

Quartus Prime Setup

Version 18.1

Last updated 11/8/24

Quartus Prime Setup

- Quartus Prime
 - Set of tools developed by Altera/Intel to support development of Altera/Intel FPGAs
 - Lite – version
 - Reduced functionality
 - FREE !
 - 18.1
 - Last Windows version that has support for NIOS integrated
 - Newer versions fall back to Linux – messy
- 7-ZIP
 - Archive read/write software needed to load the Quartus files

Quartus Prime Setup

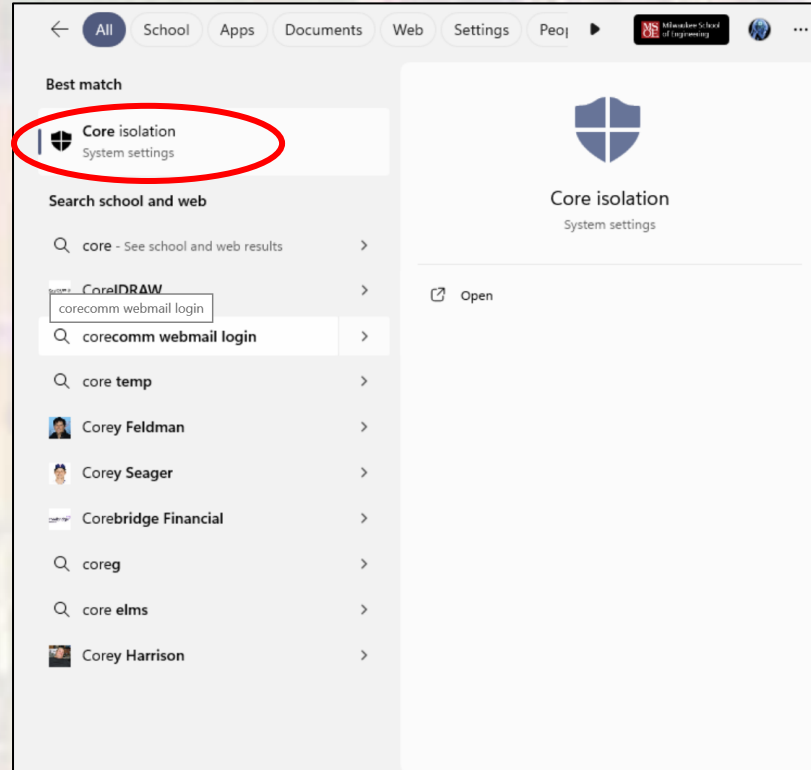
WARNING – WARNING – WARNING

Since our suppliers update their software on a regular basis – some of the screen captures and revision numbers may be different when you install the software

WARNING – WARNING – WARNING

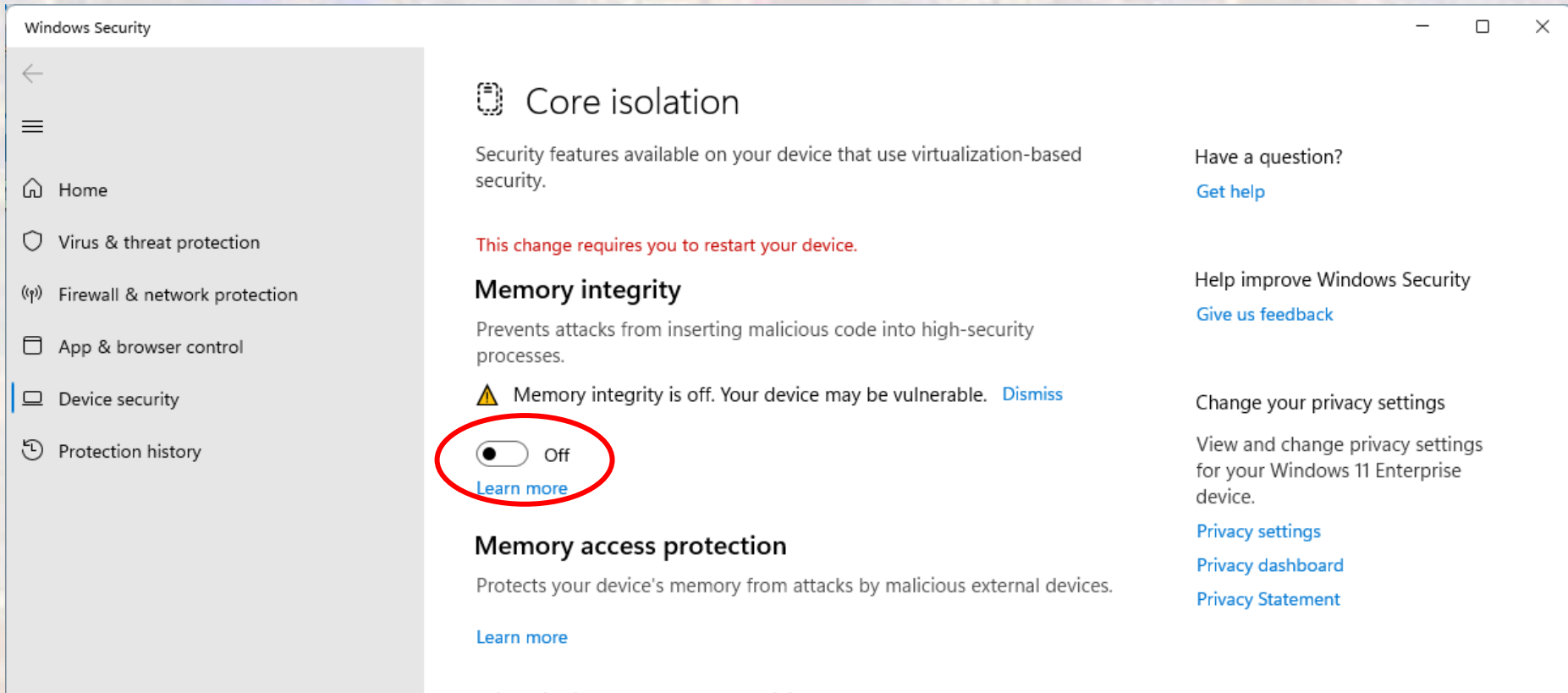
Quartus Prime Setup

- Type “**core isolation**” into the windows search box in the task bar
- Select **Core Isolation**



Quartus Prime Setup

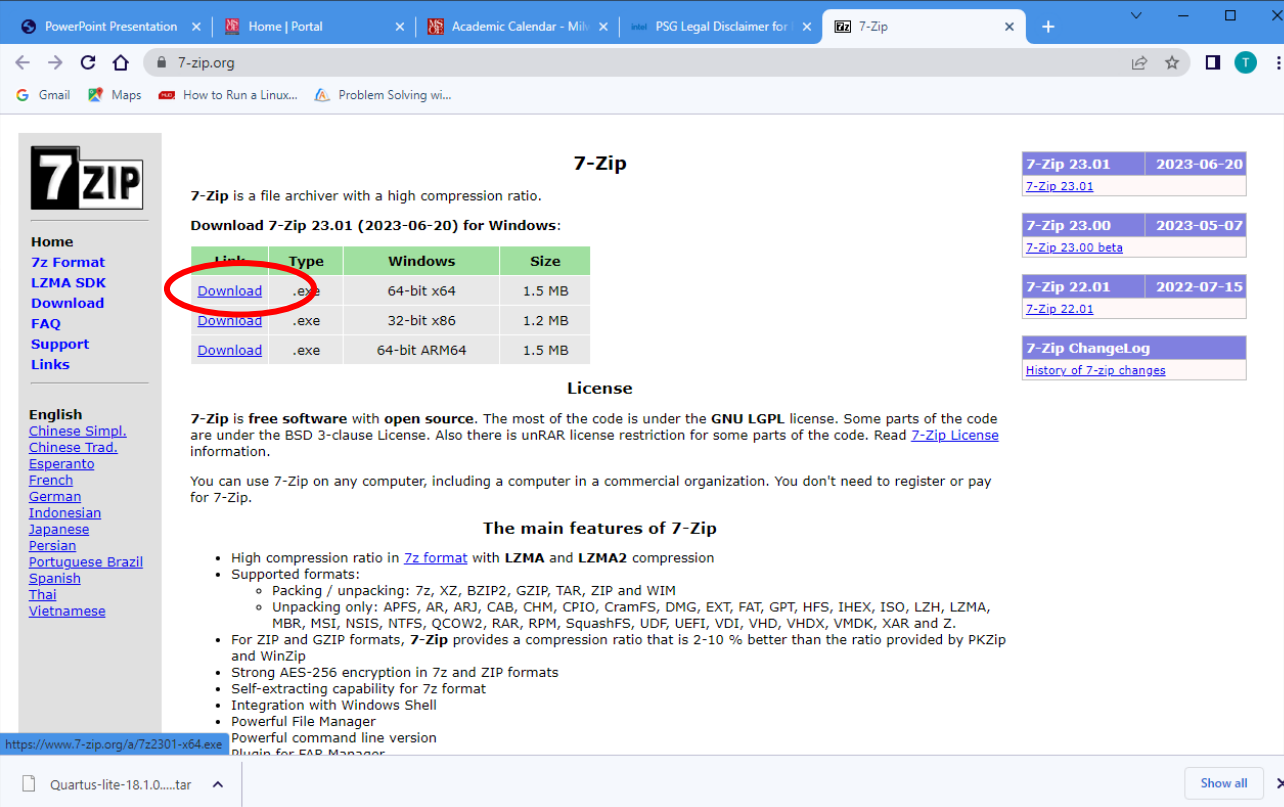
- **Switch** the Memory integrity switch to off
- **Reboot**



The screenshot shows the Windows Security application window. On the left is a navigation pane with options: Home, Virus & threat protection, Firewall & network protection, App & browser control, Device security (selected), and Protection history. The main content area is titled 'Core isolation' and contains the following text: 'Security features available on your device that use virtualization-based security.' Below this is a red warning: 'This change requires you to restart your device.' The 'Memory integrity' section is highlighted with a red circle. It includes a warning icon and text: 'Memory integrity is off. Your device may be vulnerable. Dismiss'. Below the text is a toggle switch labeled 'Off' and a 'Learn more' link. The 'Memory access protection' section is also visible below, with a 'Learn more' link. On the right side of the window, there are links for 'Get help', 'Give us feedback', and 'Change your privacy settings'.

Quartus Prime Setup

- 7-zip
 - Software to read/write archive files
 - Go to: <https://www.7-zip.org/>
 - Select the 64 bit, x64 version download



The screenshot shows the 7-Zip website with the following content:

- 7-Zip** is a file archiver with a high compression ratio.
- Download **7-Zip 23.01 (2023-06-20) for Windows:**
- Table of download options:

Link	Type	Windows	Size
Download	.exe	64-bit x64	1.5 MB
Download	.exe	32-bit x86	1.2 MB
Download	.exe	64-bit ARM64	1.5 MB

The 'Download' link for the 64-bit x64 version is circled in red.

License

7-Zip is **free software** with **open source**. The most of the code is under the **GNU LGPL** license. Some parts of the code are under the BSD 3-clause License. Also there is unRAR license restriction for some parts of the code. Read [7-Zip License](#) information.

You can use 7-Zip on any computer, including a computer in a commercial organization. You don't need to register or pay for 7-Zip.

The main features of 7-Zip

- High compression ratio in **7z format** with **LZMA** and **LZMA2** compression
- Supported formats:
 - Packing / unpacking: 7z, XZ, BZIP2, GZIP, TAR, ZIP and WIM
 - Unpacking only: APFS, AR, ARJ, CAB, CHM, CPIO, CramFS, DMG, EXT, FAT, GPT, HFS, IHEX, ISO, LZH, LZMA, MBR, MSI, NSIS, NTFS, QCOW2, RAR, RPM, SquashFS, UDF, UEFI, VDI, VHD, VHDX, VMDK, XAR and Z.
- For ZIP and GZIP formats, **7-Zip** provides a compression ratio that is 2-10 % better than the ratio provided by PKZip and WinZip
- Strong AES-256 encryption in 7z and ZIP formats
- Self-extracting capability for 7z format
- Integration with Windows Shell
- Powerful File Manager
- Powerful command line version
- Plugin for FAR Manager

At the bottom, a taskbar shows a file named 'Quartus-lite-18.1.0.....tar' and a 'Show all' button.

Quartus Prime Setup

- 7-zip
 - Double click the extracted executable file
 - Downloads - 7z2301-x64.exe
 - Accept modifications
 - Keep the default location and select install

The image shows a browser window displaying the 7-Zip website and a separate window for the 7-Zip 23.01 (x64) Setup. The browser window shows the 7-Zip website with a table of download links for Windows. The 'Download' link for the 64-bit x64 version is circled in red. The setup window shows the destination folder as 'C:\Program Files\7-Zip\' and the 'Install' button is circled in red.

7-Zip

7-Zip is a file archiver with a high compression ratio.

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7-Zip 23.01 (x64) Setup

Destination folder:
C:\Program Files\7-Zip\

Install Cancel

Quartus Prime Setup

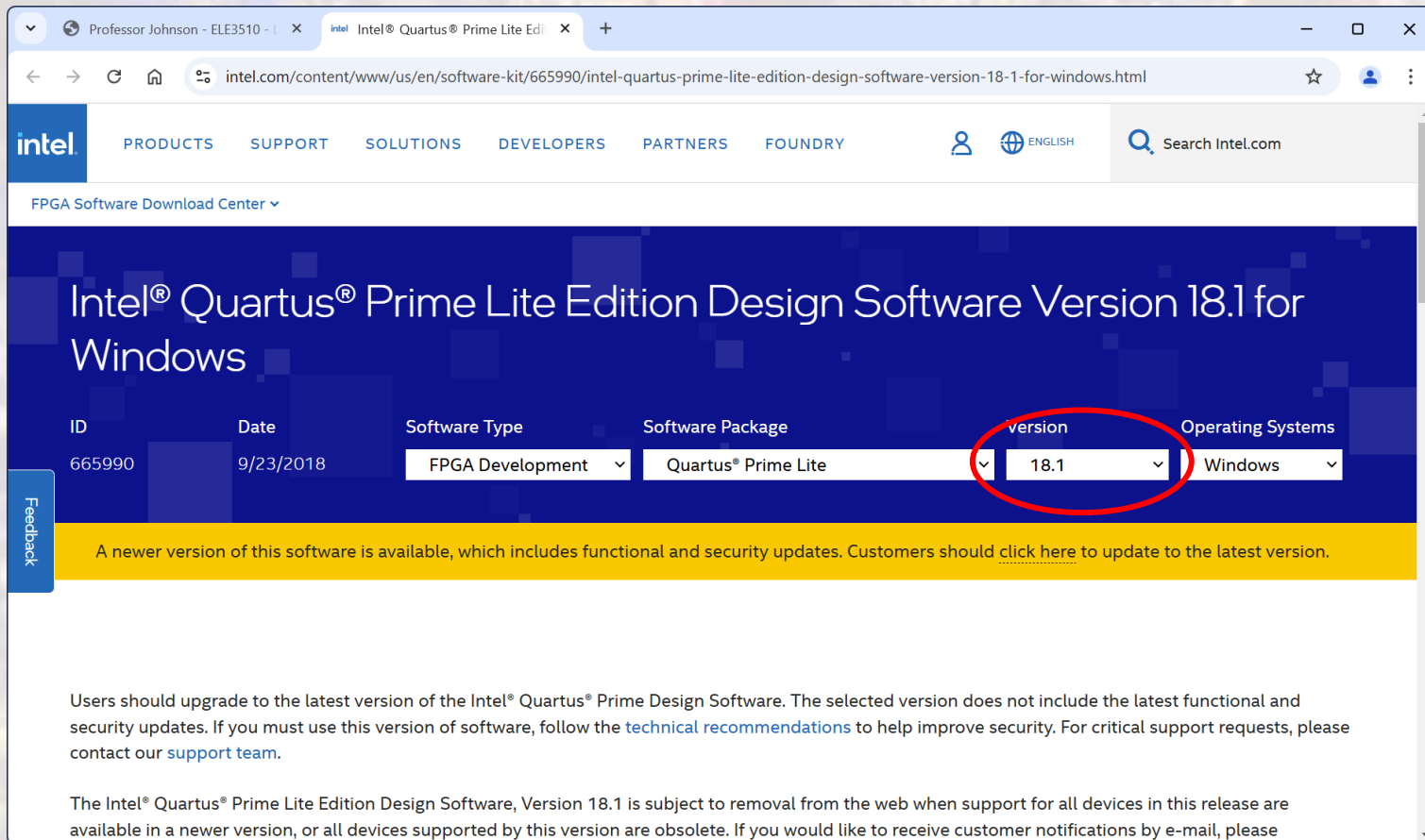
- Quartus Prime – Setup
 - The following slides walk through the process of setting up the Quartus Prime software
 - Please note – this process takes quite a while (>2 hours) depending on your internet connection.

Quartus Prime Setup

- Quartus Prime – Setup
 - Browse to the Intel Software Support site
 - <https://www.intel.com/content/www/us/en/software-kit/665990/intel-quartus-prime-lite-edition-design-software-version-18-1-for-windows.html?>

Quartus Prime Setup

- Quartus Prime – Setup
 - Verify version **18.1** from the dropdown menu



The screenshot shows the Intel website page for downloading Quartus Prime Lite Edition Design Software Version 18.1 for Windows. The page features a navigation bar with links for PRODUCTS, SUPPORT, SOLUTIONS, DEVELOPERS, PARTNERS, and FOUNDRY. Below the navigation bar is a search bar and a language selector set to ENGLISH. The main content area displays the product name and a table of software packages. The table has columns for ID, Date, Software Type, Software Package, version, and Operating Systems. The 'version' column is highlighted with a red circle, showing '18.1'. Below the table is a yellow banner with a message about a newer version being available. At the bottom, there is a section with text about upgrading to the latest version and a note about the removal of the software from the web.

ID	Date	Software Type	Software Package	version	Operating Systems
665990	9/23/2018	FPGA Development	Quartus® Prime Lite	18.1	Windows

A newer version of this software is available, which includes functional and security updates. Customers should [click here](#) to update to the latest version.

Users should upgrade to the latest version of the Intel® Quartus® Prime Design Software. The selected version does not include the latest functional and security updates. If you must use this version of software, follow the [technical recommendations](#) to help improve security. For critical support requests, please contact our [support team](#).

The Intel® Quartus® Prime Lite Edition Design Software, Version 18.1 is subject to removal from the web when support for all devices in this release are available in a newer version, or all devices supported by this version are obsolete. If you would like to receive customer notifications by e-mail, please

Quartus Prime Setup

- Quartus Prime – Setup
 - Scroll down
 - Select the **Multiple Download** tab
 - Select the **Download** button

PowerPoint Presentation | Home | Portal | intel Intel® Quartus® Prime Lite Editi... | intel Intel® Quartus® Prime Lite Editi... | +

intel.com/content/www/us/en/software-kit/665990/intel-quartus-prime-lite-edition-design-software-version-18-1-for-windows.html? | ☆ | T |

Gmail | Maps | How to Run a Linux... | Problem Solving wi...

Critical Issues and Patches for the Intel® Quartus® Prime Lite Edition Software, Version 18.1.
Knowledge Base: Search for Errata. Also see Critical Issues and Patches.
Problems and Answers on specific IP or Products.

Downloads

Multiple Download | Individual Files | Additional Software | Copyleft Licensed Source | Updates

Multiple Download

Intel® Quartus® Prime Lite Edition Software (Device support included)	Size: 5.8 GB
Download Quartus-lite-18.1.0.625-windows.tar	SHA1: c3e61983b7933bf450bae3d686c508011cf87097

What's Included?

Download and install instructions:

1. Download the software .tar file and the appropriate device support files.
2. Extract the files into the same temporary directory.
3. Run the setup.bat file.

[Read Intel® FPGA Software Installation FAQ](#)

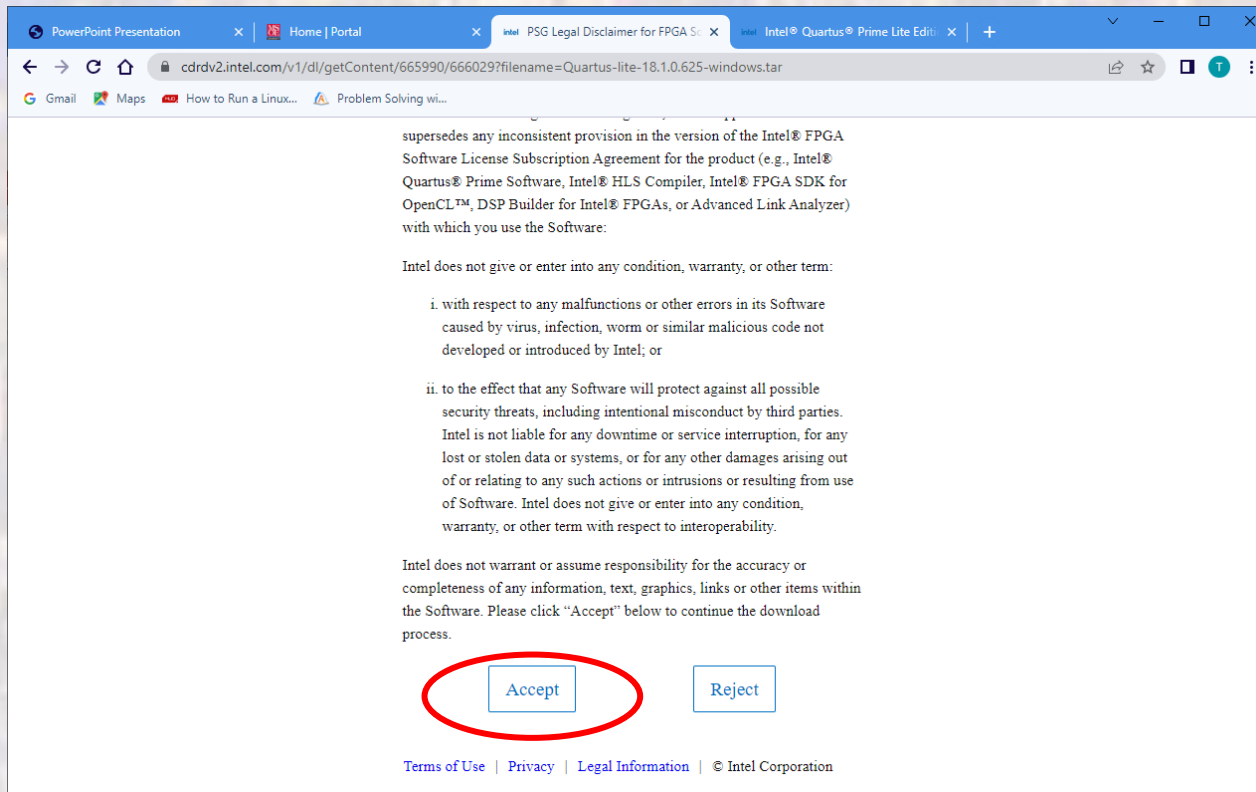
Note: The Intel® Quartus® Prime software is a full-featured EDA product. Depending on your download speed, download times may be lengthy.

Give Feedback

18.1.0.625

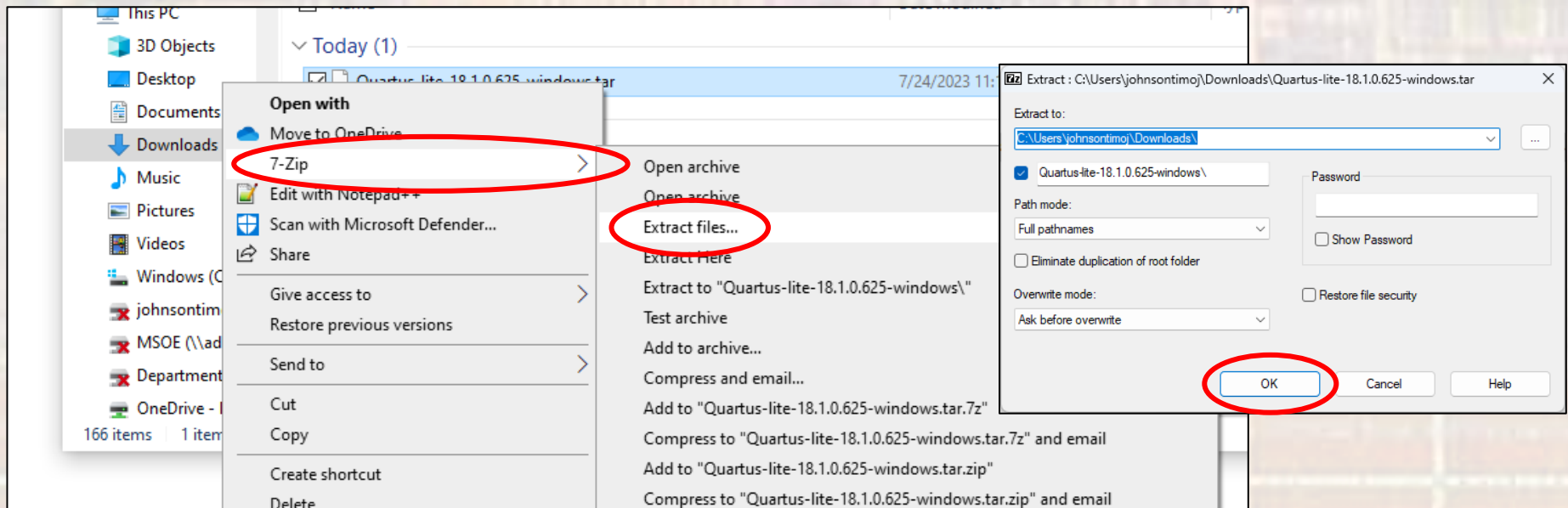
Quartus Prime Setup

- Quartus Prime – Setup
 - Accept the license if asked



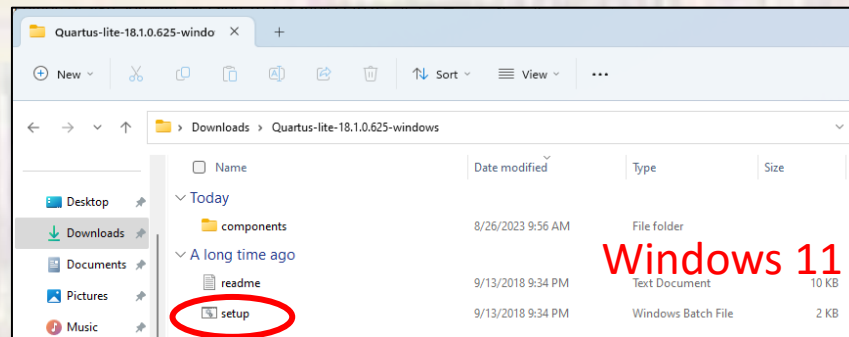
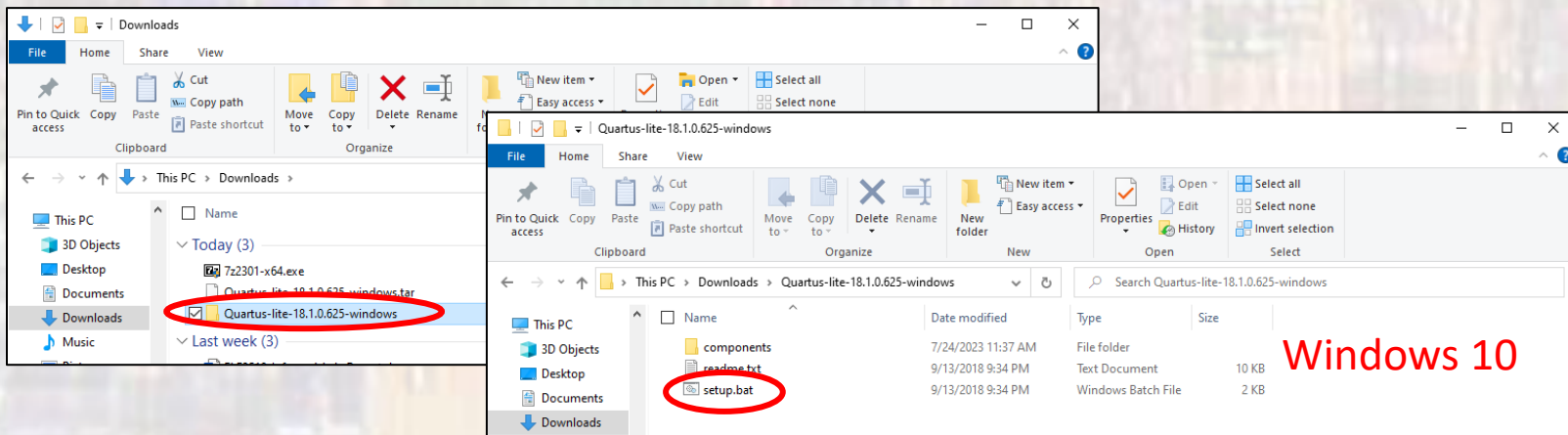
Quartus Prime Setup

- Quartus Prime – Setup
 - The download can take some time
 - Go to your Downloads folder
 - Rt-Click on the Quartus-lite-18.1.0.625-windows.zip file
 - Expand the 7-Zip line item and select Extract files
 - Leave all the defaults and select OK



Quartus Prime Setup

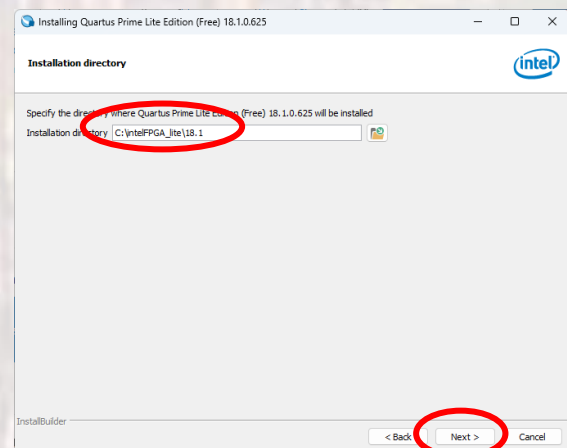
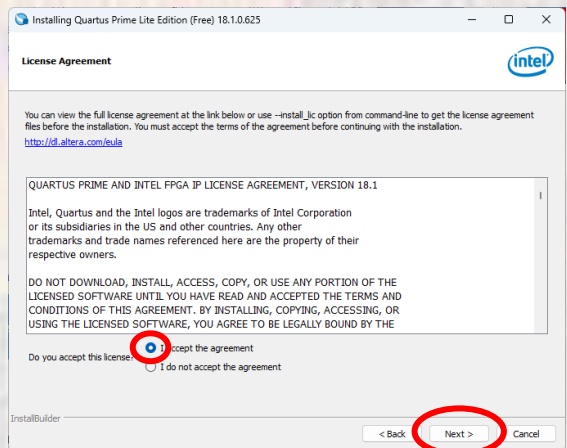
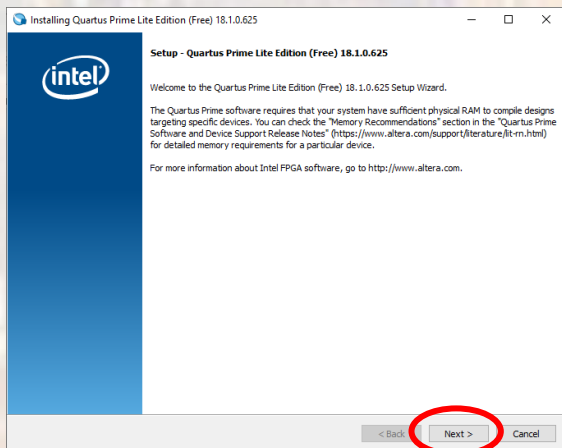
- Quartus Prime – Setup
 - Traverse into the newly created **Quartus-lite-18.1.0.625-windows** folder
 - **Dbl-click** the **setup.bat** file



Quartus Prime Setup

- Quartus Prime – Setup
 - A Windows terminal window will open
 - **Allow changes**
 - The Quartus setup wizard will open
 - **Select Next**
 - **Accept the Agreement**
 - **Leave the default location and select next**

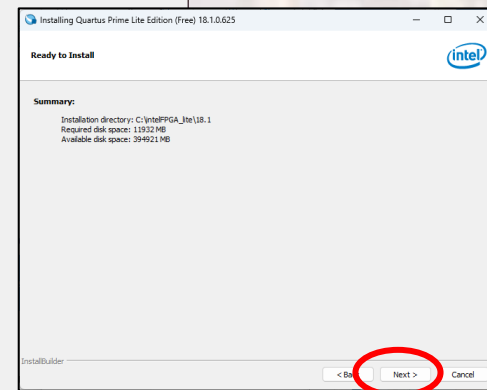
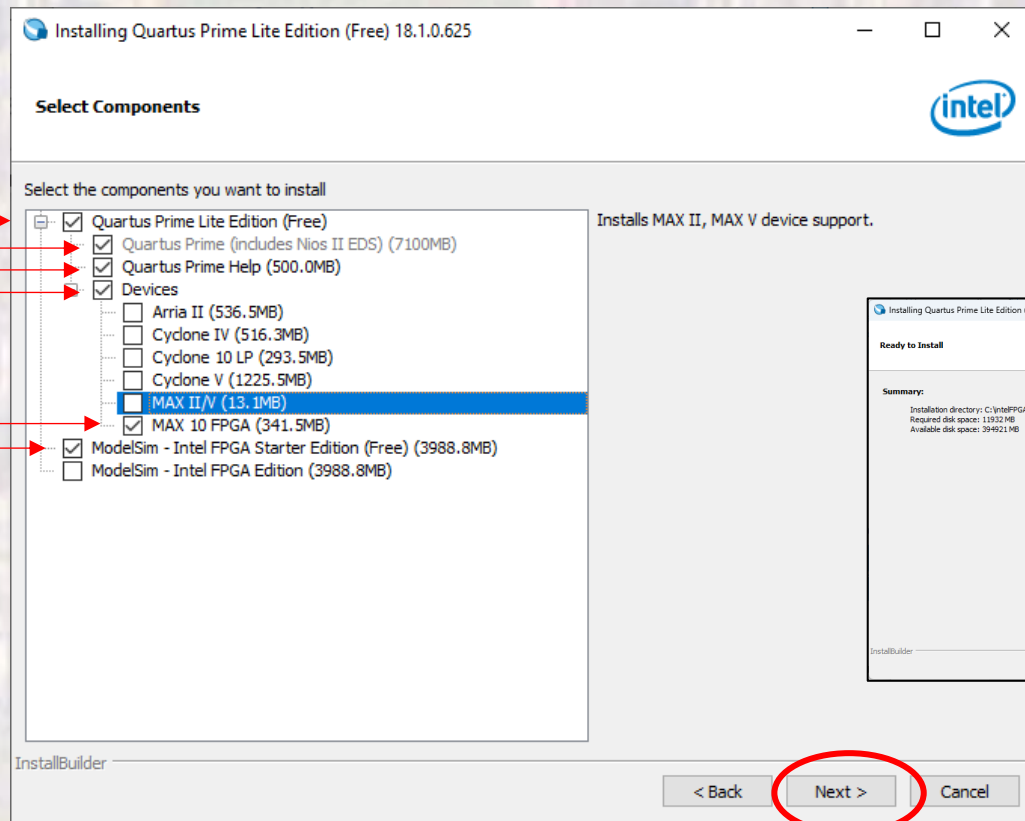
Check the status bar for a pending request to allow changes



Quartus Prime Setup

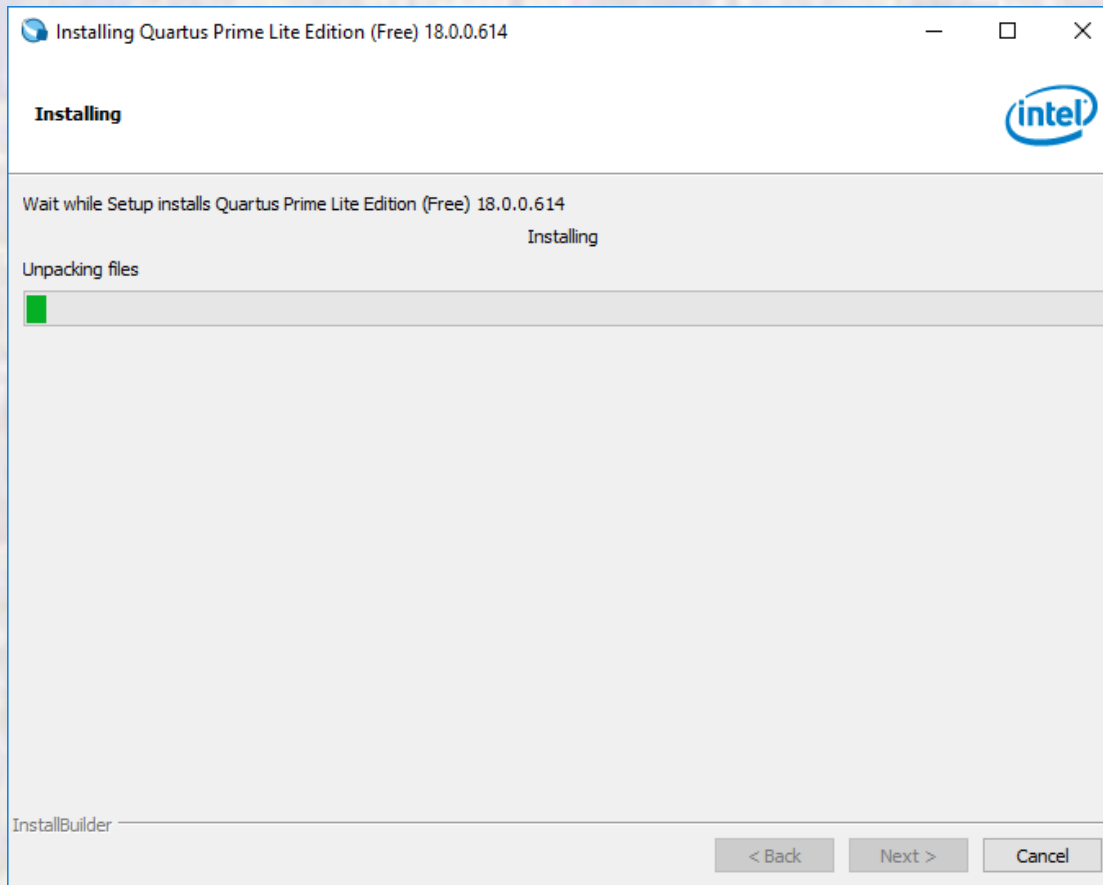
- Quartus Prime – Setup
 - Setup Wizard
 - The default selections should be correct
 - You can remove some of the devices if you wish

Select These



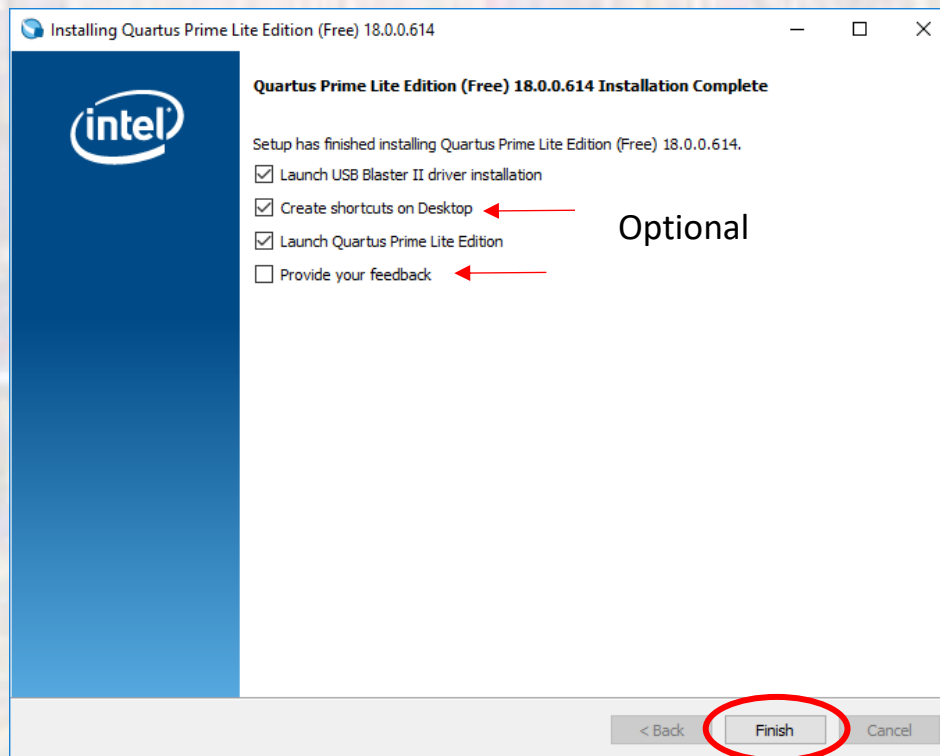
Quartus Prime Setup

- Quartus Prime – Setup
 - Setup Wizard
 - This may take a while so be patient



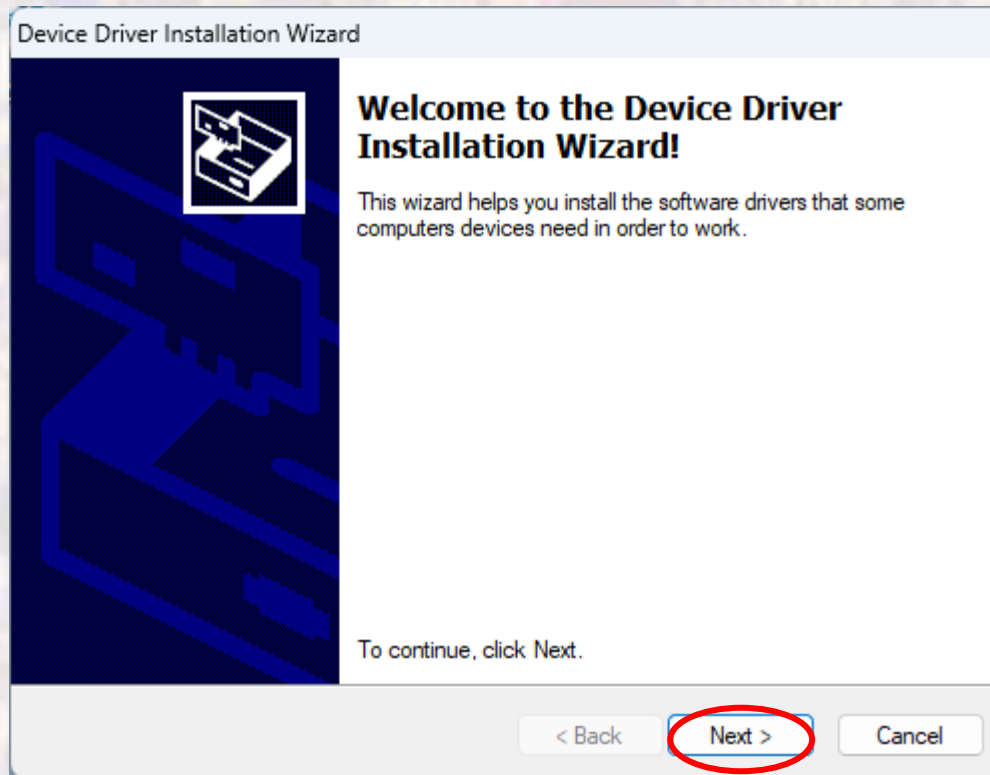
Quartus Prime Setup

- Quartus Prime – Setup
 - Setup Wizard
 - Launch the USB Blaster II driver installation
 - Create a desktop shortcut if you wish
 - Check the “Provide Feedback” box if you wish



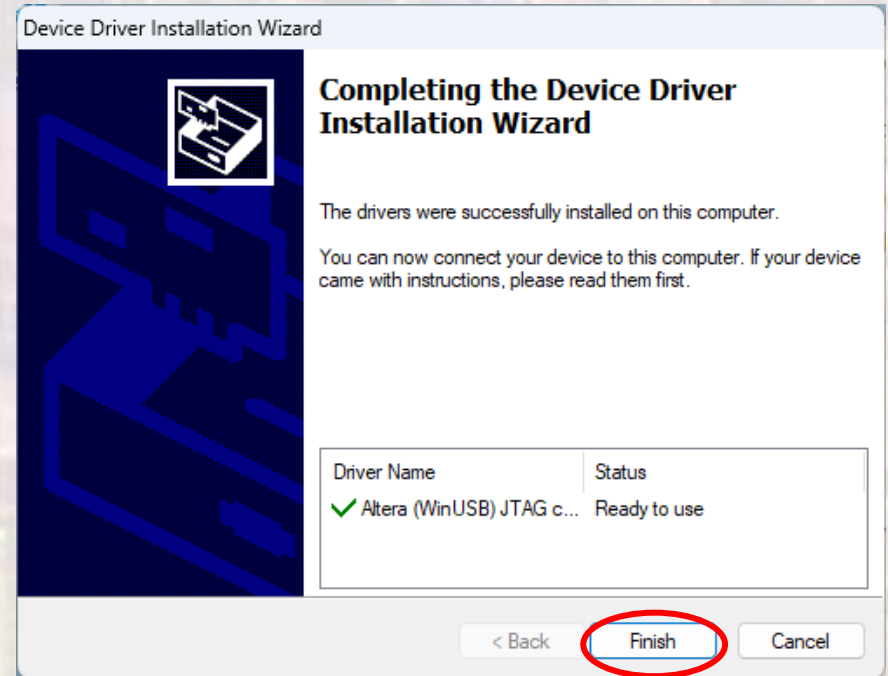
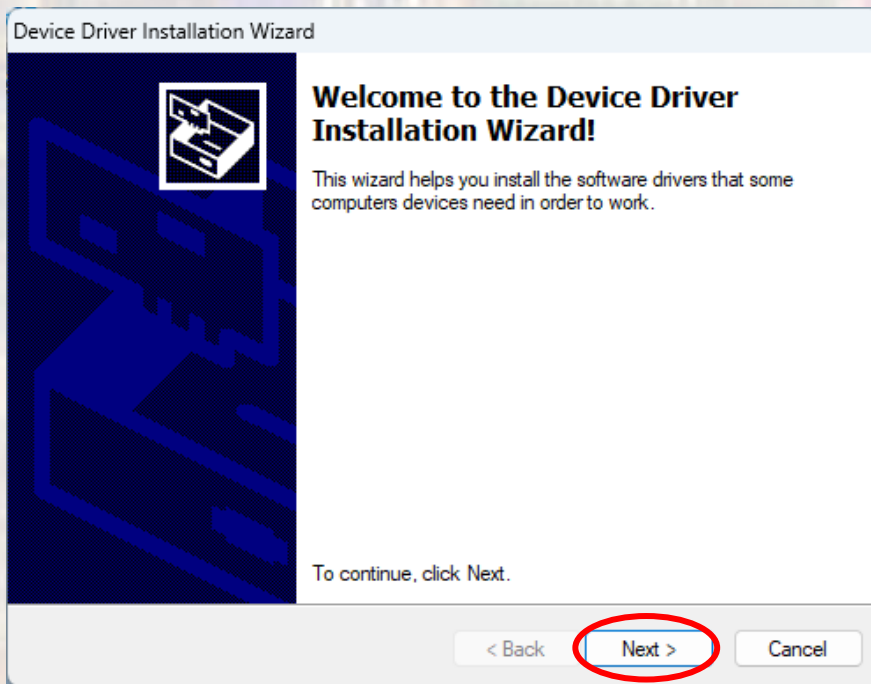
Quartus Prime Setup

- Quartus Prime – Setup
 - Device Driver
 - Next



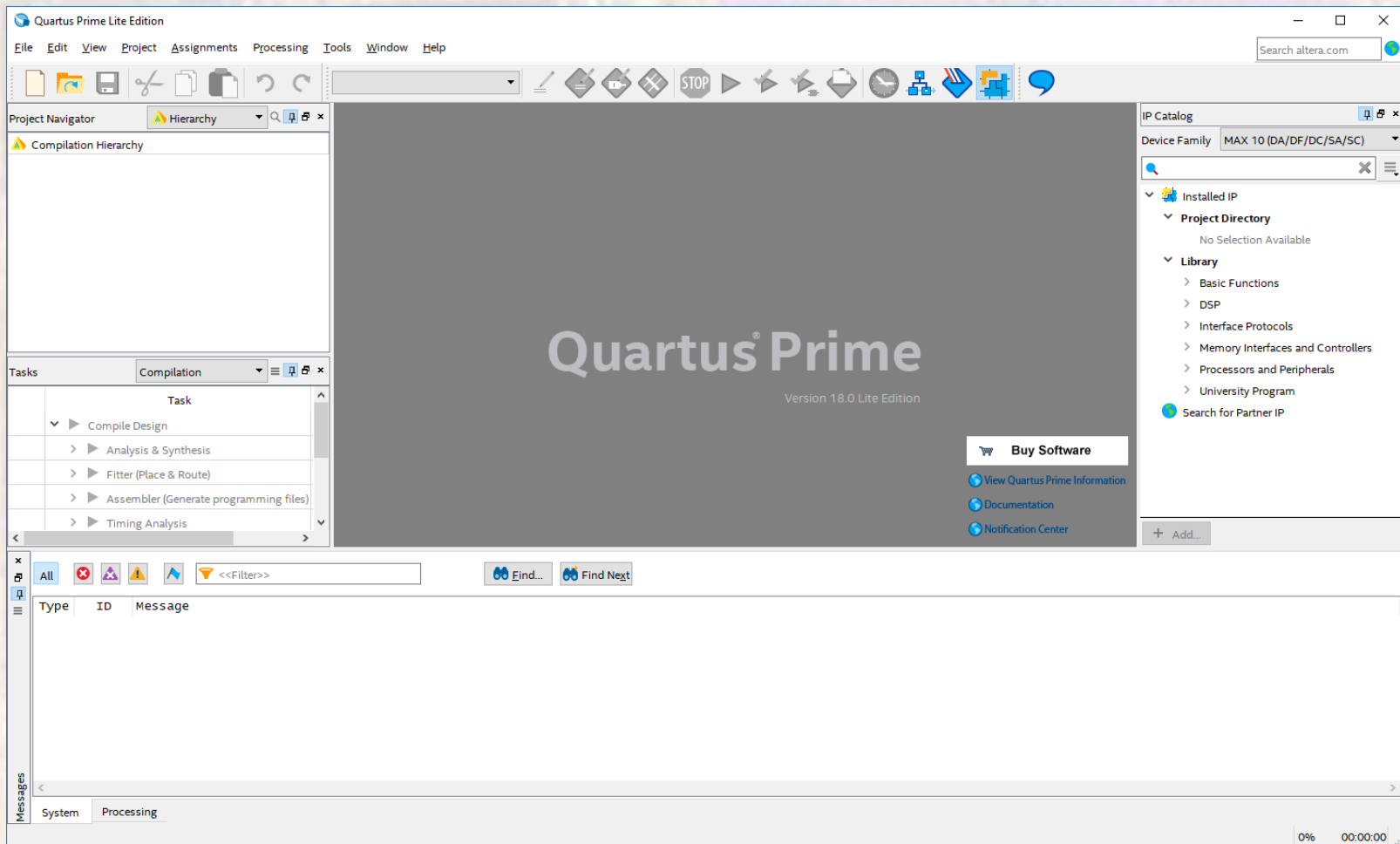
Quartus Prime Setup

- Quartus Prime – Setup
 - Device Driver
 - You may get additional instructions here – just follow them



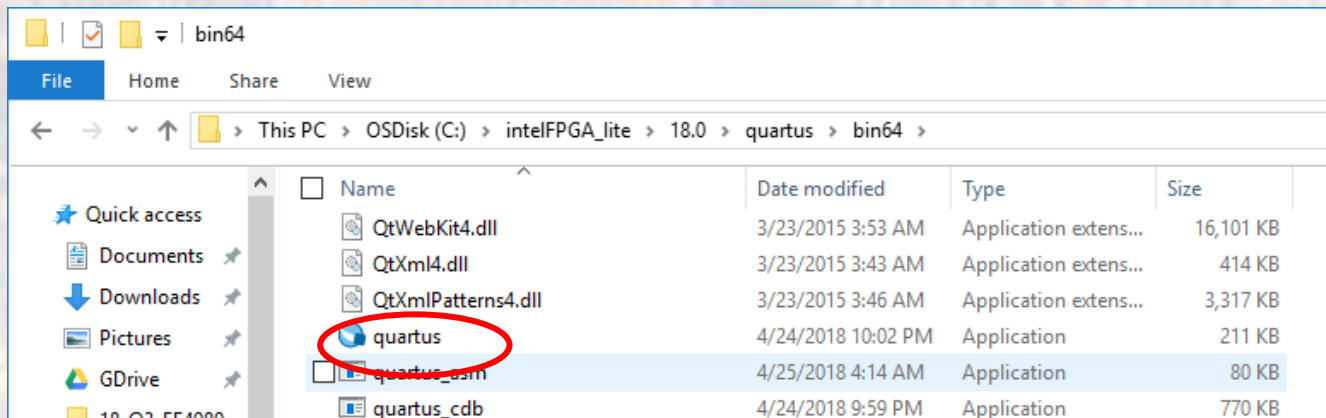
Quartus Prime Setup

- Quartus Prime – Startup
 - If you **checked** start Quartus – you should see:



Quartus Prime Setup

- Quartus Prime – Startup
 - If you **did not check** Start Quartus
 - Start Quartus
 - Use your desktop app
or
 - Traverse to **C:/intelFPGA_lite/18.1/quartus/bin64** (assuming your machine is 64 bit)
 - Select the **quartus** application file



Quartus Prime Setup

- Quartus Prime – Startup

Congratulations !!!!