

Release Note of Ubuntu Minimal 20.04 LTS (v3.0)

Summary

Release Date	2020-07-15
Release Type	New Image

File name : ubuntu-20.04-4.9-minimal-odroid-n2-20200715.img.xz

Download from below servers

- Official US West Coast: http://odroid.in/ubuntu_20.04lts
- Official US East Coast: http://east.us.odroid.in/ubuntu_20.04lts (Thanks to David Beauchamp @ archlinuxarm)
- Official EU Germany: http://de.eu.odroid.in/ubuntu_20.04lts
- Official Korea/Asia Mirror: <https://dn.odroid.com/S922X/ODROID-N2/Ubuntu/>

Features

- **Linux Kernel LTS 4.9.230**
- The latest Ubuntu 20.04 point release
- Support the new N2-Plus model
- Support a variant 2GB model [2GB with two DDR4 chips](#)
- fstrim command works with the SD card too
- Improved USB 3.0 storage device stability
- HDMI resolution auto-detection
- Mali GPU driver for framebuffer(fbdev): OpenGL-ES 1.1, 2.0, 3.0 and 3.1 with OpenCL-1.2 and 2.0.
- A lot of [Kernel patches](#)
- New **config.ini** instead of boot.ini
- Device Tree overlays support

The RootFS Auto-resize feature has changed!!!
No need for power cycling, resize will happen on background in the first booting process.

Known issues and Tips

- Tons of issues undocumented. 😞
- c2play isn't working atm, only kplayer

Access Credentials

Username	Password
root	odroid

PPSSPP

- Install PPSSPP for PSP emulation. It comes with Mali GPU accelerated SDL.

```
sudo apt update
sudo apt upgrade
bash -c "$(curl -sL http://deb.odroid.in/install_ppsspp.sh)"
cd /root/ppsspp
./PPSSPPSDL
```

glmark2-es2-fbdev

- A slightly modified version was required to work
- Source code is on /root/glmark2-es2-fbdev-master or [in Github](#). [Build & Installation guide](#)
- You can launch it running:

```
glmark2-es2-fbdev
```

OpenCL configuration

- Run the following commands to start an OpenCL programming. (Special thanks to user @DrPhil)

```
apt install clinfo ocl-icd-libopencl
apt download mali-fbdev
apt autoremove
ar -xv mali-fbdev_*
tar -xvf data.tar.xz
rm usr/lib/aarch64-linux-gnu/libOpenCL.so*
rm usr/share/mali/libOpenCL.so* usr/share/mali/libEGL.so*
cp -r usr/* /usr/
mkdir /etc/OpenCL
mkdir /etc/OpenCL/vendors/
echo "libmali.so" > /etc/OpenCL/vendors/mali.icd
```

```

root@odroid:~# cinfo
Number of platforms          1
Platform Name               ARM Platform
Platform Vendor             ARM
Platform Version            OpenCL 2.0
git.c8adb9.ad00b04c1b60847de257177231dc1a53
Platform Profile            FULL_PROFILE

```

Video Playback #1

- Hardware accelerated 4K video playback is possible using c2play
- c2play is a amazing piece of software written by crashoverride [Source Code](#)
- c2play usage:

```
c2play filename
```

- Kodi is also NOT available due to our limited capabilities.

Video Playback #2

- Alternative way: A more flawless 4K video play with 'kplayer'.
- Install Amlogic video play libs package

```

$ wget http://deb.odroid.in/c4/pool/main/a/aml-libs/aml-
libs_20200921-8b4ccad-12_arm64.deb
$ dpkg -i aml-libs_20200921-8b4ccad-12_arm64.deb
$ reboot

```

- Edit also configuration like this to fix the audio sampling frequency problem .

```

$ cat /etc/asound.conf
pcm.!default{
    type hw
    card
    device
}

ctl.!default{
    type hw
    card
}

```

- kplayer usage:

```
kplayer filename
```

boot.ini and config.ini

- [Available here](#)

Kernel build (native)

- [Native Kernel build Guide](#)

How to Update system and kernel software

```
sudo apt update  
sudo apt full-upgrade  
sudo reboot
```

From:

<http://wiki.odroid.com/> - **ODROID Wiki**

Permanent link:

http://wiki.odroid.com/odroid-n2/os_images/ubuntu/20200715

Last update: **2020/12/23 03:30**

