INSTALLATION GUIDE FOR INTEL OpenCL SDK

Prepared By: Yasir Noman Khalid

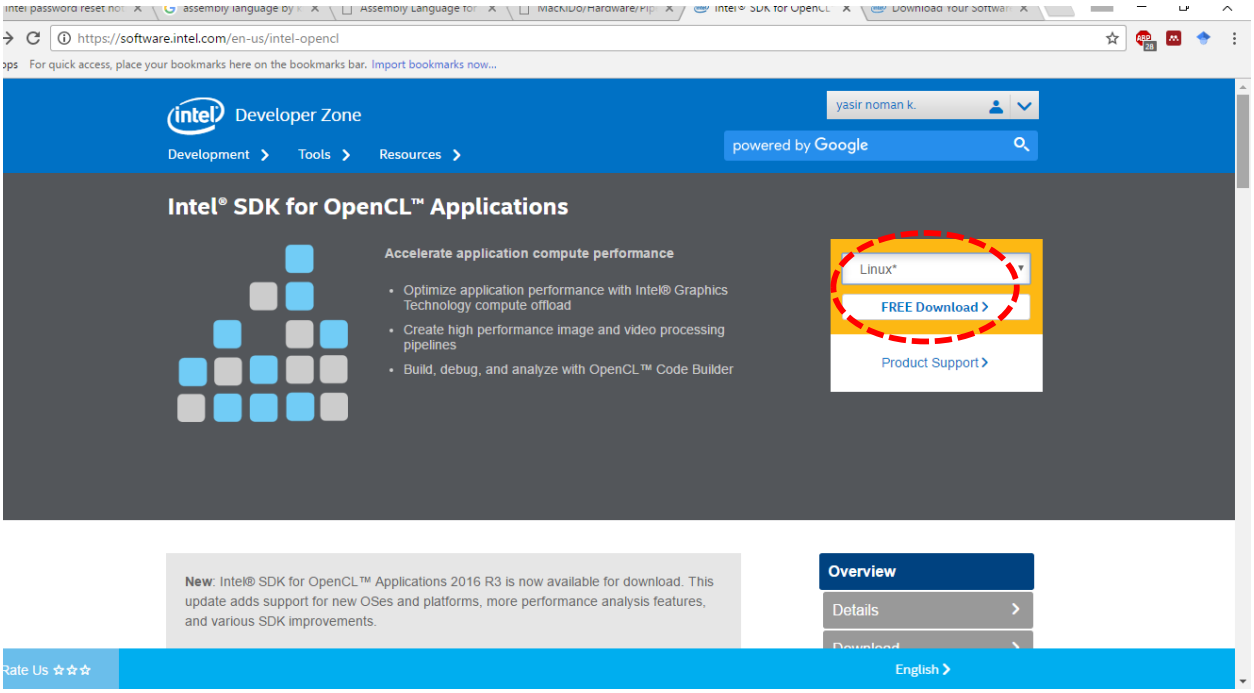
DCS-143001

Capital University of Science & Technology

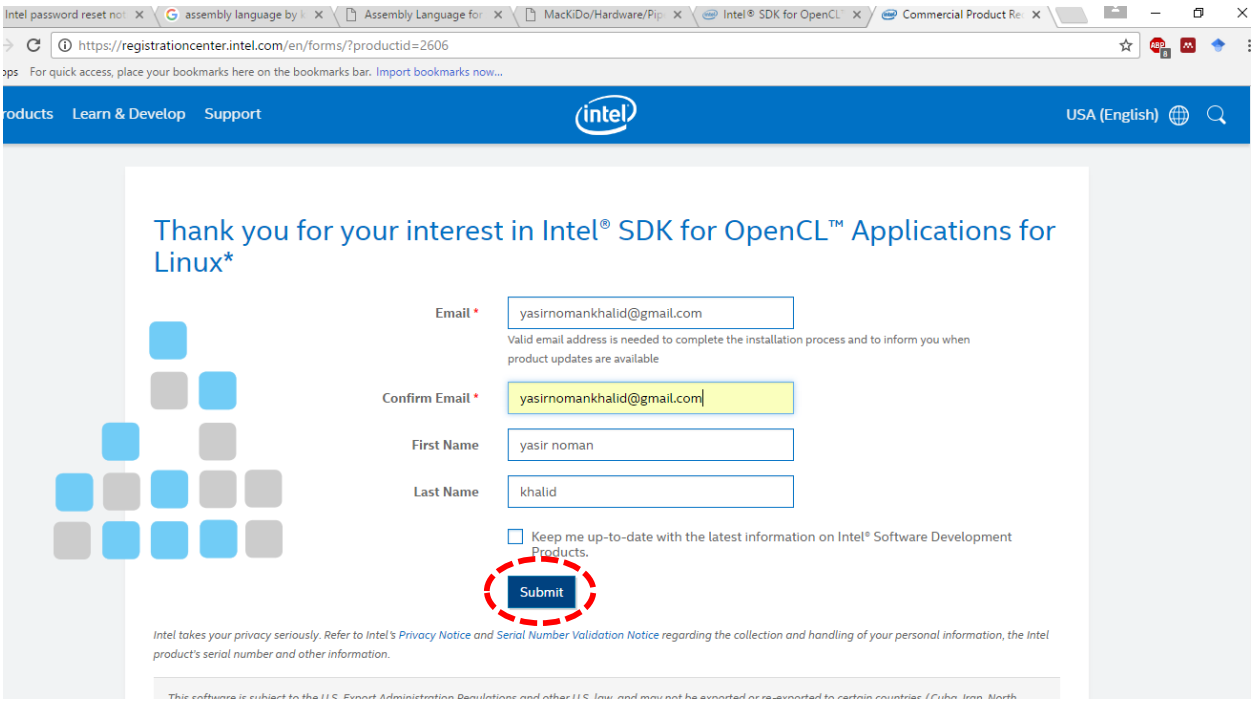
Contents

1. Downloading Intel OpenCL SDK

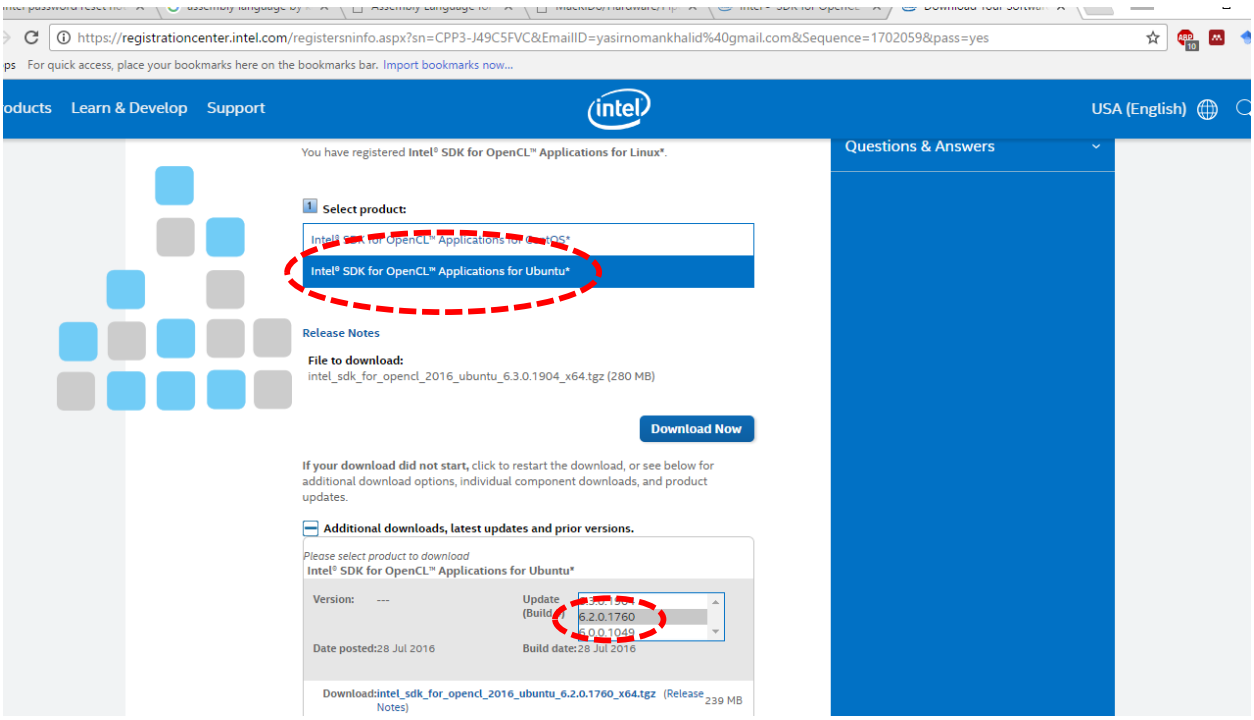
1. To Download Intel OpenCL SDK, Follow link provided below https://software.intel.com/en-us/intel-opencl
2. Select Linux as operating system and click on free download



3. A new tab will open up, fill the form and click submit



4. In the new tab
    a. Select Ubuntu distribution of linux
    b. Select Update (Build #) as 6.2.0.1760
    c. Click on Download Now

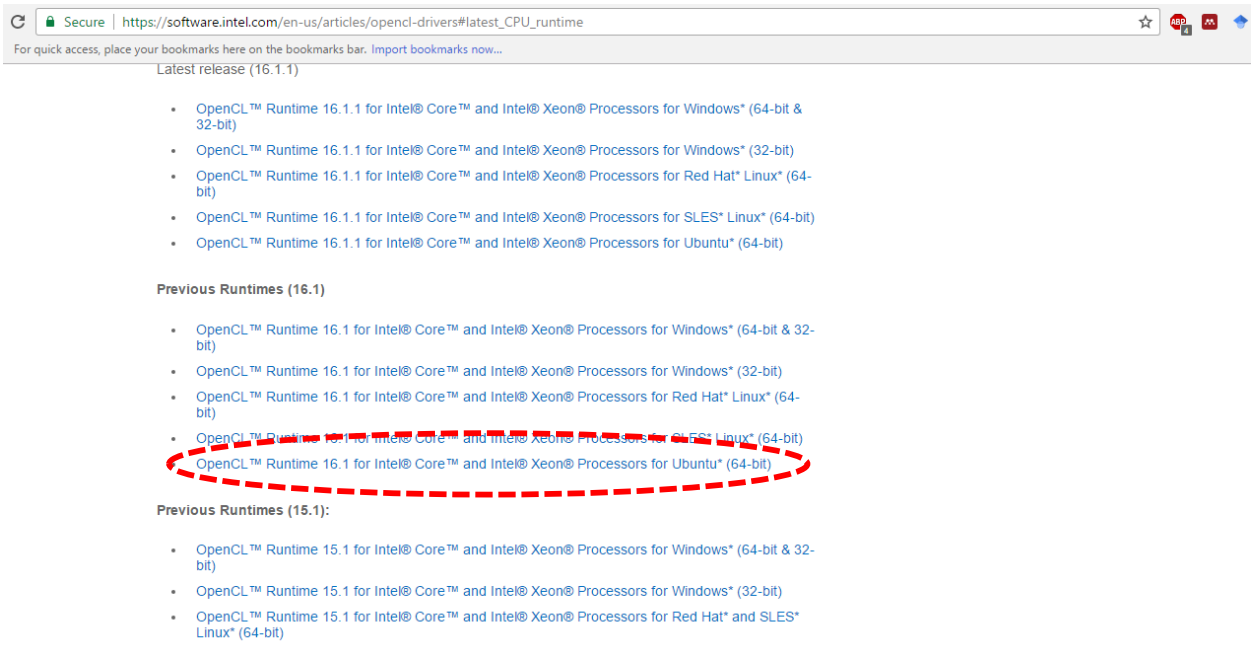


2. Downloading Intel OpenCL Runtime

1. Before installing Intel SDK for OpenCL, we have to install Intel OpenCL Runtime
2. For this purpose, go to following link

https://software.intel.com/en-us/articles/opencl-drivers#latest_CPU_runtime

3. Under previous Runtimes 16.1, select
    a. OpenCL™ Runtime 16.1 for Intel® Core™ and Intel® Xeon® Processors for Ubuntu* (64-bit) which will download this runtime for OpenCL



3. Additional steps for UBUNTU 16.04 LTS[1]

As Ubuntu 16.04 is not officially supported intel, we to also install following packages

1. mono by typing following command in terminal:

   sudo apt-get install mono-complete

2. libicu52 by download it from following link:

   http://packages.ubuntu.com/trusty/amd64/libicu52/download and then

   a. Open terminal (Alt+Ctrl+T) and type

      cd Downloads

   b. Now type following command

   sudo dpkg -i libicu52_52.1-3ubuntu0.4_amd64.deb

3. Close Terminal

4. Installing Intel OpenCL SDK and Runtime:

1. Open Terminal by typing Alt+Ctrl+T
2. In terminal, type

   cd Downloads

[1] For UBUNTU 14.04, 12.04 etc., don't follow these steps

4.1. Installing Intel OpenCL Runtime

1. Extract the tgz archive contents by typing in terminal:

   tar xzf opencl_runtime_16.1_x64_ubuntu_5.2.0.10002.tgz

   Highlighted part in above command is version number. Please replace it with version number of your downloaded package. Find it at the end of name of downloaded package e.g. name of package is opencl_runtime_16.1_x64_ubuntu_VersionNumber.tgz
2. After Extraction process is complete, type:

   cd opencl_runtime_16.1_x64_ubuntu_5.2.0.10002
3. Run the following command (from terminal) and follow the installer prompts:

   ./install.sh (remember '.' before '/')
4. Alternatively (for installation with graphical user interface) run the following command:

   ./install_GUI.sh

4.2. Installing Intel OpenCL SDK

1. Extract the TGZ archive contents by typing in terminal:

   tar xzf intel_sdk_for_opencl_2016_ubuntu_6.2.0.1760_x64.tgz

   Highlighted part in above command is version number. Please replace it with version number of your downloaded package. Find it at the end of name of downloaded package e.g. name of package is intel_sdk_for_opencl_2016_ubuntu_VersionNumber_x64.tgz
2. After Extraction process is complete, type:

   cd intel_sdk_for_opencl_2016_ubuntu_6.2.0.1760_x64
3. Run the following command (from terminal) and follow the installer prompts:

   ./install.sh
4. Alternatively (for installation with graphical user interface) run the following command:

   ./install_GUI.sh

5. Installation verification

To verify successful installation of Intel OpenCL SDK, install clinfo package by typing following commands in terminal:

1. ***sudo apt-get update***

   After typing this command, if you are prompted to provide password then provide password of your user_name for logging into UBUNTU

2. *sudo apt-get install clinfo*

After completing installation of clinfo, type following command in terminal:

clinfo

Its output will be similar to image below