

Digital design CAD-program



Installation Instructions



For lab **VHDL Intro** You need to make preparation tasks with modern CAD software. Altera's **Quartus II** design program, and Mentor Graphics **ModelSim** simulation program, are both "state of the art" industry standard programs. They are typically used in very large digital design projects - Although our lab task is modest to suit beginners.

The programs are installed in our Laborations hall to be used in conjunction with hardware/laboratory equipment at the laboratory work.

For preparation tasks you should install the programs on your own computer, but as a "backup" the programs are also installed in the school's Windows computer rooms.

- An important part of your education is to install and become familiar with various computer programs used in the industry.

Programfiles Quartus II and ModelSim version 13

The screenshot shows the Altera Download Center navigation path: Home > Support > Downloads > Download Center. Two download options are listed:

Product	License	Action
Quartus II Subscription Edition	Paid license required	Download
Quartus II Web Edition	FREE, no license required	Download

Nowadays Quartus has reached version 14.

Either you visit the [Altera homepage](#), or can you borrow a USB stick with the files in the school. USB Transfer of program files takes about 5 minutes. The installation can then take a long time.

(Nothing prevents you from sharing the installation files with other students.)

ATTENTION! Altera has dropped support for the 3000 series of chips (which we use in the lab) with the versions from Quartus 13.1. Therefore, you must download the previous version **13.0**. See the figure.

Quartus II Web Edition
 Home > Support > Downloads > Quartus II Web Edition

Release date: May, 2013

Quartus II Web Edition v13.0

Select a previous version of Quartus II: **13.0**

Operating System Windows Linux
 Select the operating system on which you will run the Quartus II software.

Download Method Akamai DLM3 Download Manager Direct Download
 Select whether you want to download the files. *Direct Download is recommended to recover from interrupted downloads.*

The download method is: **Combined Files** Individual Files DVD Files

Quartus II Web Edition (Free)

Quartus II Software (includes Nios II EDS) Size: 1.5 GB MD5: 30B0588E7BC9368B5C646BCF7337AD66	
ModelSim-Altera Edition (includes Starter Edition) Size: 779.4 MB MD5: D083E6256A5BA98419FF7E7F68EFB2D9	
Devices You must install device support for at least one device family to use the Quartus II software.	
Arria II device support Size: 467.2 MB MD5: F0EE10638F5520227547CB70CFBC1B11	
Cyclone II, Cyclone III, Cyclone IV device support (includes all variations) Size: 568.8 MB MD5: 0C13D53053884E4071C380BAF02CE96E	
Cyclone V device support (includes all variations) Size: 700.7 MB MD5: A9EB7719925306C1DBED812C8C098069	
MAX II, MAX V, MAX 3000, MAX 7000 device support Size: 6.7 MB MD5: AB3109D942B20499DFEF8EA1AB819C2A	

Install Quartus II version 13.0 from a borrowed USB-memory



We use the Quartus II Web Edition (free)

Create a temporary folder on your computer for example. C:\Altera_temp. On the USB stick is the quartus13 folder. Copy the files:

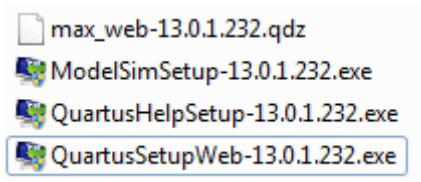
QuartusSetupWeb-13.0.1.232.exe
 max_web-13.0.1.232.qdz
 QuartusHelpSetup-13.0.1.232.exe
 ModelSimSetup-13.0.1.232.exe

It is important that your files are in one folder on your PC. This is required for them to be installed together.

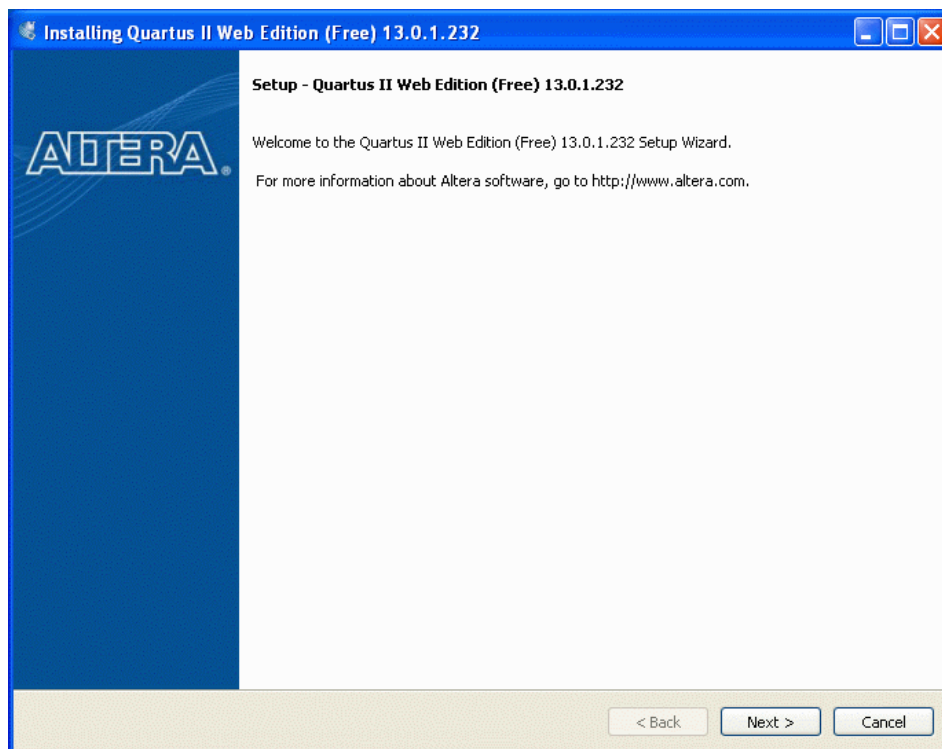
You can now return the USB memory.

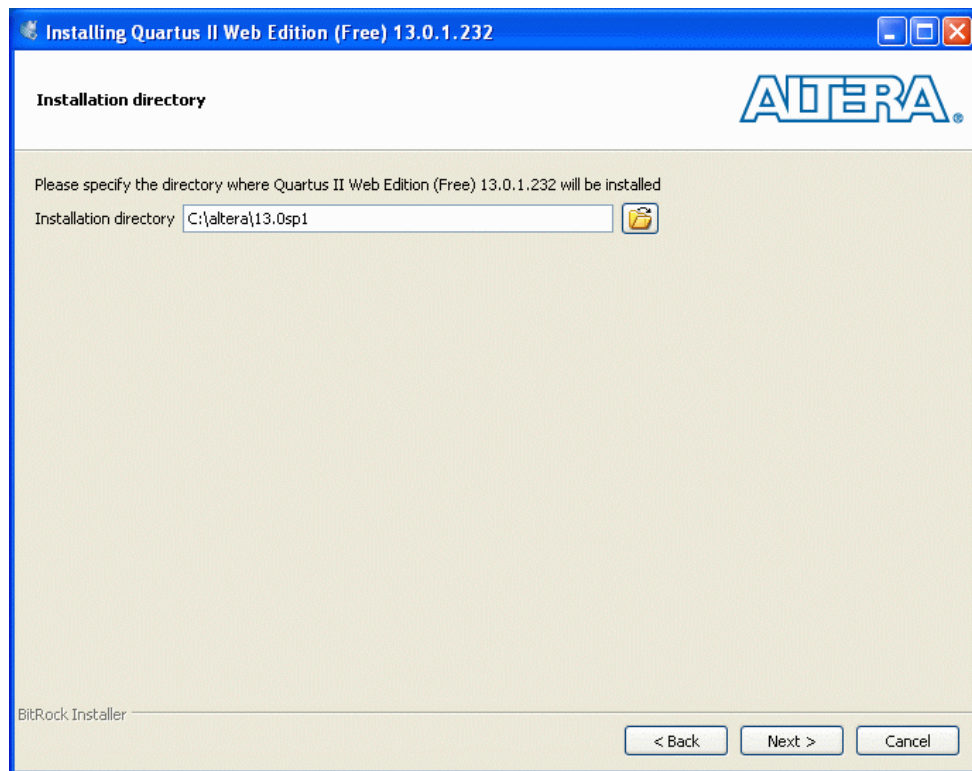
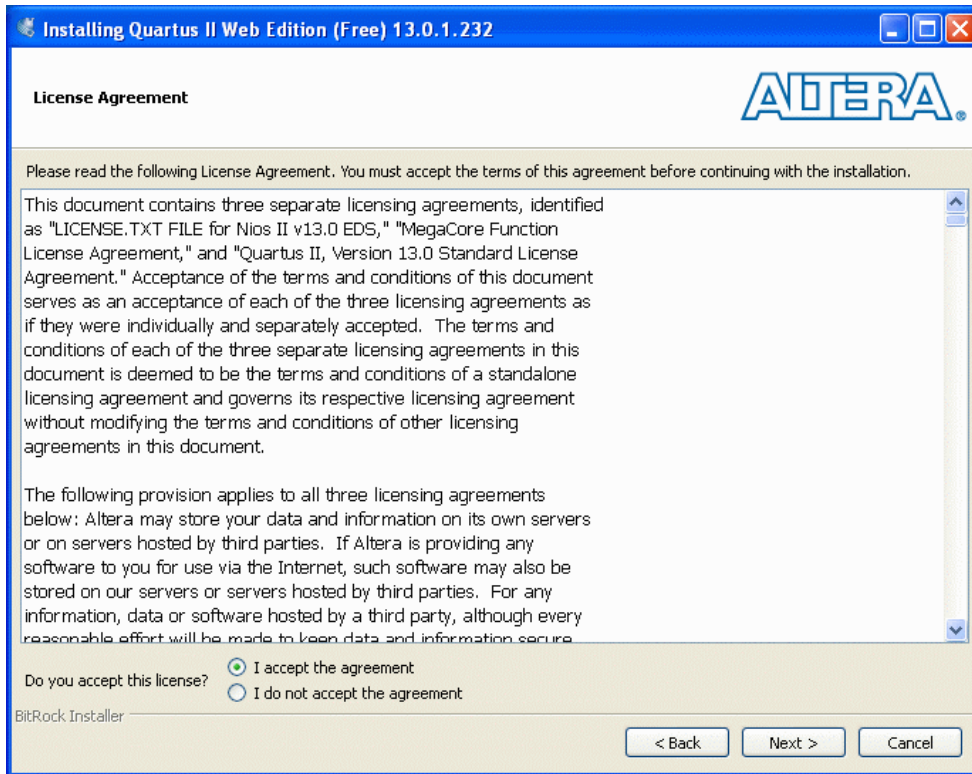
Install Quartus II and ModelSim, version 13

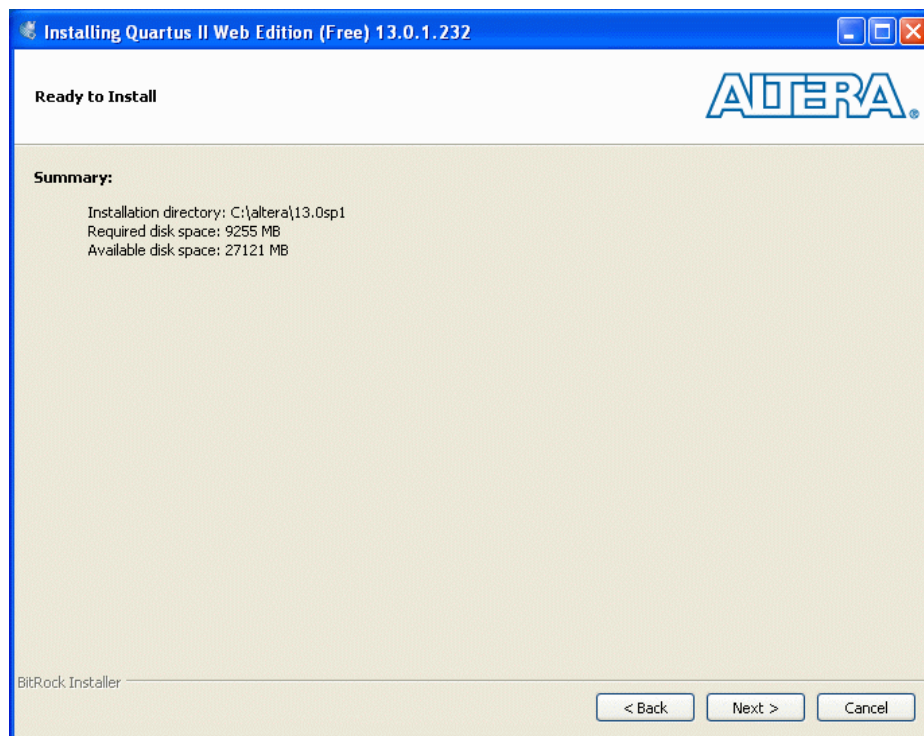
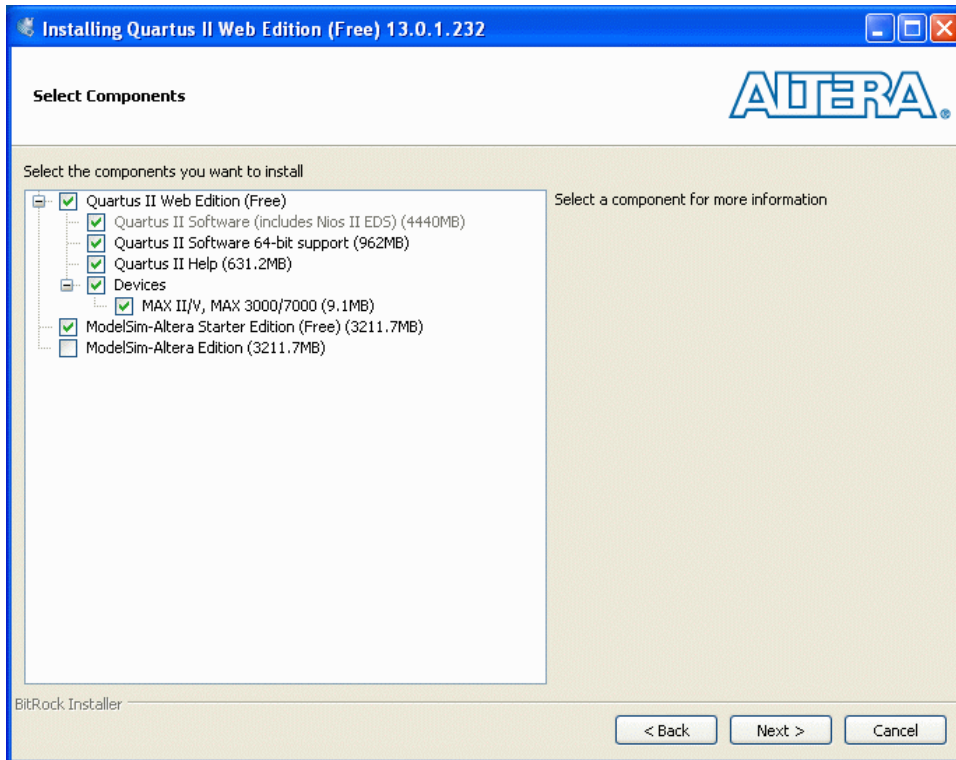
The installation is "straightforward", and as one would expect. This describes it step by step.



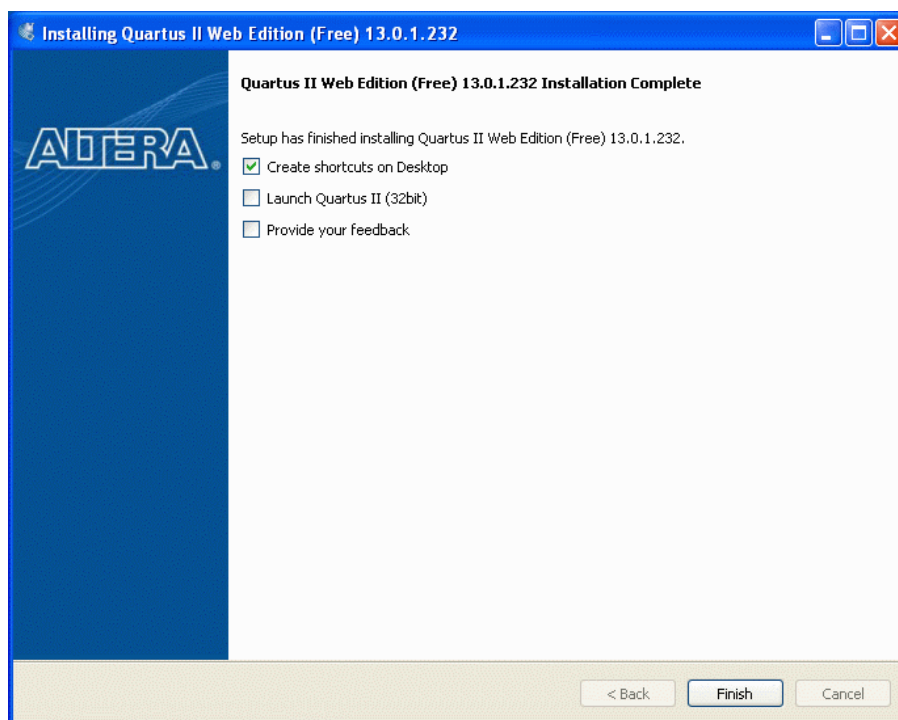
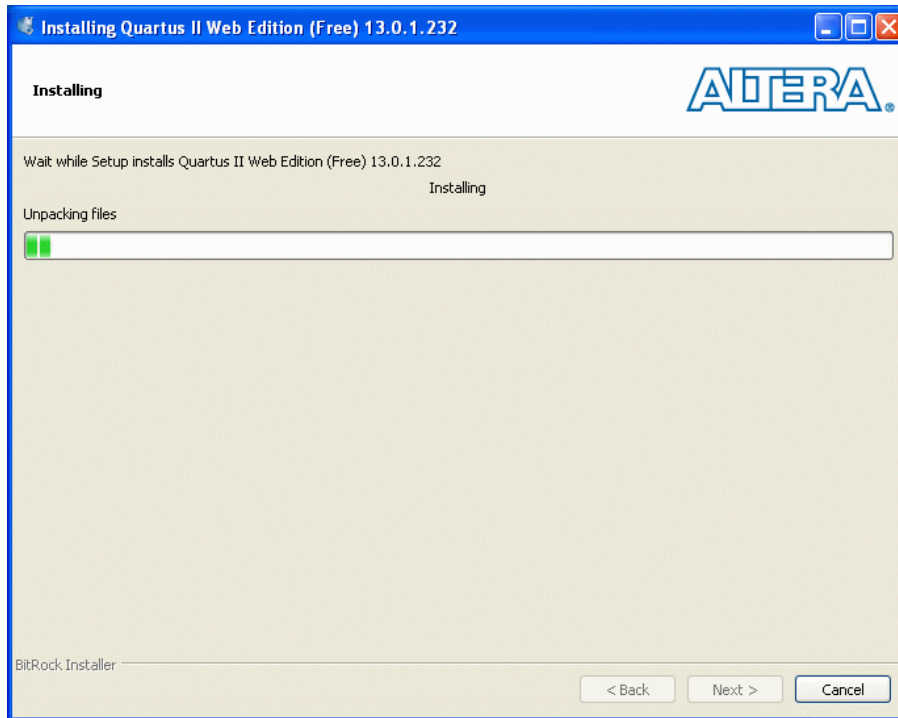
Double-click on `QuartusSetupWeb-13.0.1.232.exe` in your folder `Altera_temp`. This will install Quartus and other files in the folder, as Modelsim. Be prepared that this will take time.







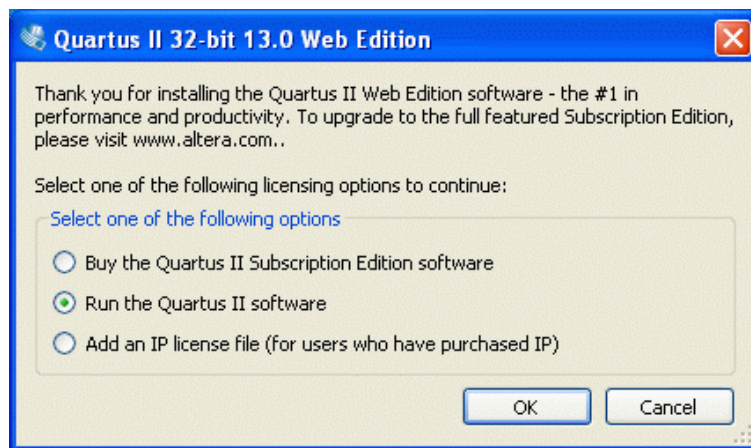
Grab a cup of coffee - now it will take time ...



Depending on your computer's performance has Quartus 32 or 64 bit versions been installed.



When you start the Quartus so you will get a question.
We are doing just fine with the free version of Quartus - so there is no need to pay for anything.



- **Note - You can now delete the entire folder `Altera_temp` with the installation files.
It will only take place on the computer.**

Good luck with the installation

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