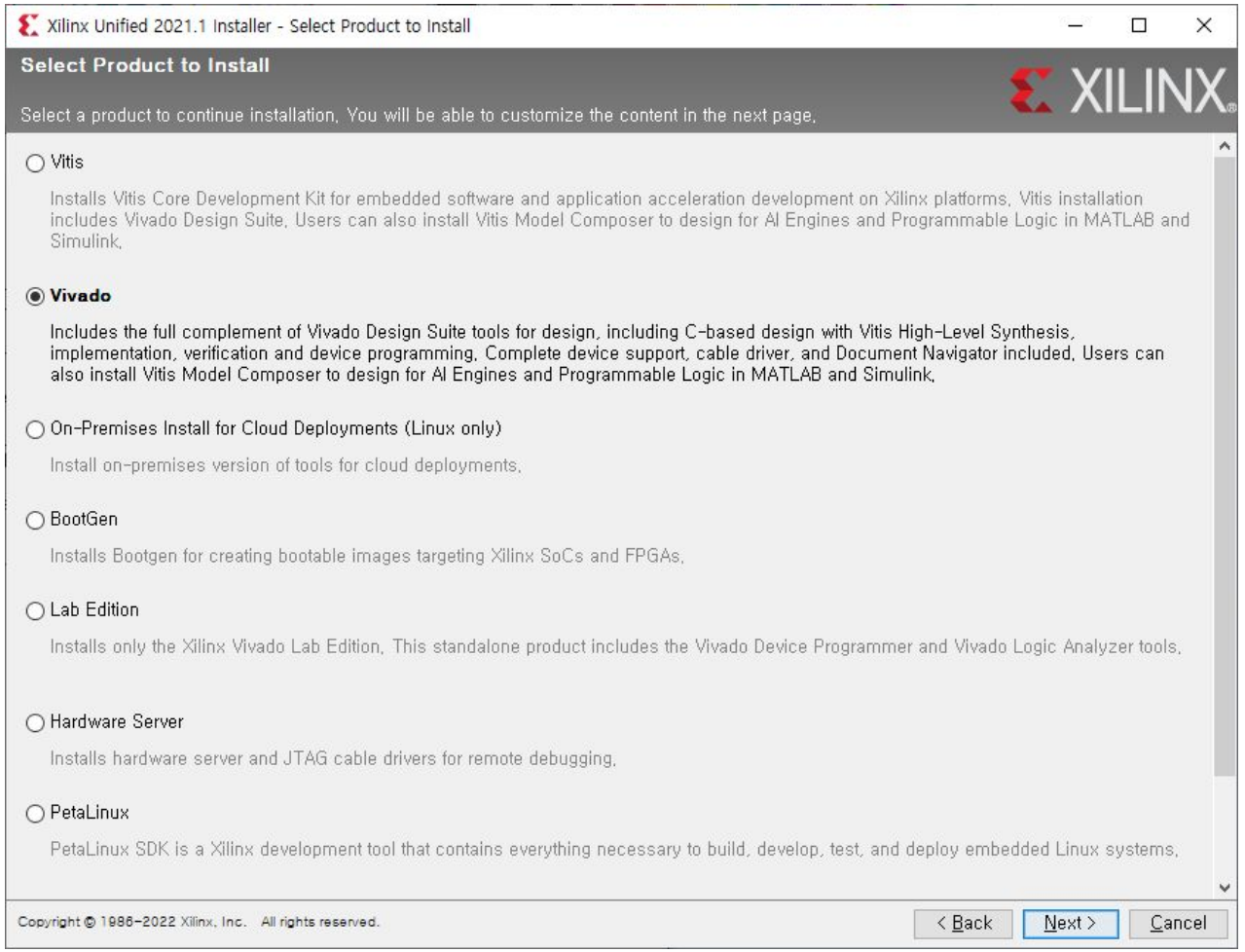
1. Installation

- Enter your Xilinx account
- Select download and install now
- Click next



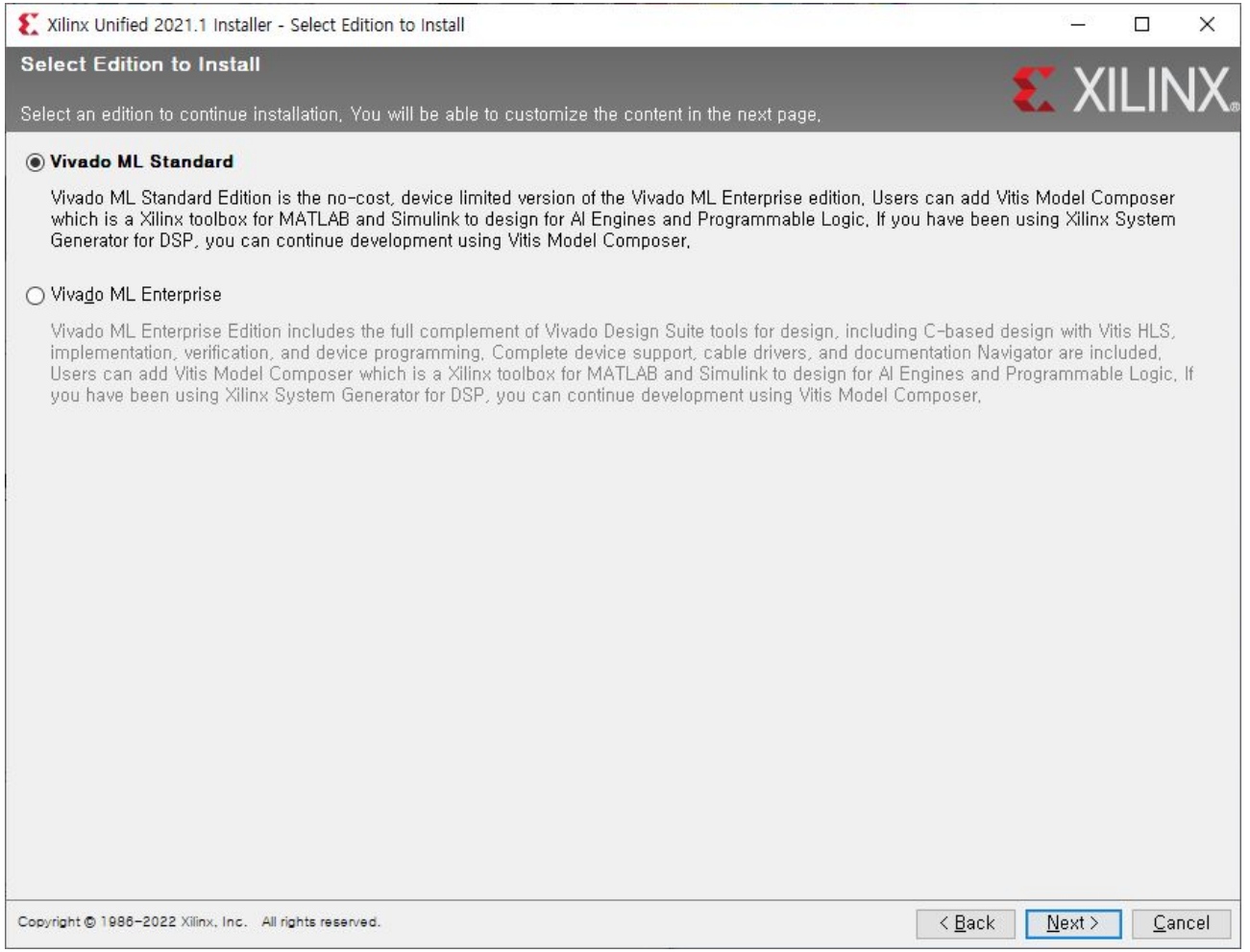
1. Installation

- Select Vivado, click next



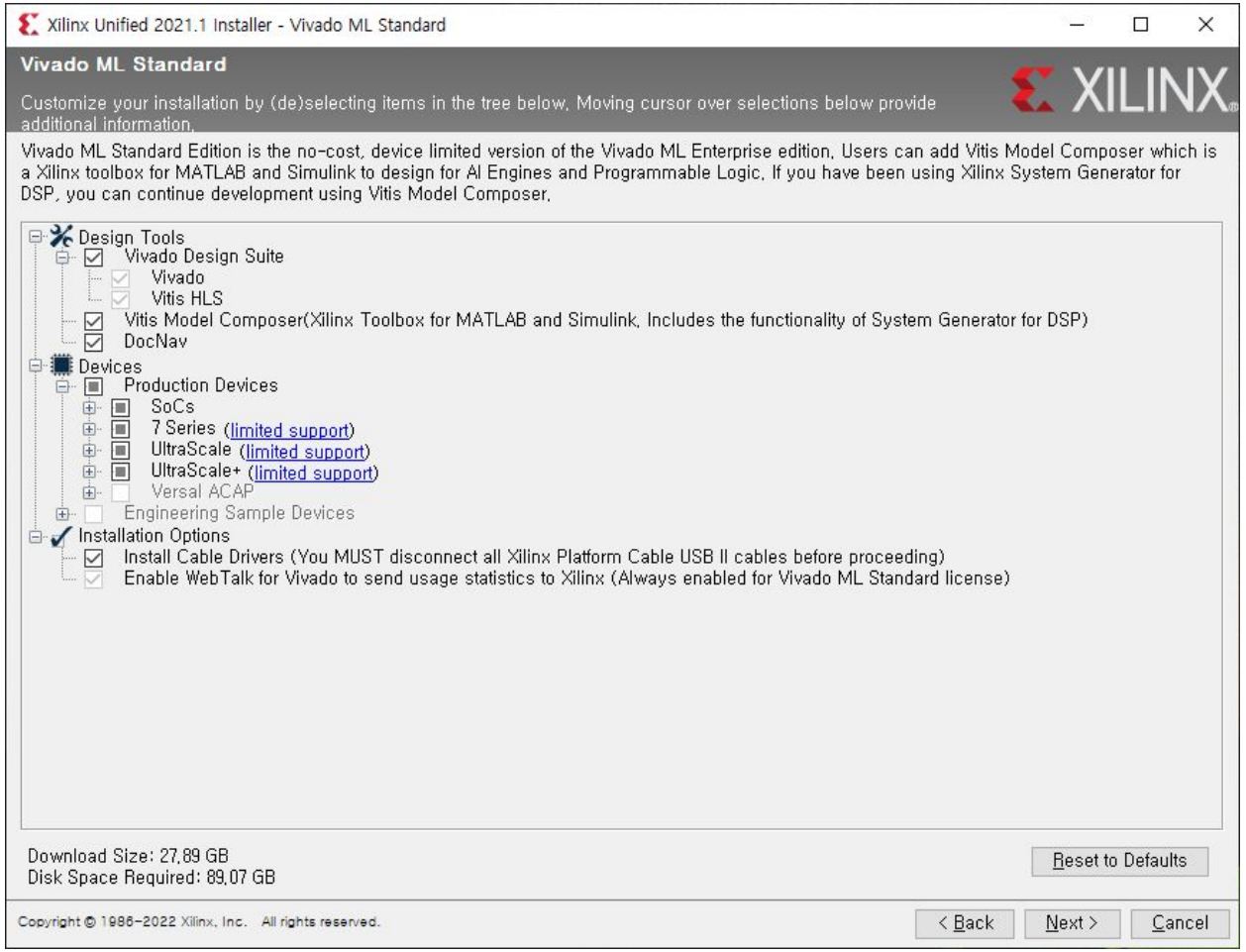
1. Installation

- Select Vivado ML Standard, click next



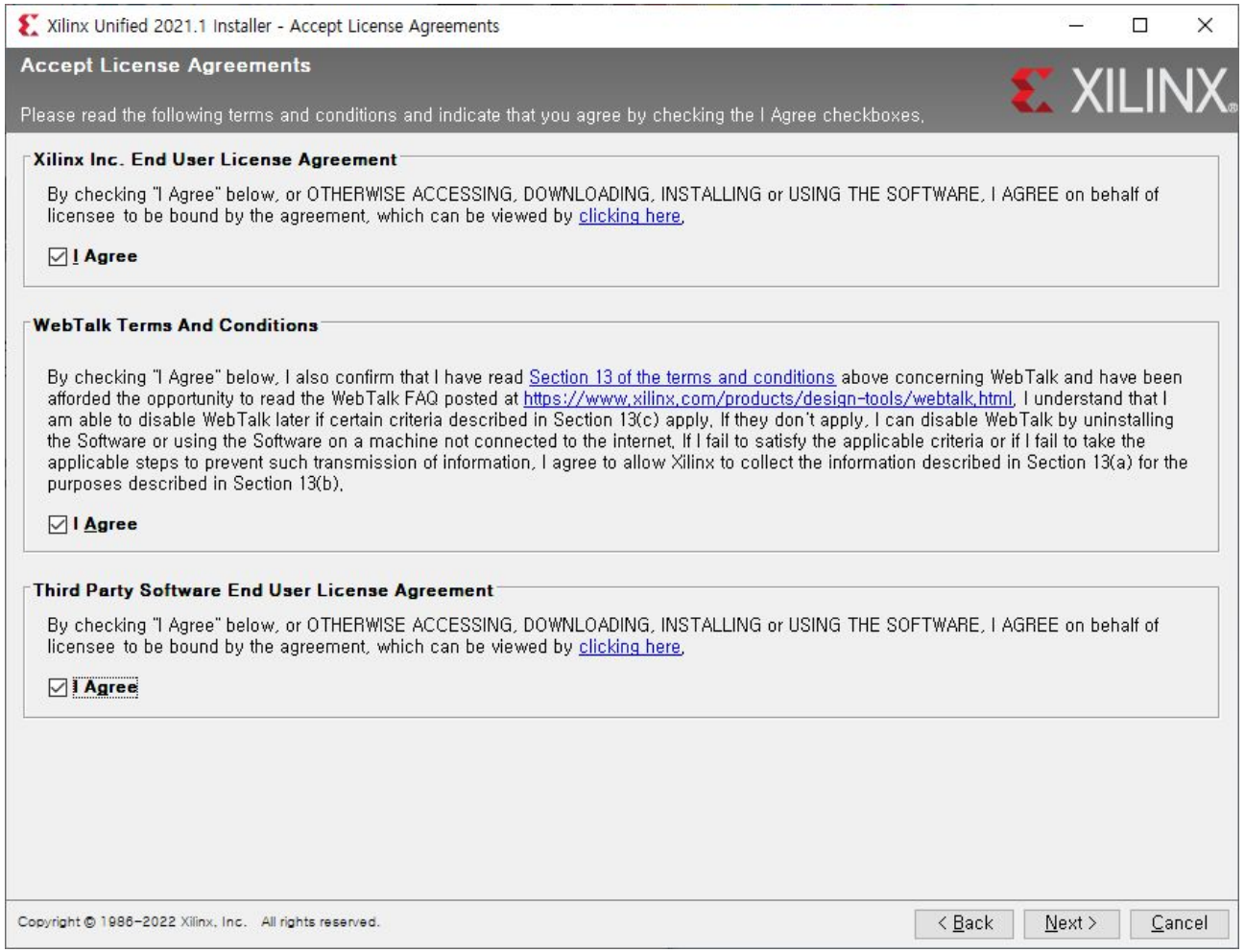
1. Installation

- Click next



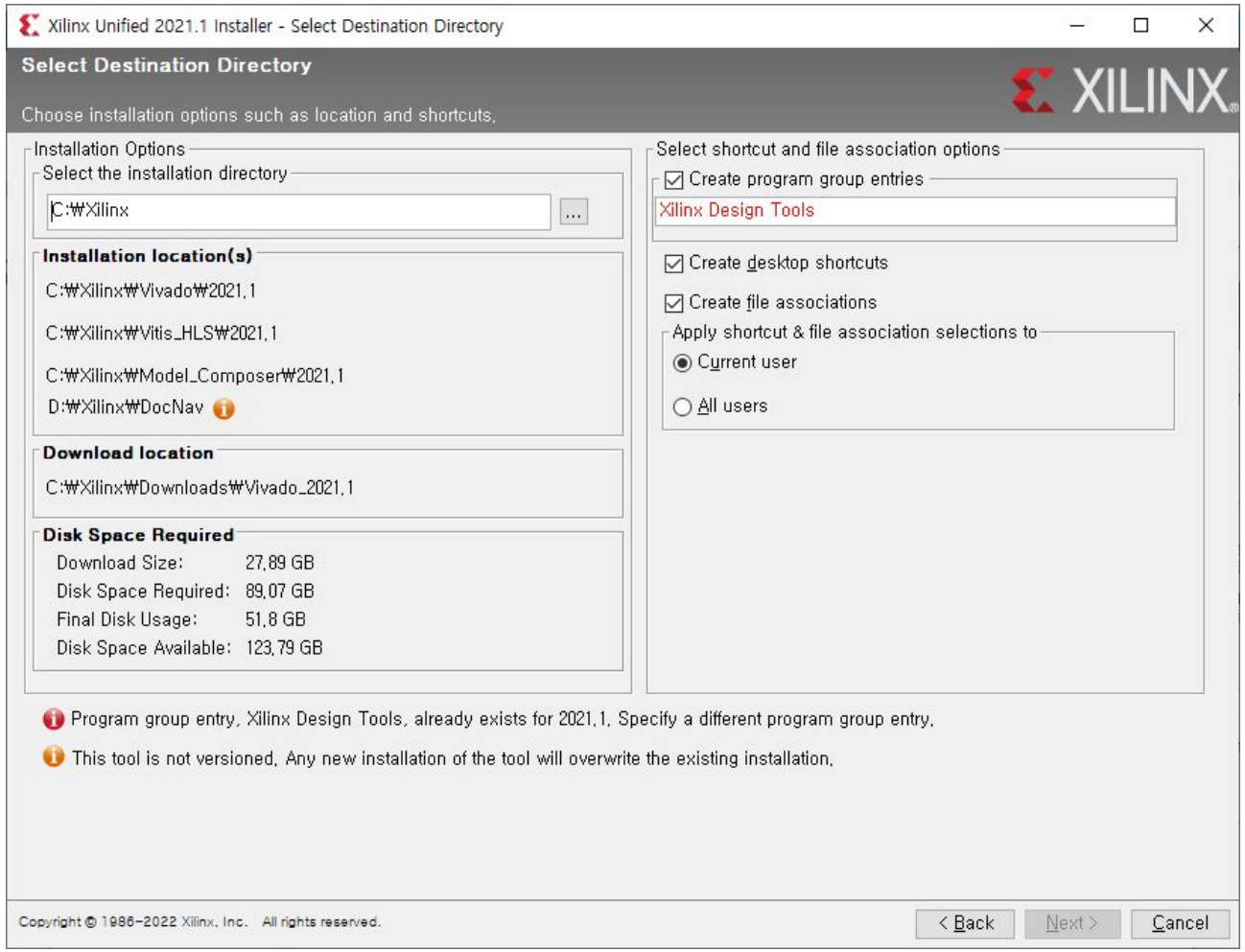
1. Installation

- Select I agree, and click next



1. Installation

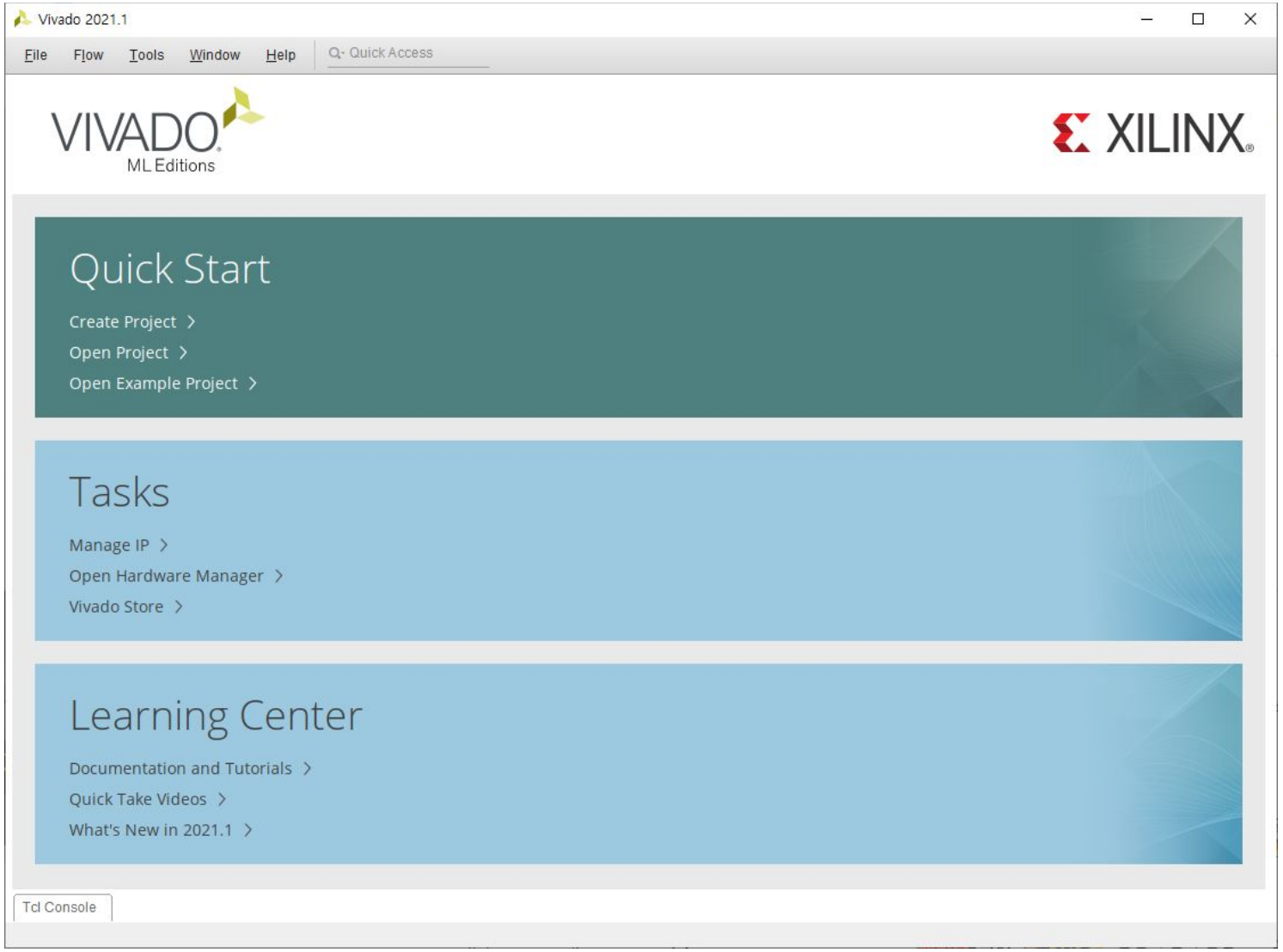
- Select installation directory, and click next
- After this, it will take quite long to finish installing



2. Create a new project

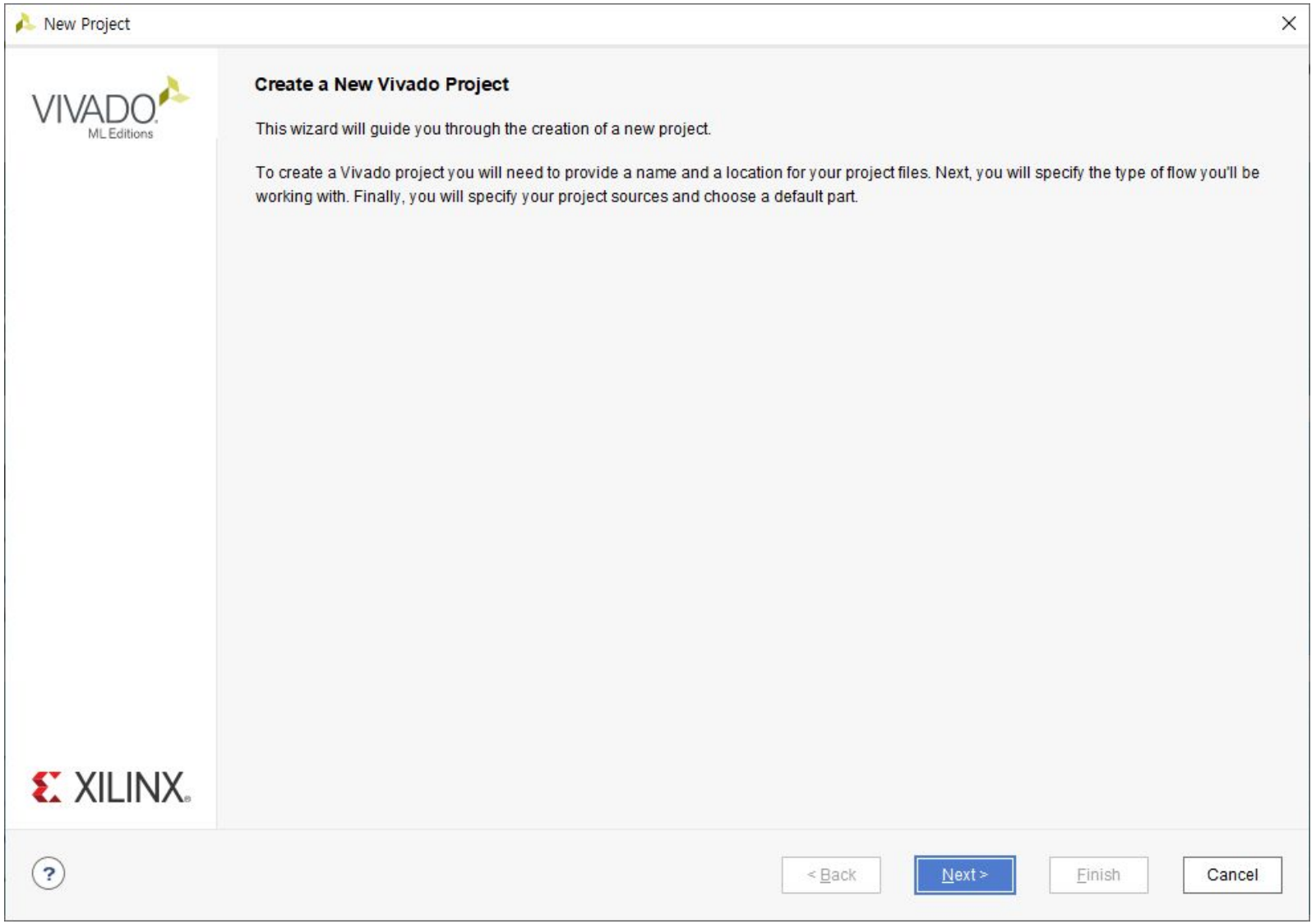
2. Creating an example project

- Run Vivado
- Click Create Project



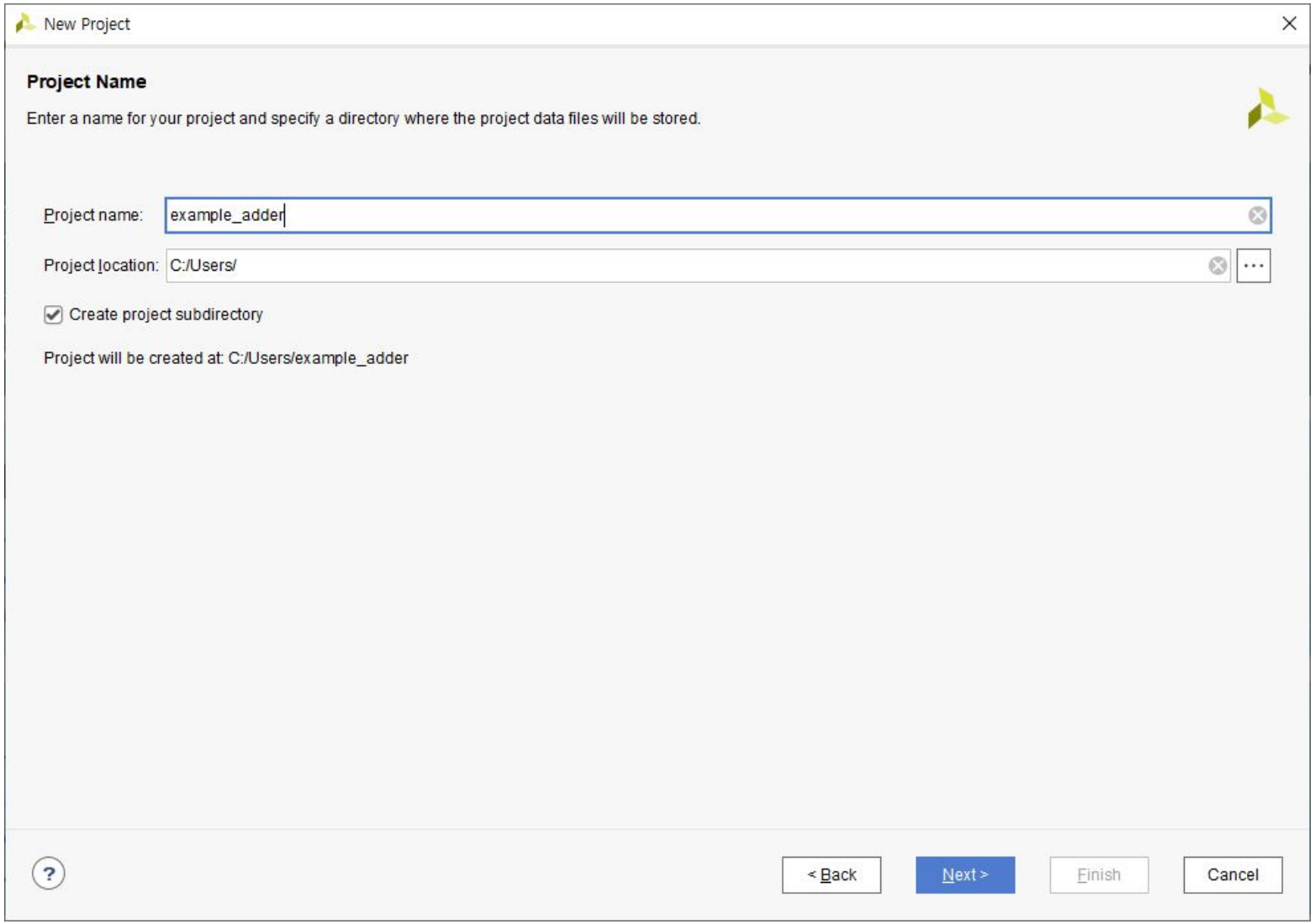
2. Creating an example project

- Click next



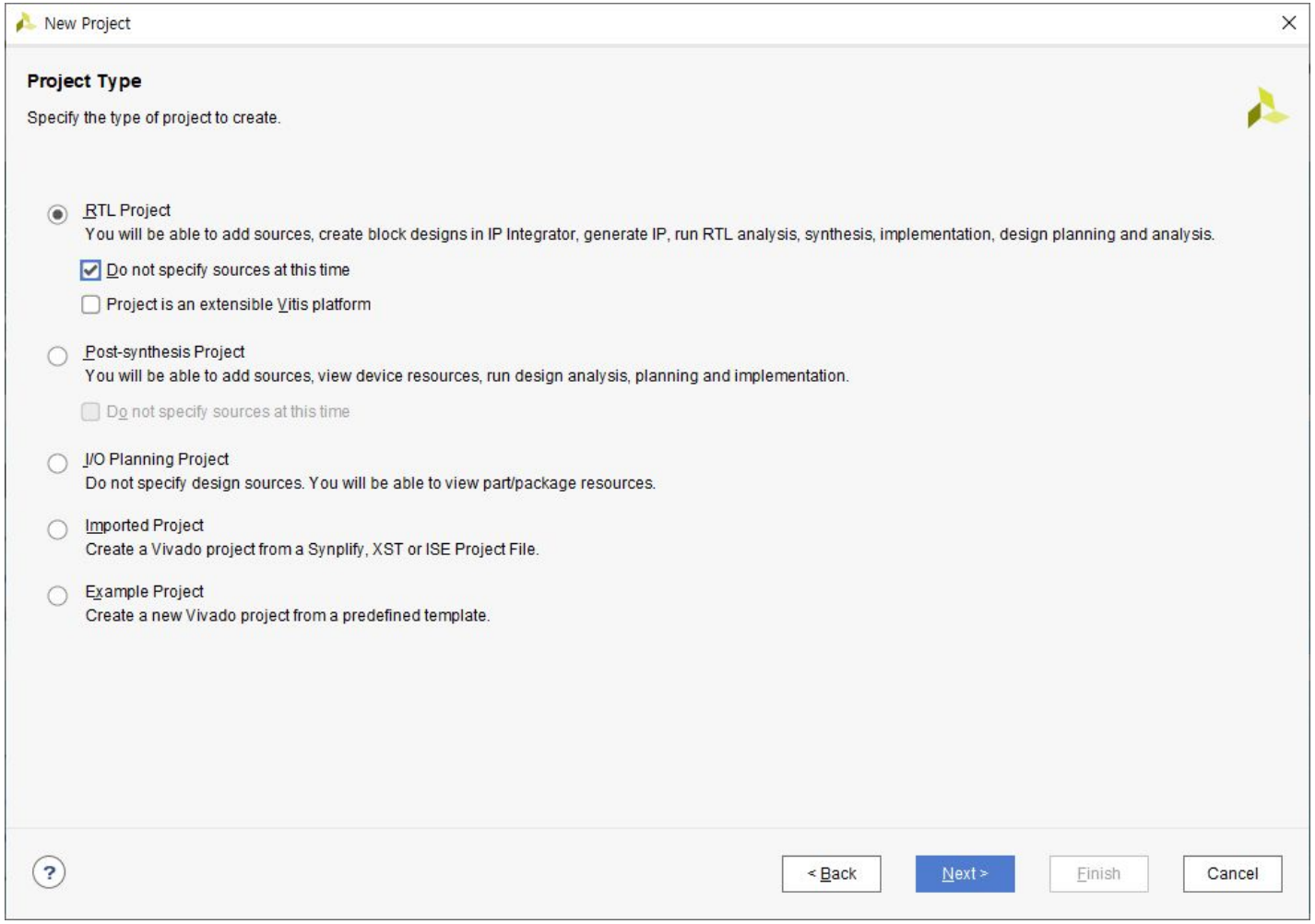
2. Creating an example project

- Select project name and location
- Click next



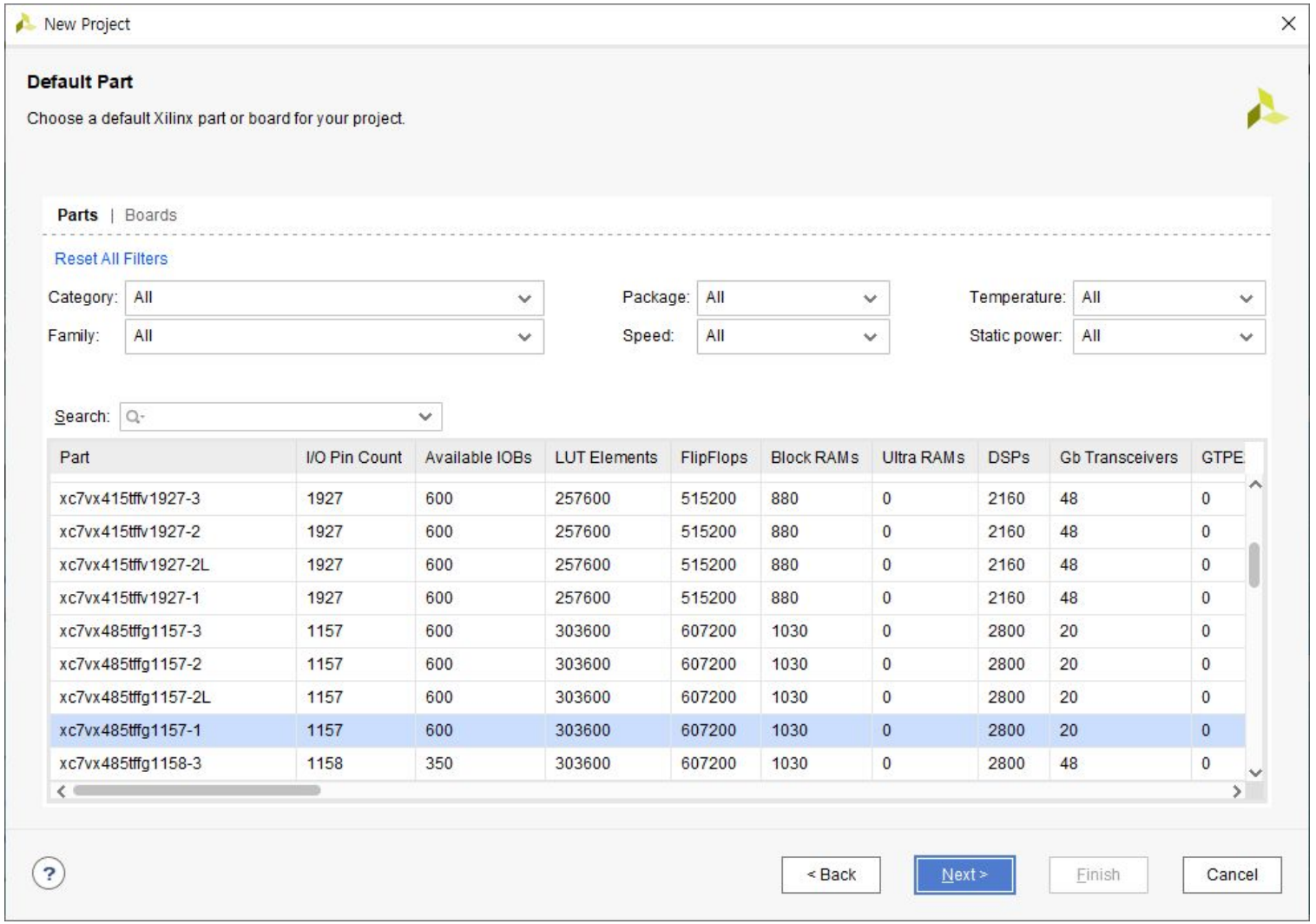
2. Creating an example project

- Click next



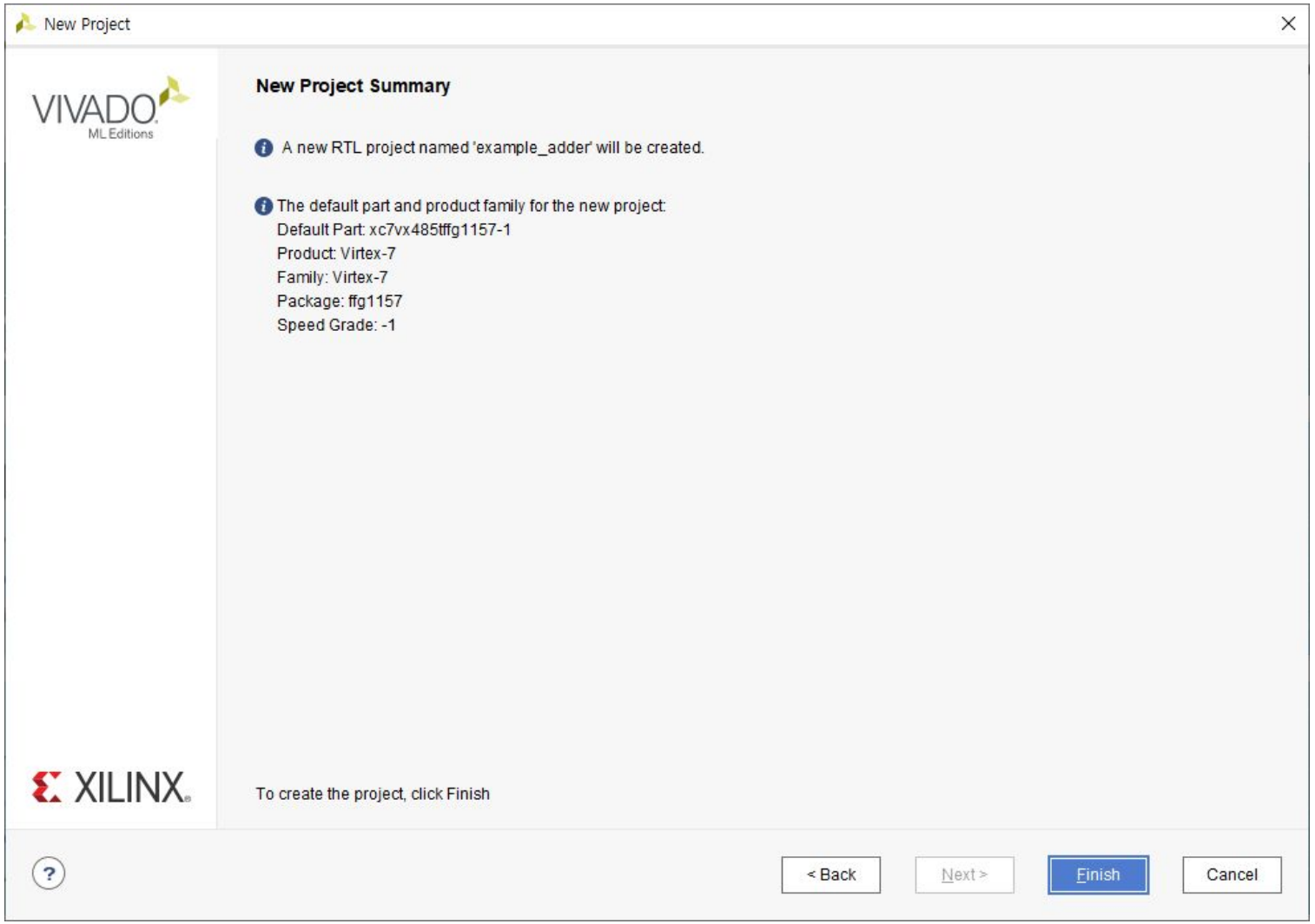
2. Creating an example project

- This is **board selection**
- For now, we will only simulate the design.
- Click next



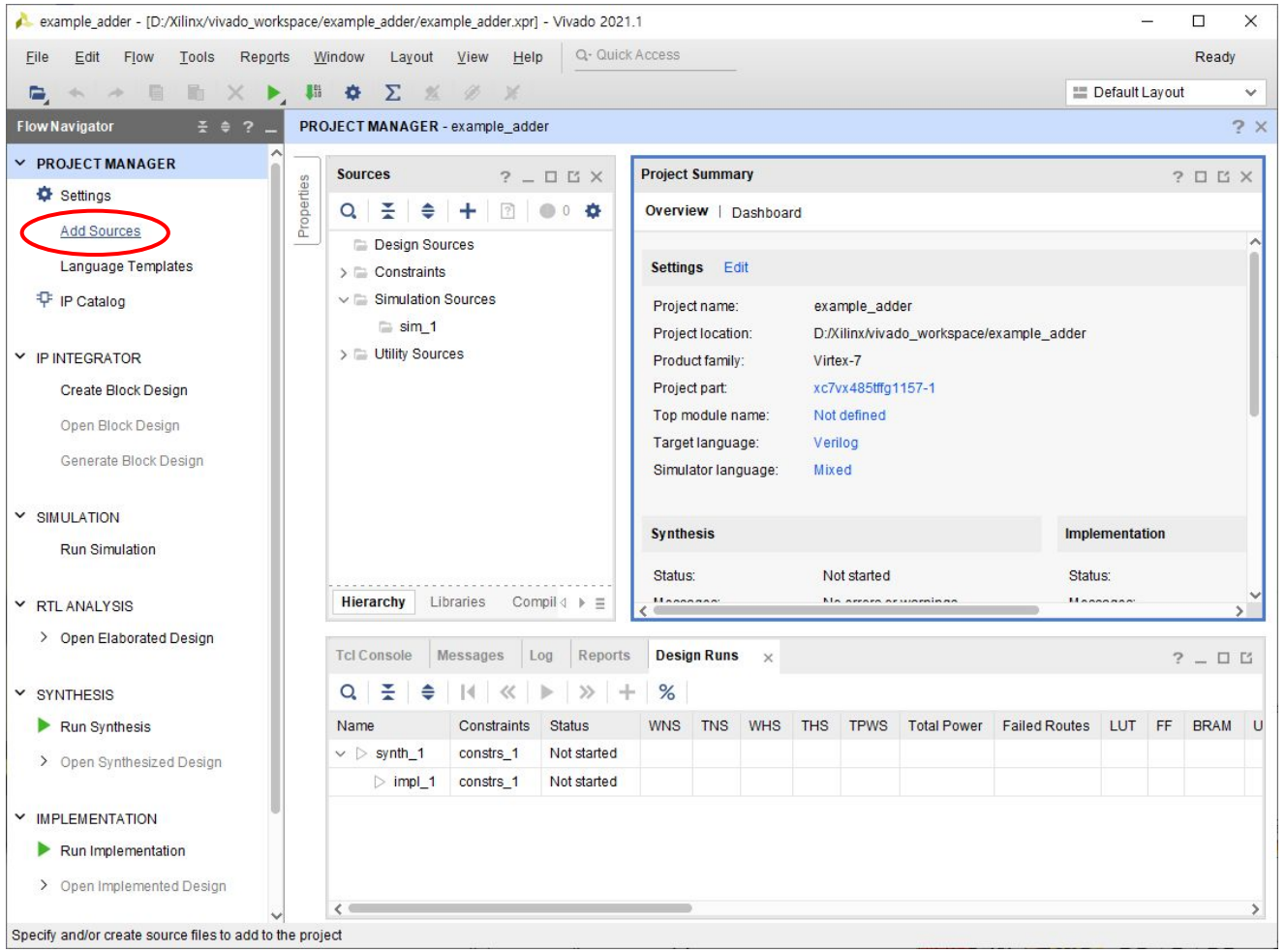
2. Creating an example project

- Click finish



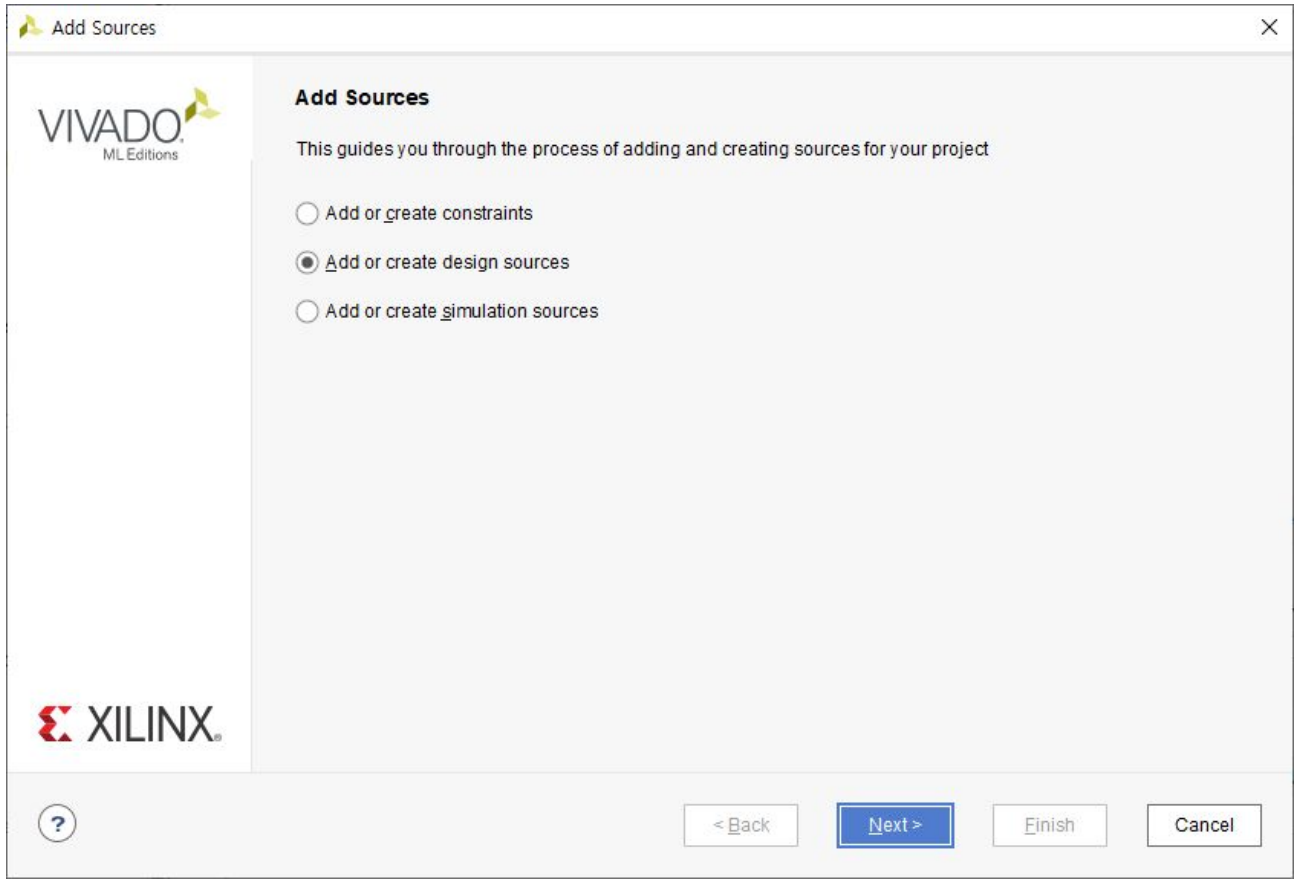
2. Creating an example project

- Click add sources



2. Creating an example project

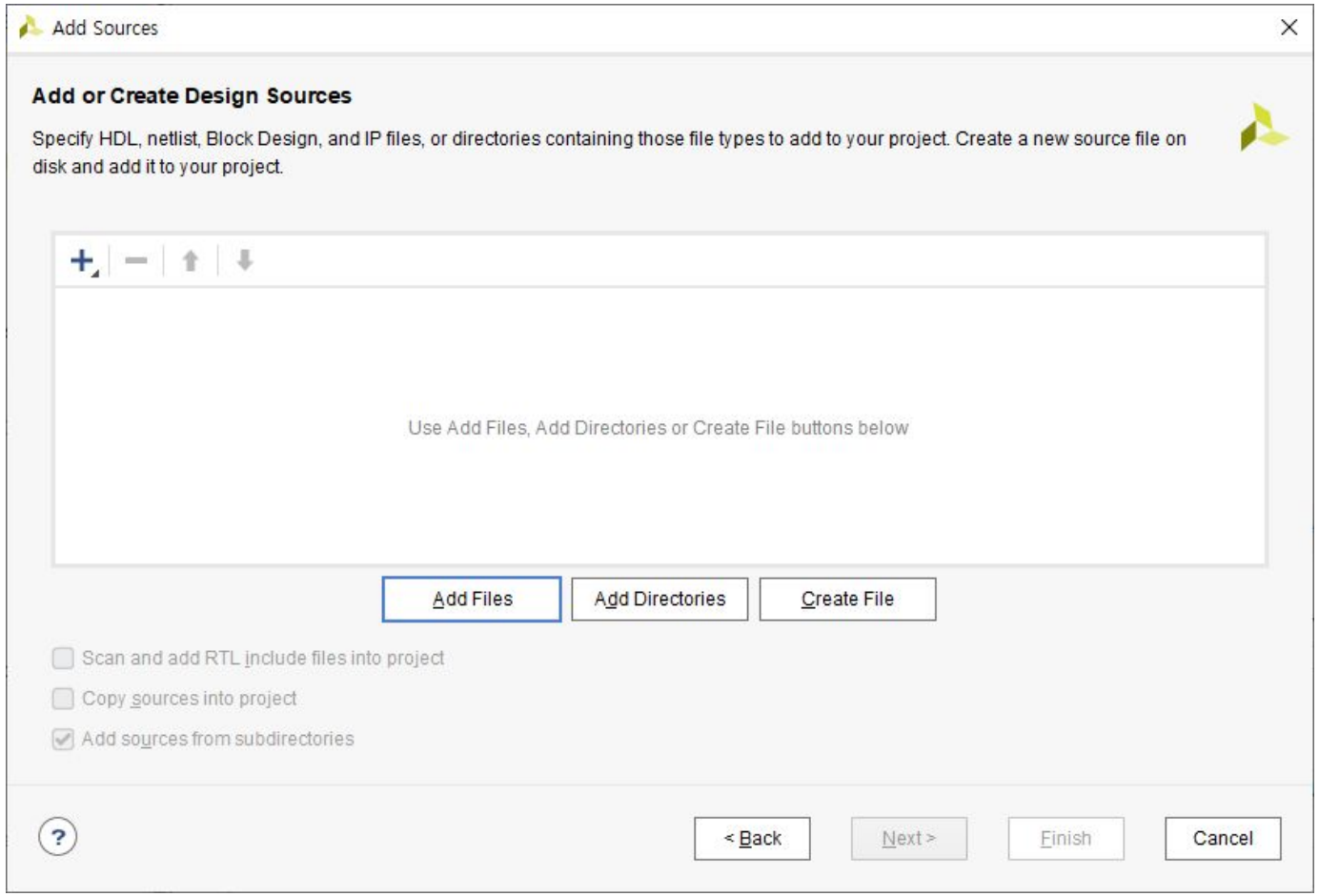
- Select Add or create design sources



2. Creating an example project

- Select Add Files
- Add the files(source code)
  - Ex)adder.v
  - Ex)adder_tb.v

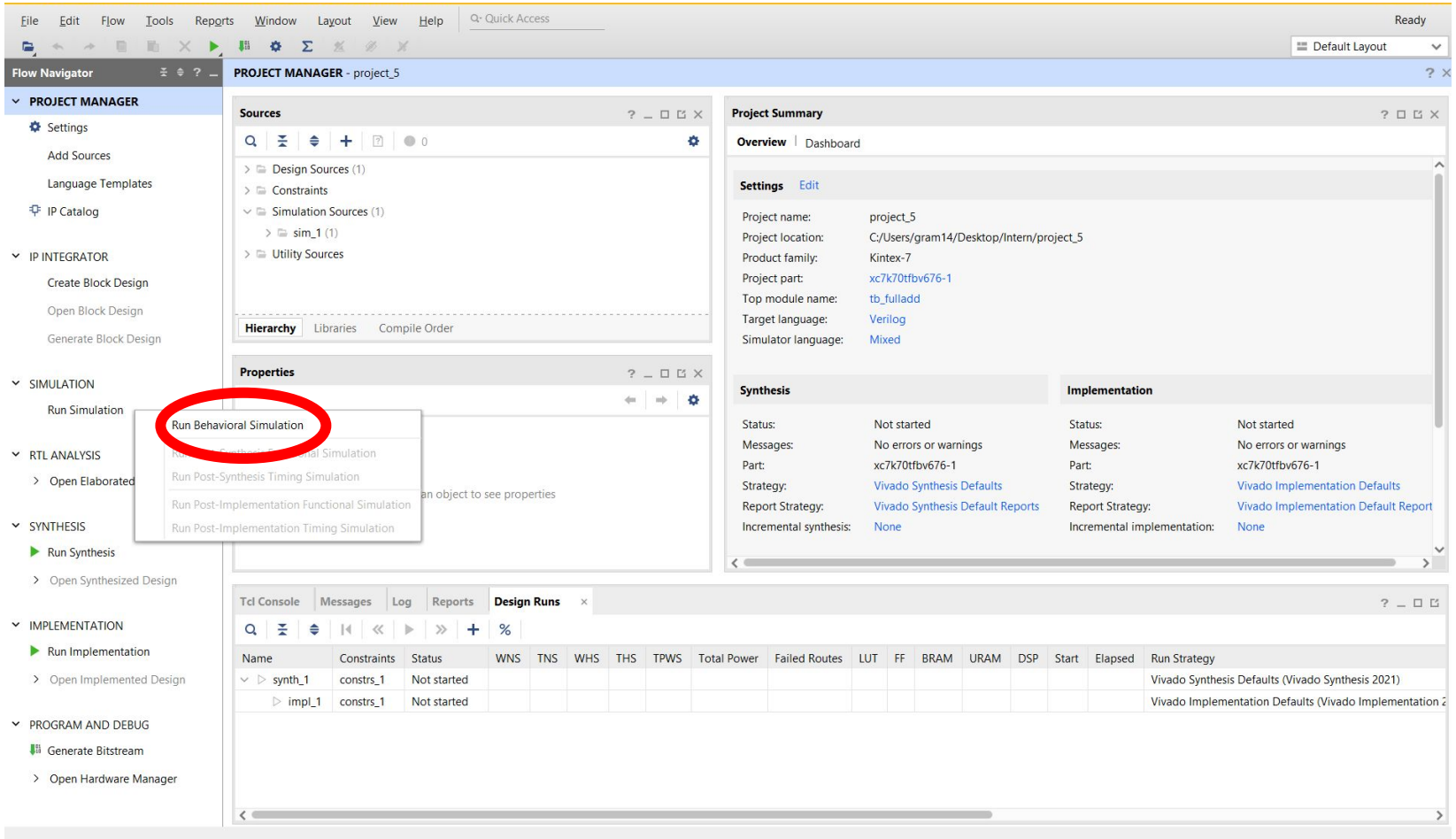
- The example code is a simple 4-bit adder



3. Simulate the project

3. Simulation

- After adding the source files
- Click run simulation –> run behavioral simulation



3. Simulation

- Check the simulation result