

Task 2: Write the Ros installation algorithm on the Jetson nano

1- Download xubuntu 20.04 through the following link:

xubuntu 20.04 link:

<https://forums.developer.nvidia.com/t/xubuntu-20-04-focal-fossa-l4t-r32-3-1-custom-image-for-the-jetson-nano/121768>

2- Unzip the xubuntu 20.04 folder after the download process is finished using 7zip

3- Download the balena Etcher program through the following link:

Balena Etcher link:

<https://www.balena.io/etcher/>

4- When launching the balena Etcher program, select flash from file then choose xubuntu20.04

5- After that choose flash

6- A window will appear, close it

7- Complete the xubuntu 20.04 installation process, choose the language and region, enter the name and code and complete the other settings

Install Ros2 Foxy:

1- Open the terminal

2- Then copy the following commands:

Command link:

<https://docs.ros.org/en/foxy/Installation/Ubuntu-Install-Debians.html>

local

```
sudo apt update && sudo apt install locales
```

```
sudo locale-gen en_US en_US.UTF-8
```

```
sudo update-locale LC_ALL=en_US.UTF-8 LANG=en_US.UTF-8
```

```
export LANG=en_US.UTF-8
```

local

```
apt-cache policy | grep universe
```

```
500 http://us.archive.ubuntu.com/ubuntu focal/universe  
amd64 Packages
```

```
release
```

```
v=20.04,o=Ubuntu,a=focal,n=focal,l=Ubuntu,c=universe,b=amd  
64
```

```
sudo apt install software-properties-common
```

```
sudo add-apt-repository universe
```

```
sudo apt update && sudo apt install curl gnupg2 lsb-release  
sudo curl -sSL  
https://raw.githubusercontent.com/ros/rosdistro/master/ros.k  
ey -o /usr/share/keyrings/ros-archive-keyring.gpg
```

```
echo "deb [arch=$(dpkg --print-architecture) signed-  
by=/usr/share/keyrings/ros-archive-keyring.gpg]  
http://packages.ros.org/ros2/ubuntu $(source) /etc/os-release  
&& echo $UBUNTU_CODENAME) main" | sudo tee  
/etc/apt/sources.list.d/ros2.list > /dev/null
```

```
sudo apt update
```

```
sudo apt upgrade
```

```
sudo apt install ros-foxy-desktop
```

```
sudo apt install ros-foxy-ros-base
```

```
source /opt/ros/foxy/setup.bash  
ros2 run demo_nodes_cpp talker
```

1-Download xubuntu 20.04 through the following link



ocal Fossa L4T R32.3.1 - Custom Image for the Jetson Nano 

ubuntu Jetson Nano Jetson & Embedded Systems Autonomous Machines

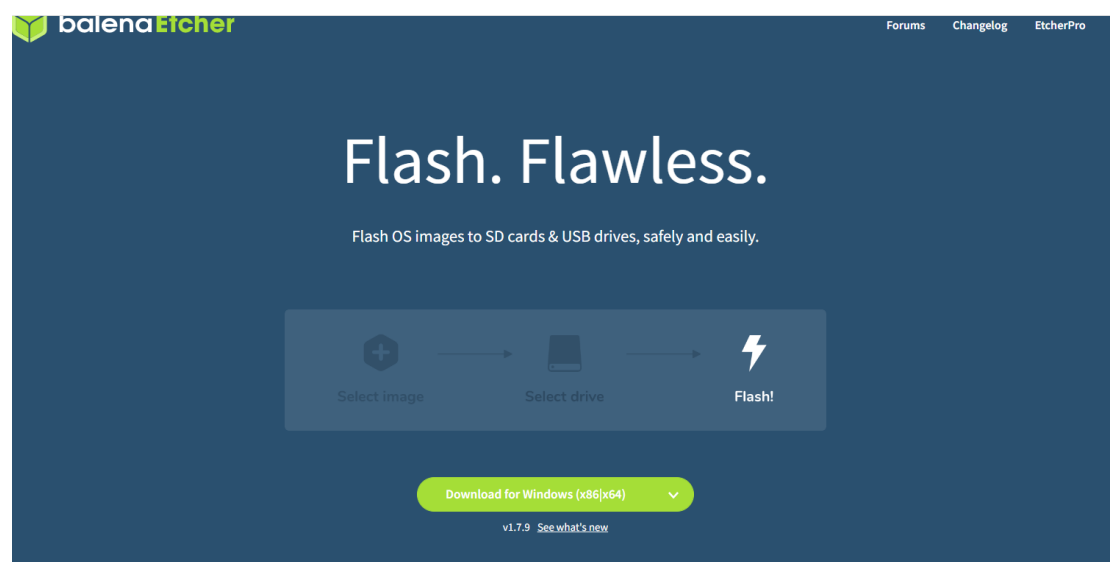
Detecting hardware, please wait...

Download Link: [Xubuntu-20.04-l4t-32.3.1.tar.tbz2](#)

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!Great job, I like this

2-Download the balena Etcher program through the following link




balenaEtcher Forums Changelog EtcherPro

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