ODROID-GO Ultra Function Key Map

Installing OS Image on Odroid GO Ultra

ODROID-GOU has built-in 16GB emmc.
ODROID-GOU comes with **Ubuntu Minimal EmulStation** image pre-installed on emmc.
As a result, It is not necessary to flash the image to an SD card. You only need to copy a ROMS file structure and games to your sd card to get started.

This page will show you how to install a new version of the OS or restore emmc.

Ubuntu Minimal EmulationStation Image

Release versions	Downloads	Release-notes	Description
v1.1	Ubuntu 20.04 ES image : KR US	release-notes	

Recovery mode on ODROID-GOU

In order to connect the built-in emmc to the PC, it is necessary to boot the recovery mode on ODROID-GOU.

- Power off ODROID-GOU.
- As shown in the image above, press both keys(Trigger Left2 + Trigger Right2) at the same time and Power ON

- When the recovery splash-screen is displayed, you can release the button.

- A USB connection message is output with a "RECOVERY MODE" banner.
- Connect to a PC using a USB-C type cable.

- **Download Etcher**

You can easily flash an image to your memory card using Etcher.

Download Etcher here: https://www.balena.io/etcher/

- **Flash the image**

1. Open Etcher.
2. Select the downloaded OS image.
3. Select the inserted ODROID-GOU. (Normally, the memory card is detected automatically.)
4. Click Flash!
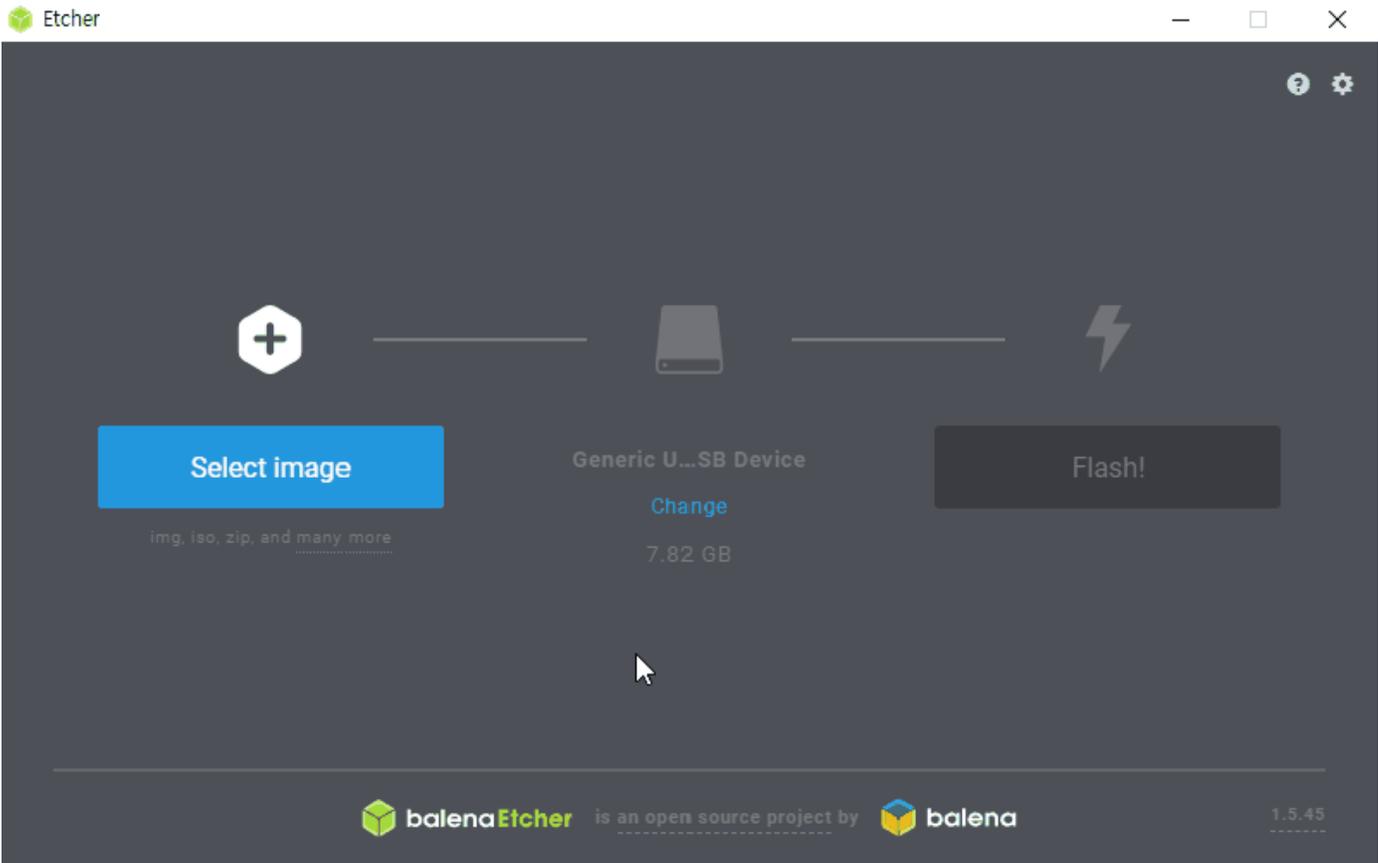
Partition Layout of eMMC

partition	Size	From(sector #)	To(Sector #)	Name for Fastboot	Partition Name
BL1 / MBR	512B	0	0	-	
U-Boot	959.5KB	1	1919	bootloader	/dev/block/bootloader
U-Boot Environment	64KB	1920	2047	env	/dev/block/env
FAT32 for boot	128MB	2048	264191	-	mmcblk0p1
EXT4 for root filesystem	-	264192	remaining blocks	-	mmcblk0p2

Transferring Game ROMs with SD Card Reader

There is some open source or for free application to communicate an EXT4 file system under the Windows O/S.
Have tested some apps and found only one for free to transfer files to the EXT4 filesystem without error and there are tiny tips too.
If you know other apps, please share them.

Before copying files, you have to boot the ODROID device with the OS installed SD card first. The OS will resize the EXT4 root file system to fit the SD card capacity in the first booting process.
1. Flash the OS image with Etcher.
2. Plug the SD card to ODROID.
3. Turn on the device and wait a couple of minutes.
4. Safely shutdown the system by pressing power button.
5. Unplug the SD card from ODROID and connect the SD card to your PC with a card reader.
6. Transfer ROM files in to the SD card.

1. Linux File System access for Windows by Paragon Software

DOWNLOAD
You can download follow this link https://www.paragon-software.com/home/linuxfs-windows/

INSTALL

Transfer rate decreased to 5 MB/s after 10 days if you want to keep using it for free

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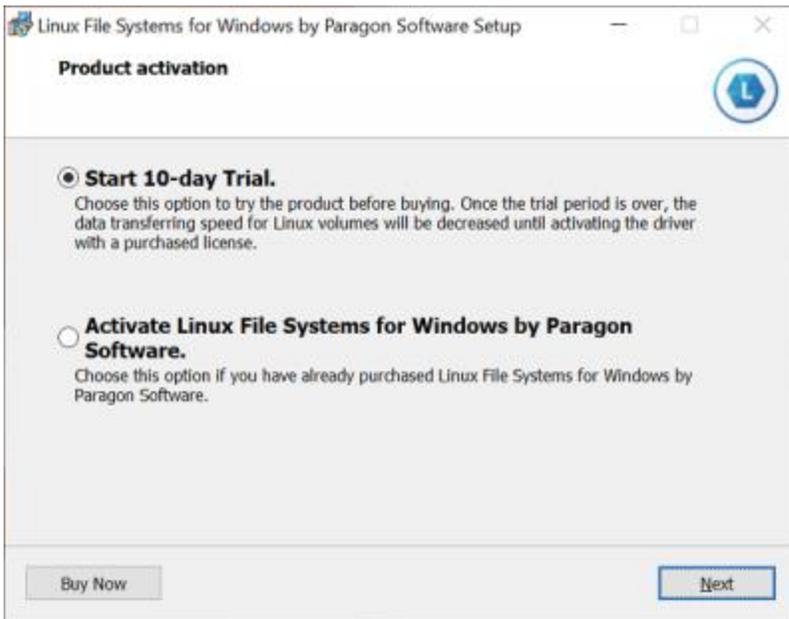
RUN

- **Step 1.** No connection anything EXT4 file system in the system
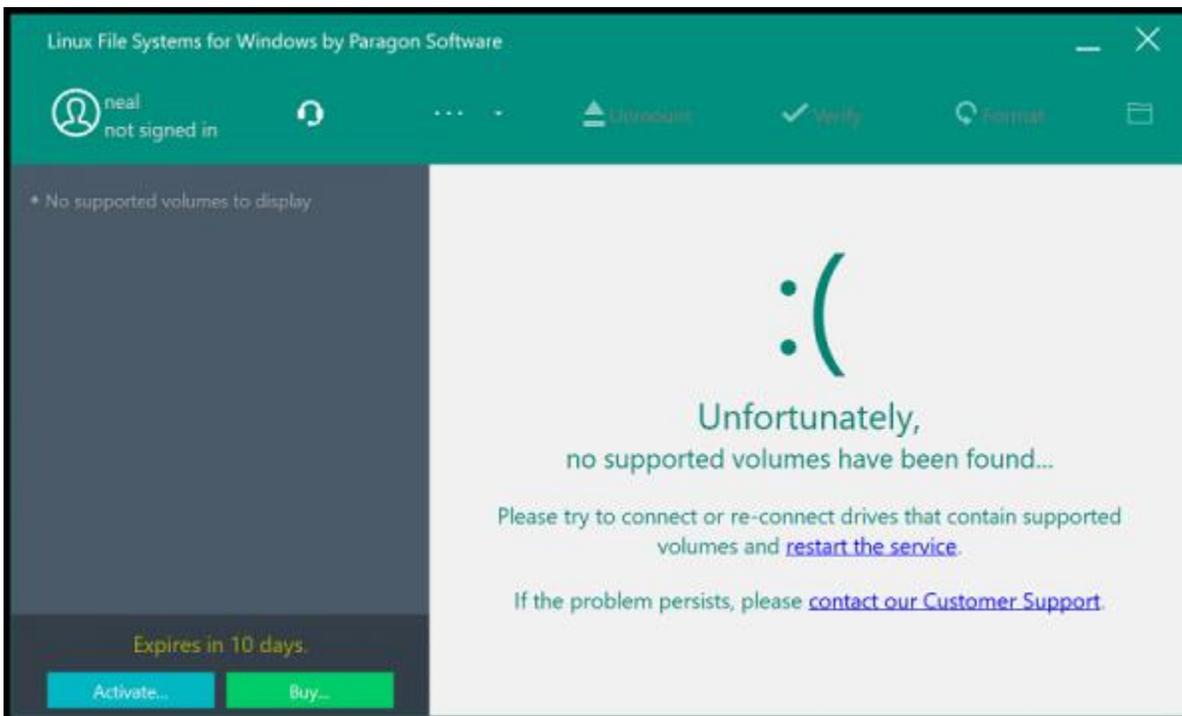
- **Step 2.** Recommand set Off Mount automatically
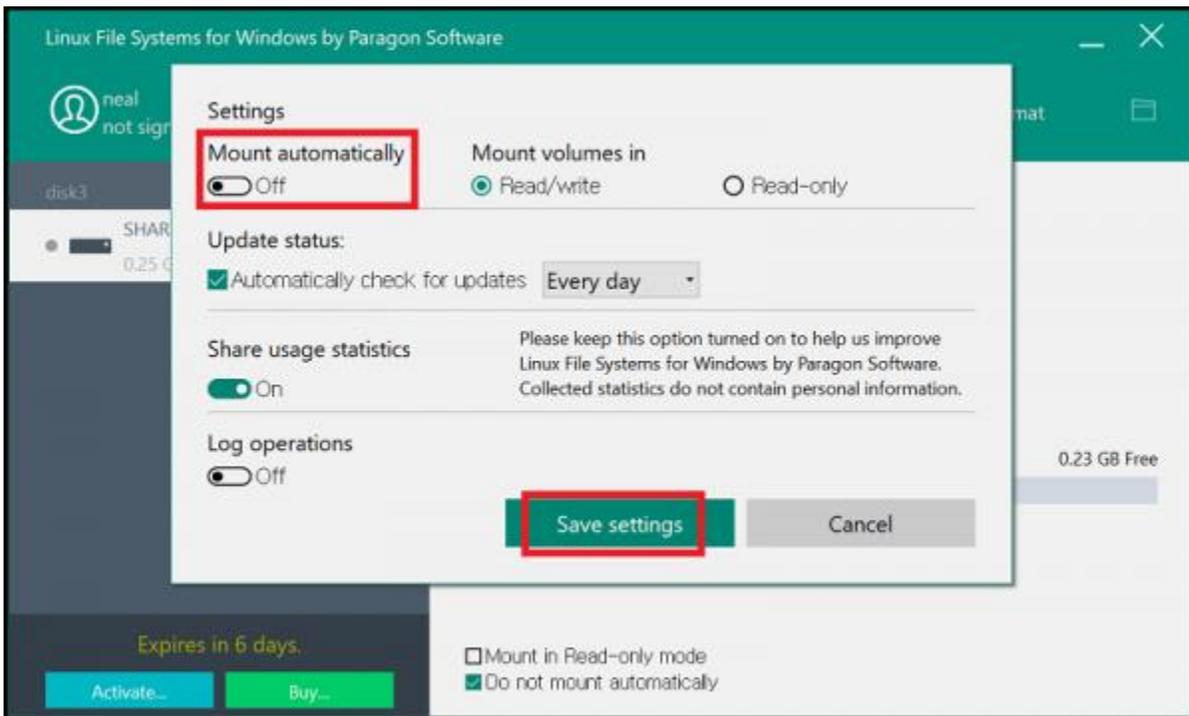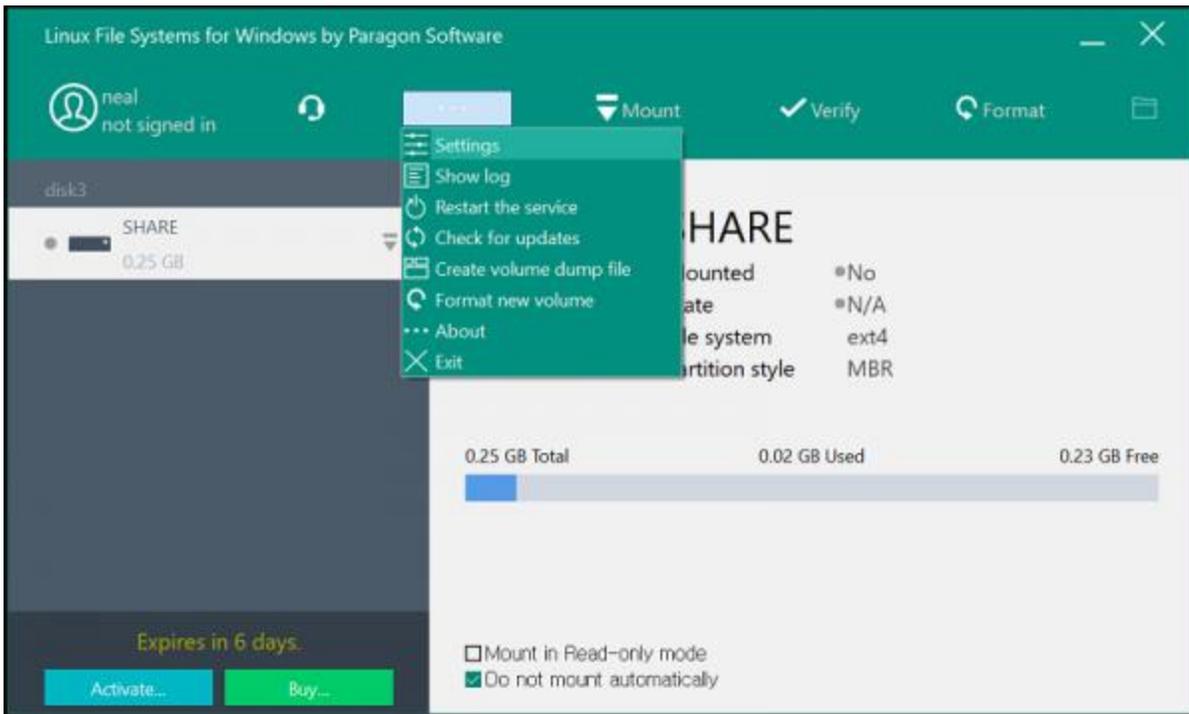
- **Step 3.** Connected SD card and click "Mount"
- Discovered connection EXT4 file system when connection established with SD card
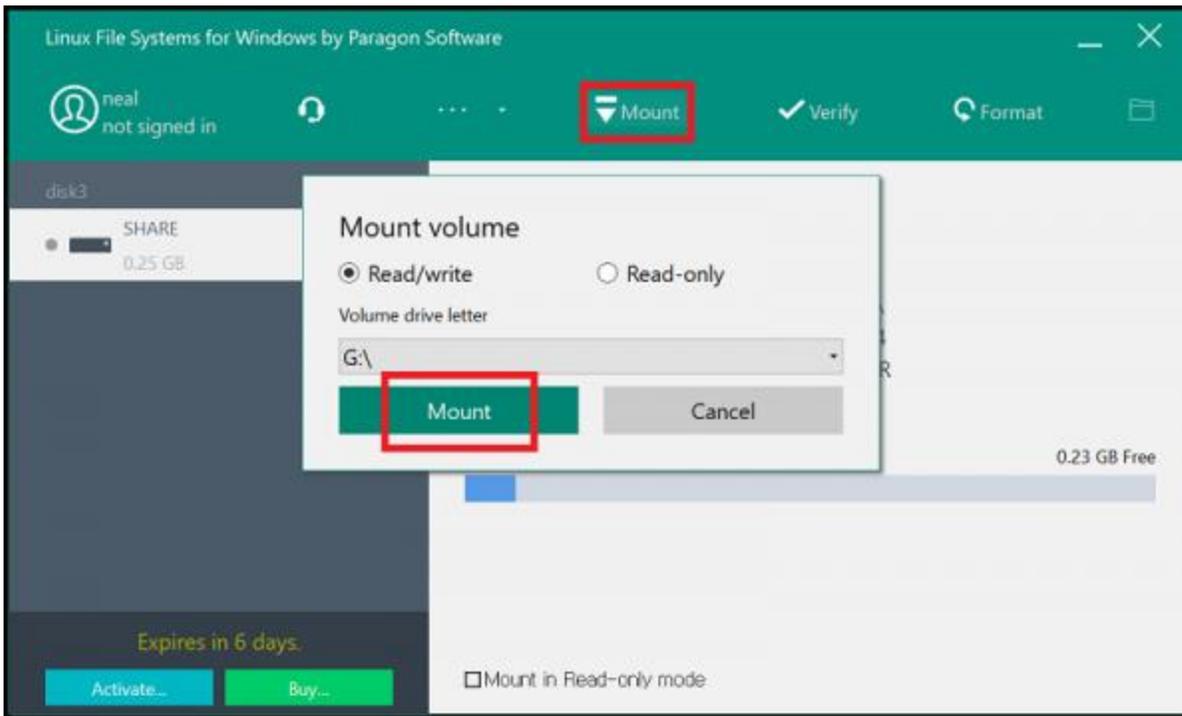
- **Step 4.** Copy files to the SD card directory you want
- Now that your Windows has recognized the EXT4 file system via the app you can read/write your SD card under the windows explorer
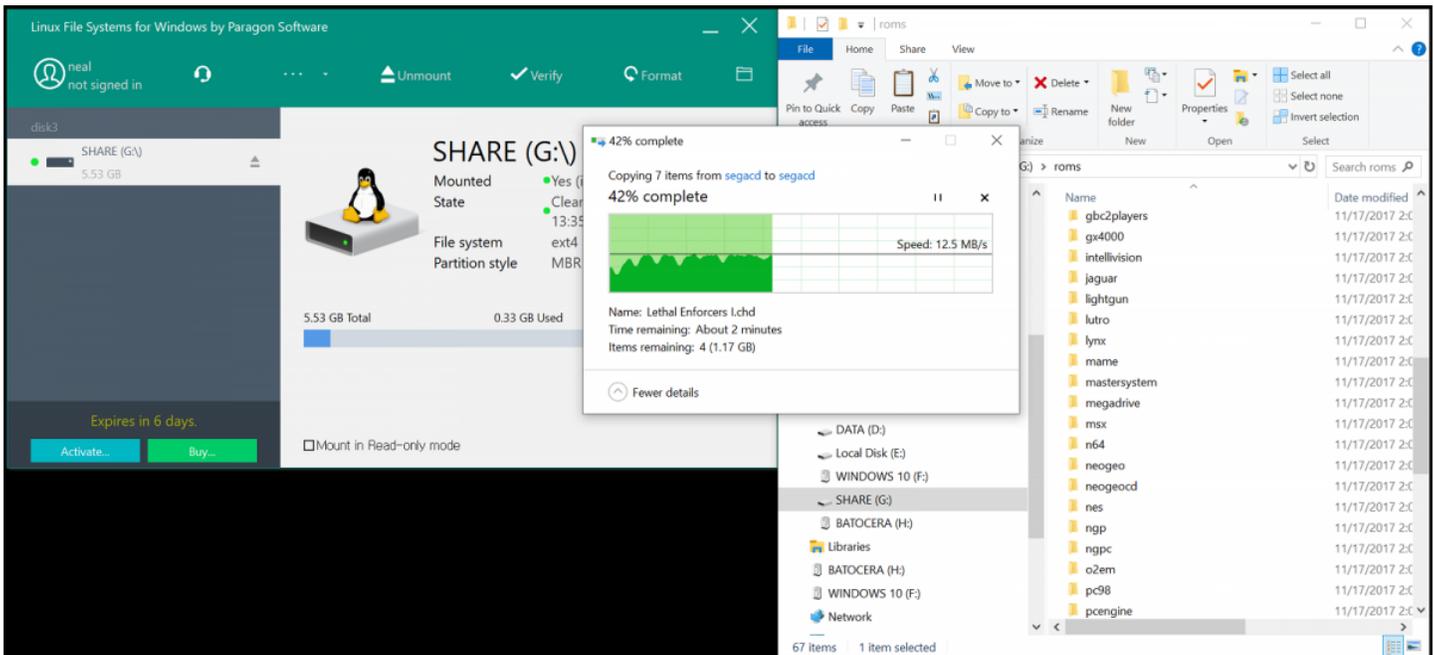
- **Step 5.** Remove SD card

You should click "Unmount" on the app first and then "Eject" on the windows explorer before pulling your SD card out
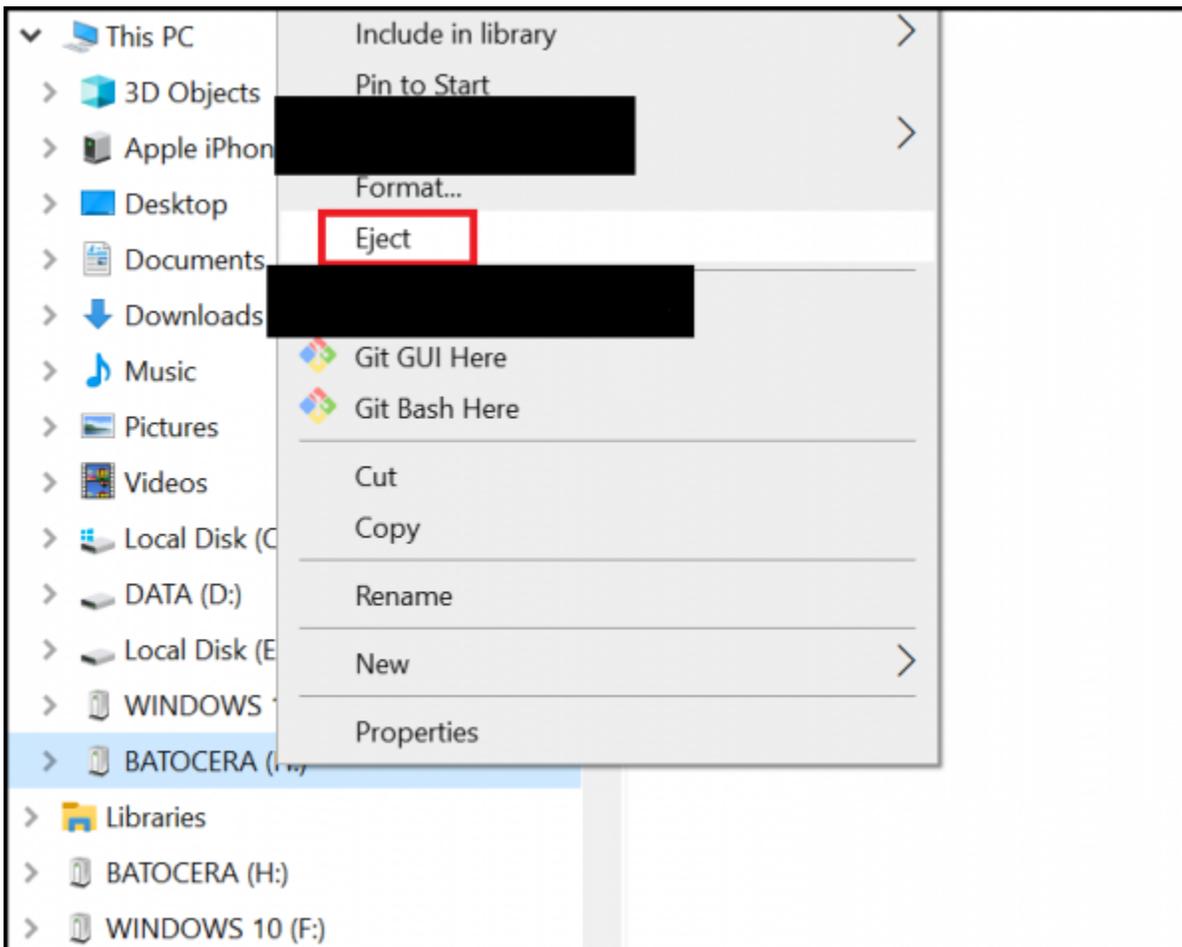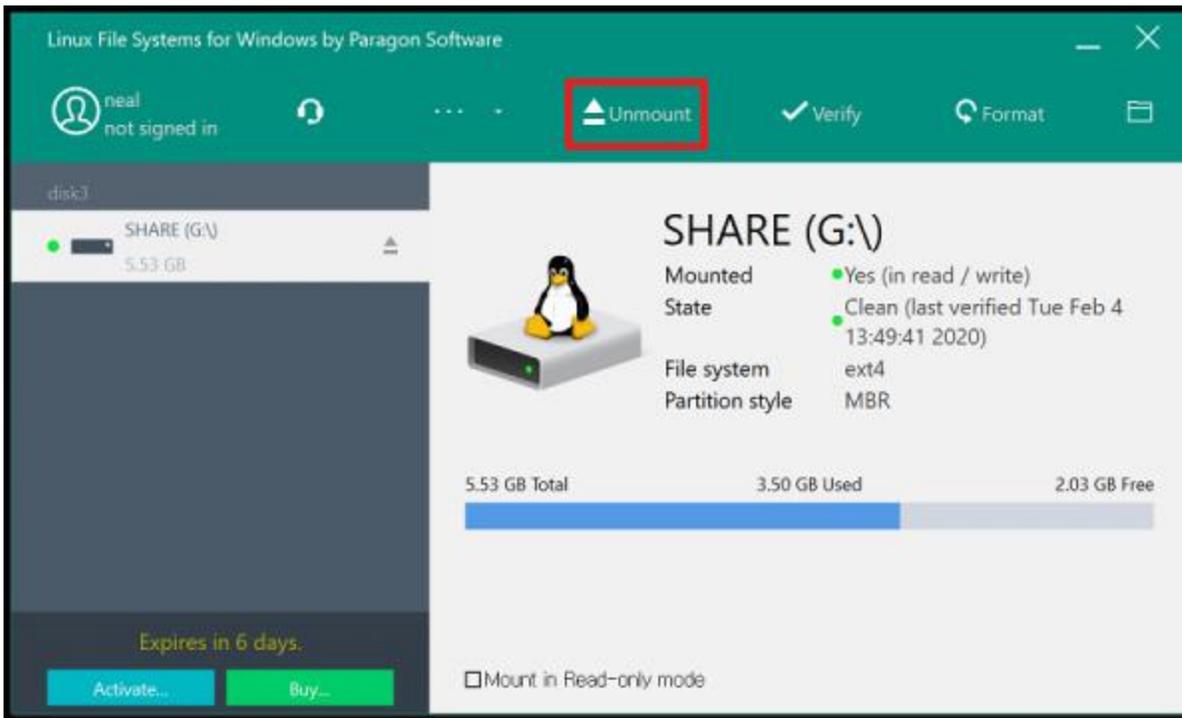
Check the EXT4 file system whether its integrity is okay or not. If there's a corrupted EXT4 file system after writing files, you should try to verify and make clean. (Unmount first if it is mounted)
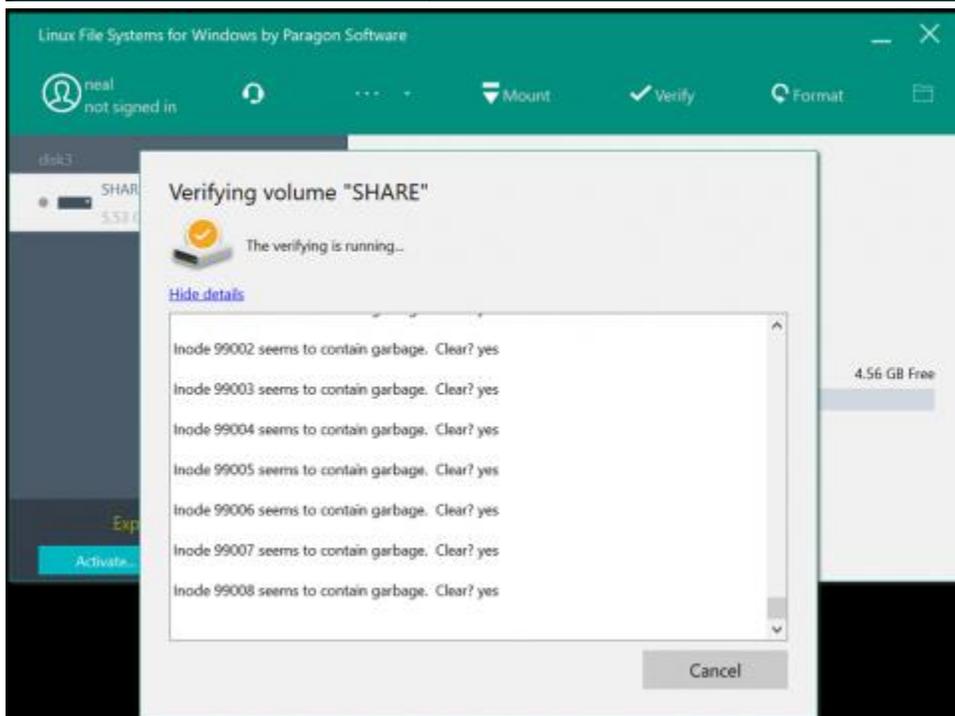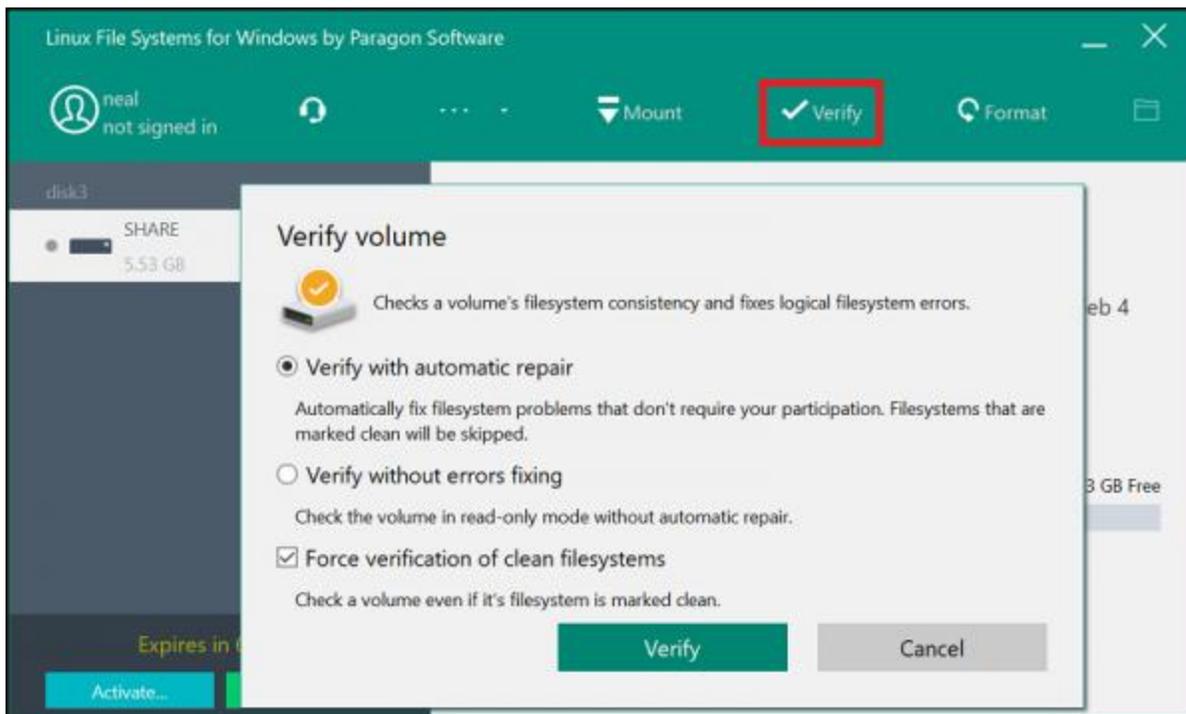
2. Linux File System access for MacOS by Paragon Software

https://www.paragon-software.com/home/extfs-mac/

Transferring Games ROMs via Network

You can choose the two ways according to your preferences to transfer game ROMs. If you are not familiar with CLI, follow the SAMBA.

SAMBA

The SAMBA server has installed since the Jan 29, 2020 image by default, so you don't have to any configuration about SAMBA server.
You just need a network device and your HOST-PC.

- Transferring Game ROMs via SAMBA

ssh(scp) on Ubuntu

- Transferring Game ROMs via scp

Force Power OFF

If you have any problem with your ODROID-GO-Ultra, you will try to switch off.
You can switch off ODROID-GO-Ultra by pushing the on/off buttons for about 6 seconds.

Block Diagram
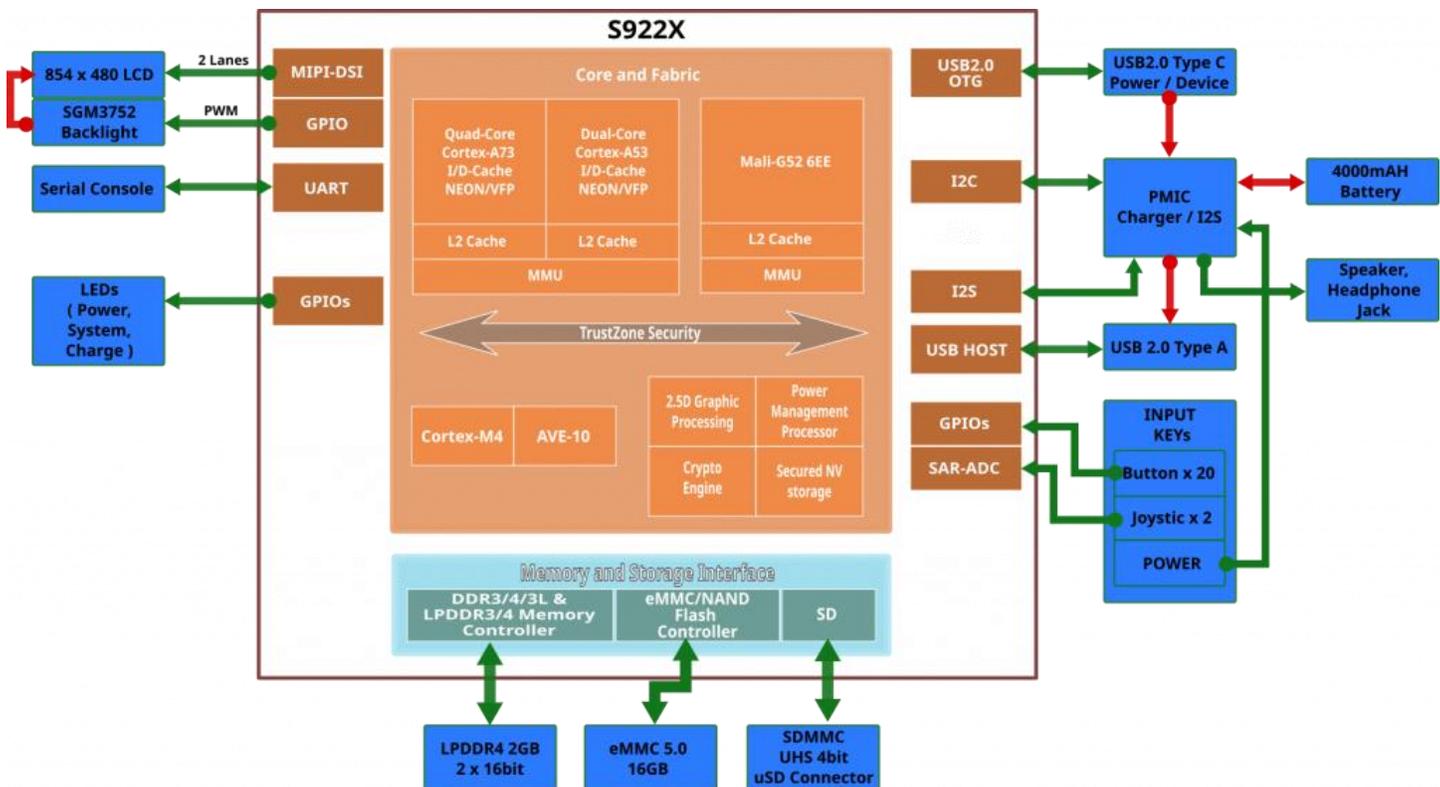
Software Platform

- **Build Information**

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- U-boot
- Kernel

- **Advanced**
  - How to recover eMMC
  - Setting Network
  - Custom Boot Logo
  - Calibration Joystick
  - Auto Test to check HW components
  - Forced SD Boot Mode
  - Check battery charging status

Regulatory Compliance Documents

- ODROID-GO-Ultra KC Certification
- ODROID-GO-Ultra CE Certification
- ODROID-GO-Ultra FCC Certification