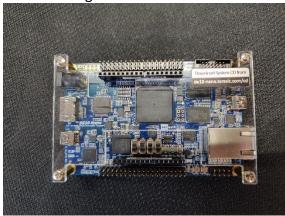
## Linux on the FPGA

## MicroSD specification

- 8GB minimum
- Class 4 speed with minimum write speed of 4MB/s.

## Refer to the speed class using this link

1. Configure the FPGA Mode Switch like in figure 1.





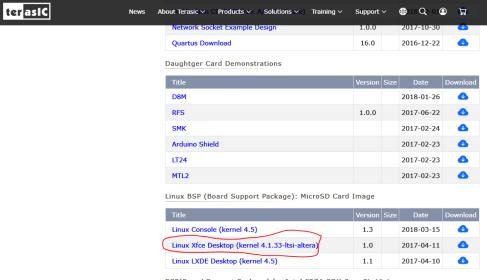
2. Download the SD card image file that contains the Linux environment on the DE10-Nano.

This link automatically downloads the DE10 Nano Xfce.zip file on the website.

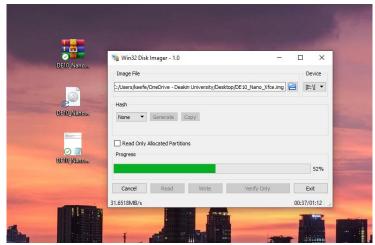


OR

<u>You can use this website to manually install it</u>. Scroll down to Linux BSP and select Linux Xfce Desktop



- BSP(Board Support Package) for Intel FPGA SDK OpenCL 16.1
- 3. Unzip the zip file using WinRAR and place it on your desktop.
- 4. Download Win32 Disk Imager and open the program
- 5. Under the Image File, select the unzipped file called DE10\_Nano\_Xfce in your Desktop.
- 6. Plug in the MicroSD card in your computer/laptop and select the MicroSD using the Device drop down button located at the top right corner of the program.
- 7. Click write and wait for the program to finish writing the file into the MicroSD card, this will take a couple minutes.



8. Once the program finished writing the file, insert the MicroSD card into the FPGA and close the Win32 Disk Imager program. You have finally installed Linux into the FPGA. Let us get it communicating with Windows. Follow the next tutorial called "FPGA on Windows".