Jetson Flashing Guide.

April, 2018

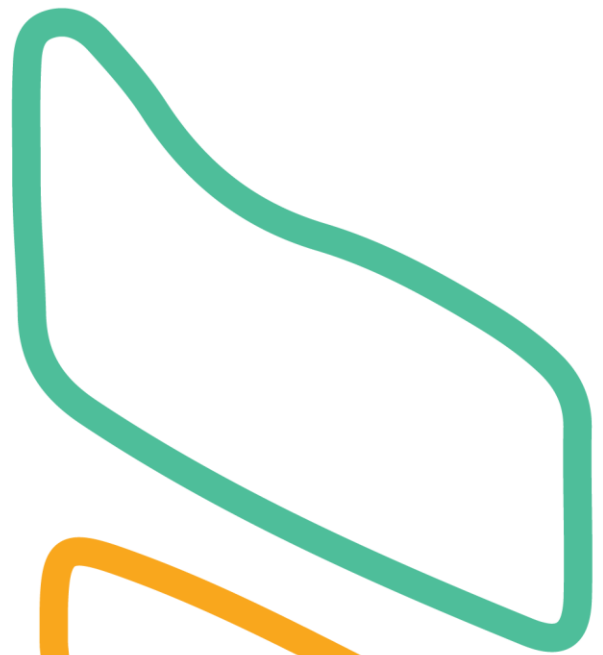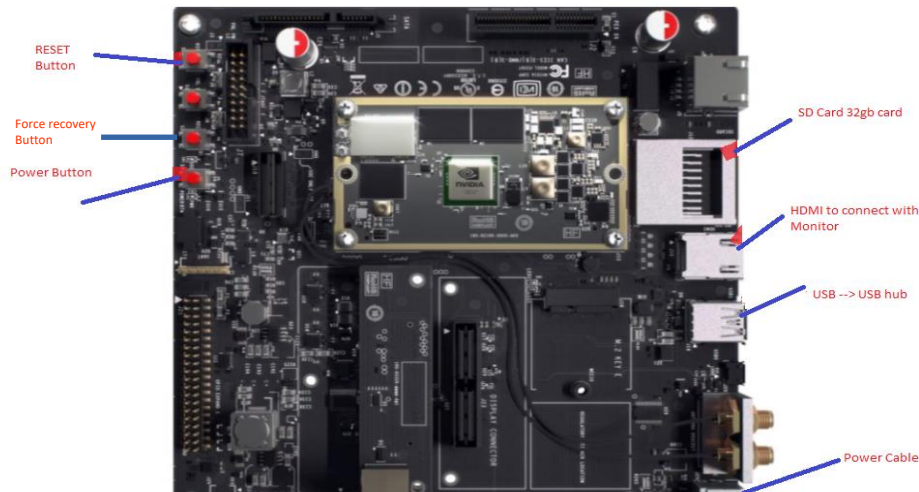## Table of Contents

Introduction

We will flash Nvidia jetson board with Linux based OS.

Please refer following image for Jetson board layout.

Prerequisite

1. Host Ubuntu machine
2. Jetson board

Steps

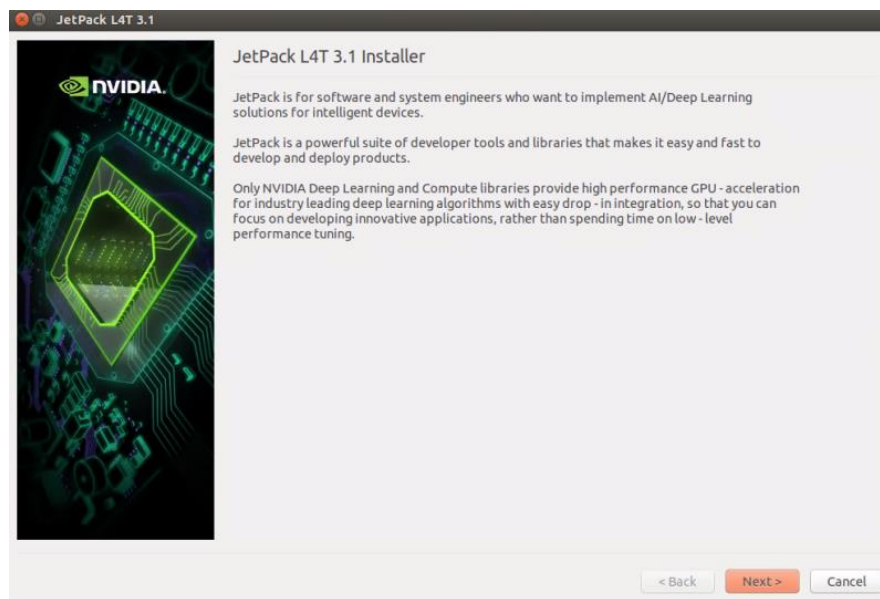Please follow following steps to setup Jetson board (On host machine).

1. Download Nvidia Jetson **Jetpack** for flashing:
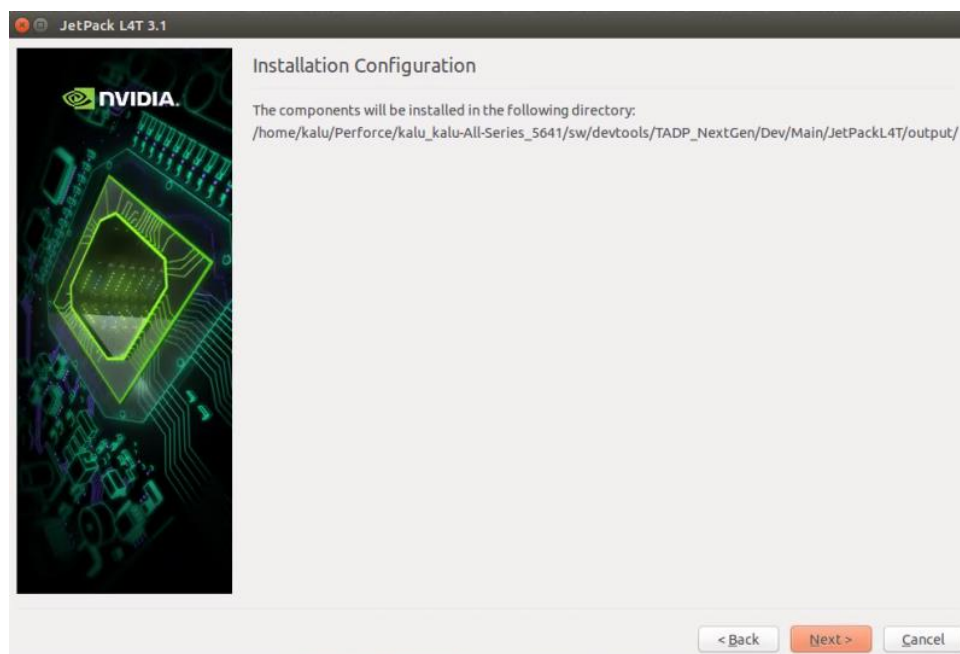
   https://developer.nvidia.com/embedded/jetpack

2. Create a folder named **jetson_jetpack** for installation of Jetpack libraries.

3. Place the downloaded JetPack-${VERSION}.run (Eg: **JetPack-L4T-3.1-linux-x64.run**) file in above folder

4. Add exec permission for the JetPack-L4T-3.1-linux-x64.run -

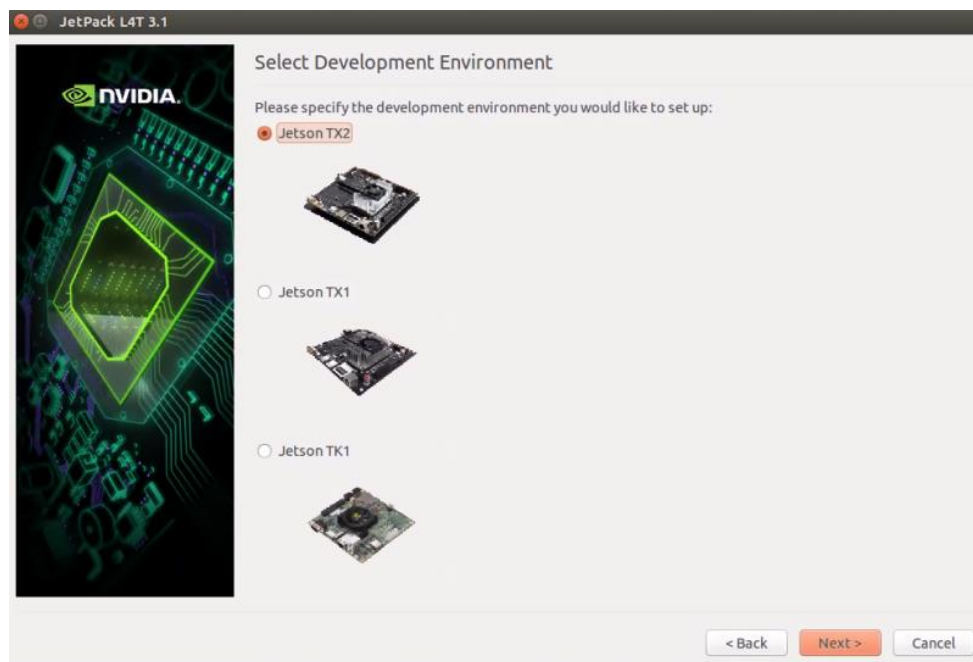   chmod +x JetPack-L4T-3.1-linux-x64.run

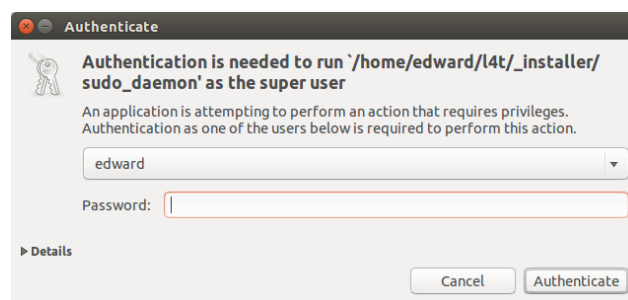5. Run JetPack-L4T-3.1-linux-x64.run in terminal on your host Ubuntu machine.

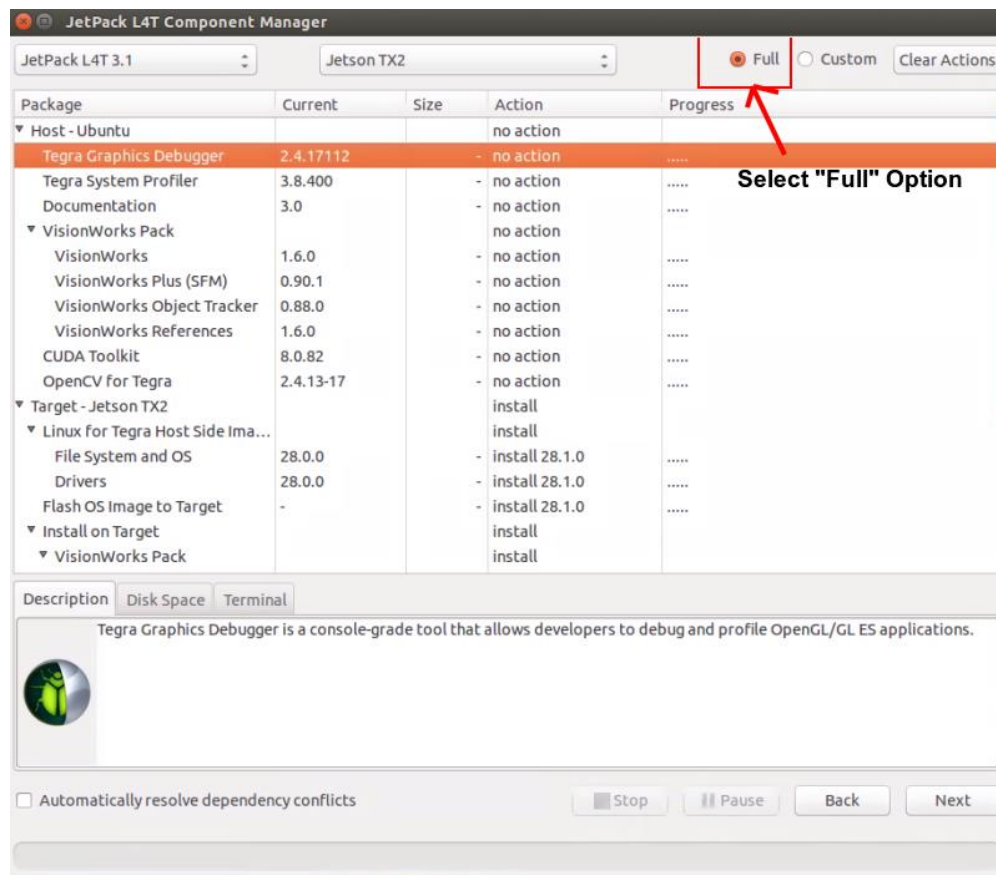6. Next, the JetPack installer will indicate the installation directory.

7. Select the development environment to setup.

8. The JetPack installer will pop up a window to ask for permission to use during the installation process; you will need to enter your sudo password here
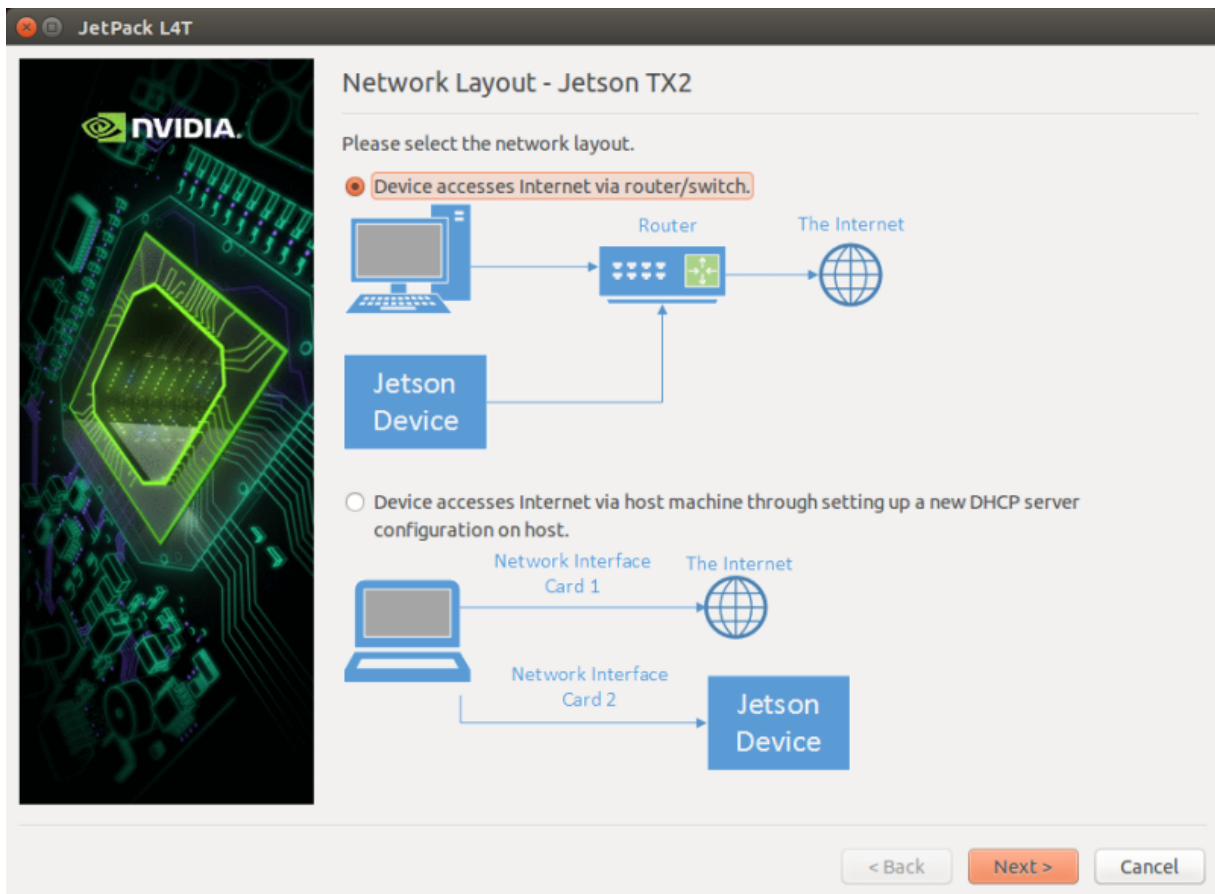
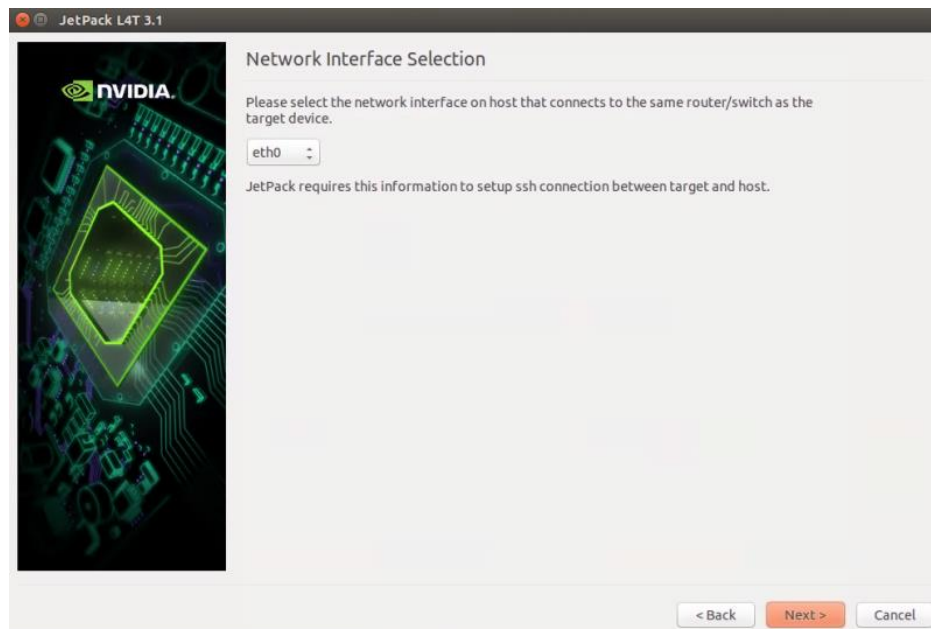9. Select the **Full** option for installing all the packages on the jetson.

10. Accept the license agreement for the selected components.

11. The Component Manager will proceed with the installation. Once the host installation steps are completed, click the Next button to continue with the installation of target components.
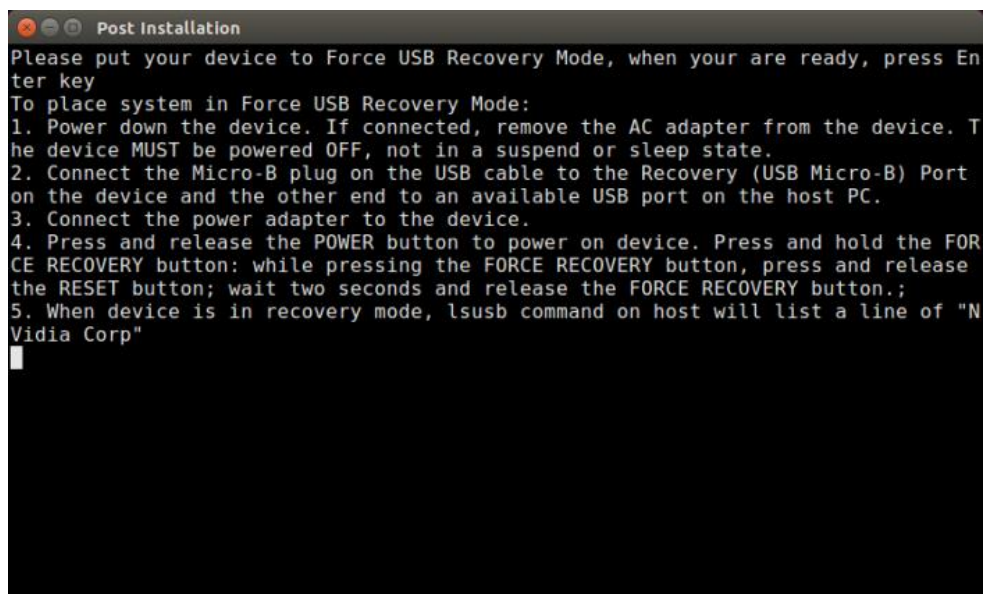
12.You will need to select the network layout for your specific environment.

13. If you selected the **Device access Internet via router/switch** layout, you will be asked to select which interface to use for Internet access.

14. A pop-up window will instruct you to put your device into Force USB Recovery Mode, so you can flash the OS.

<u>Fix for 4th step to put device in recovery mode (if not working):</u>

Long press FORCE RECOVERY button, meanwhile press POWER button and release POWER button after a second. Then release FORCE RECOVERY button.

15. Next the host will try to identify the IP address of Jetson system. If it **gives up**, enter IP manually.

Note: To know IP of Jetson: Open Terminal on Jetson machine->**ifconfig**. Use HDMI cable to connect monitor/display.

16. After obtaining the IP the host PC will install all the libraries on Jetson device.

17. After all the processing the host PC will give a 'Done Installation' message. Then Jetson is completely flashed .