

Journal 2 – A70 tests and investigations.

Research – Wednesday 20th November

I decided to begin with Ubuntu Touch...

The instructions provided [here](#) (download is there too):

- Download the latest build.
- Reboot to recovery
- Optional: Create backup of your current rom.
- Flash the latest build.
- Reboot
- Default password is "user" (without quotes)

...But before testing it out, I ran into some concerns.

After seeing these warnings {

/*

* I'm not responsible for bricked devices, dead SD cards, thermonuclear war, or you getting fired because the alarm app failed (like it did for me...).

* Please do some research if you have any concerns about features included in the products you find here before flashing it!

* YOU are choosing to make these modifications, and if you point the finger at me for messing up your device, I will laugh at you.


* Your warranty will be void if you tamper with any part of your device / software.

* Same statement for XDA.

*/

},

I decided it would be a good idea to find a way to save the current state of the phone before proceeding.

It was hard to find out how to do so on my Windows pc, so I asked ChatGPT for the resources and steps. 

1. Backup the Stock ROM

Before messing with your phone's software, it's critical to back up your current ROM (stock Samsung firmware or any custom ROM you're using). Use **TWRP (Team Win Recovery Project)** to create a full Nandroid backup. This backup allows you to restore the device to its exact current state if needed.

2. Reverting to Stock Samsung Firmware

To reinstall the stock Samsung firmware:

- Download **Odin (a tool for flashing Samsung firmware on Windows)**.
- Download the correct stock firmware for your Galaxy A70 from websites like [SamMobile](#) or [Frija Tool](#).
- Put your device into **Download Mode** and use Odin to flash the stock firmware. This will effectively "clean" the device and return it to Samsung's official software.

3. Installing a Different Custom ROM

If you want to install another custom ROM after trying Ubuntu Touch:

- Use TWRP to wipe the system, cache, and data partitions.
- Flash the new custom ROM of your choice by following its specific installation instructions.

4. Cleaning the Device Before Reinstalling

If you're experiencing issues or want a fresh start:

- Format the **data** partition using TWRP. This will remove all user data, so ensure you've backed up anything important.
- Use tools like **fastboot** (if supported) or TWRP to ensure the partitions are clean before reinstalling a ROM.

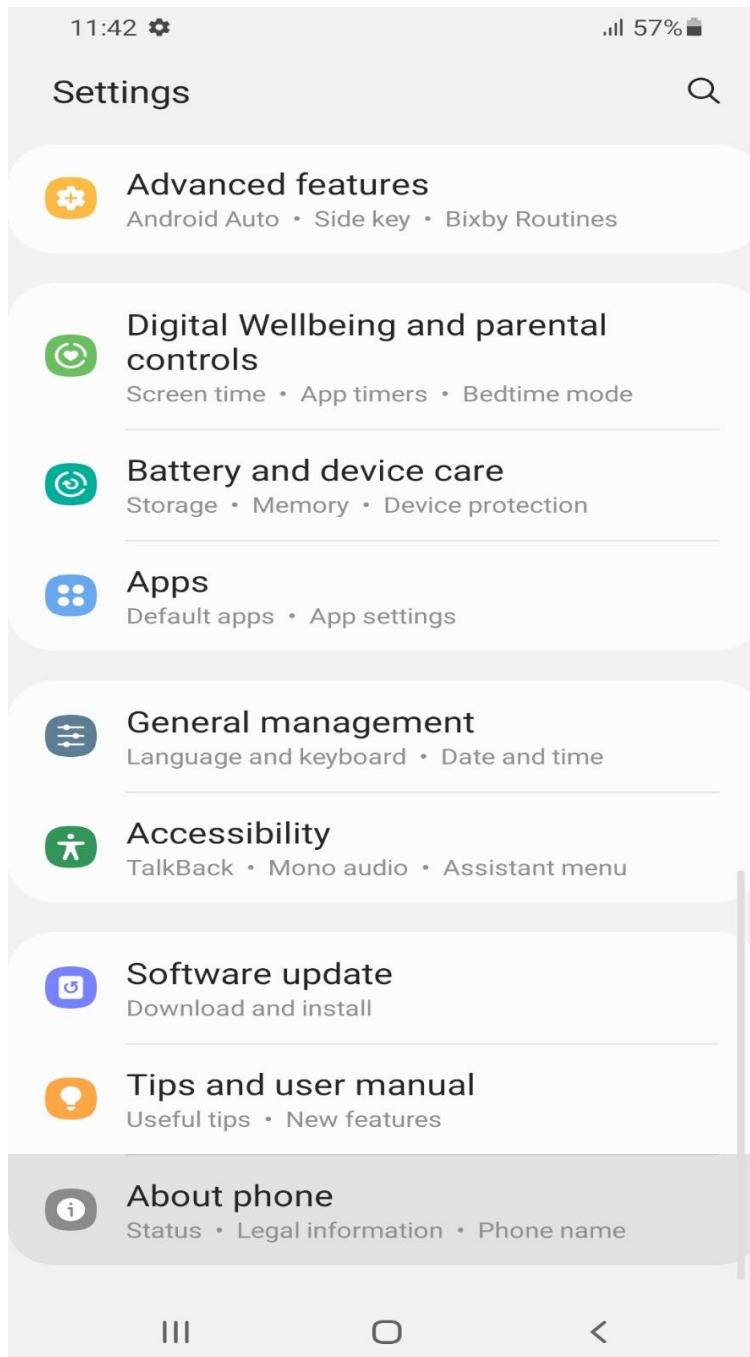


Preparation – Friday 22nd November

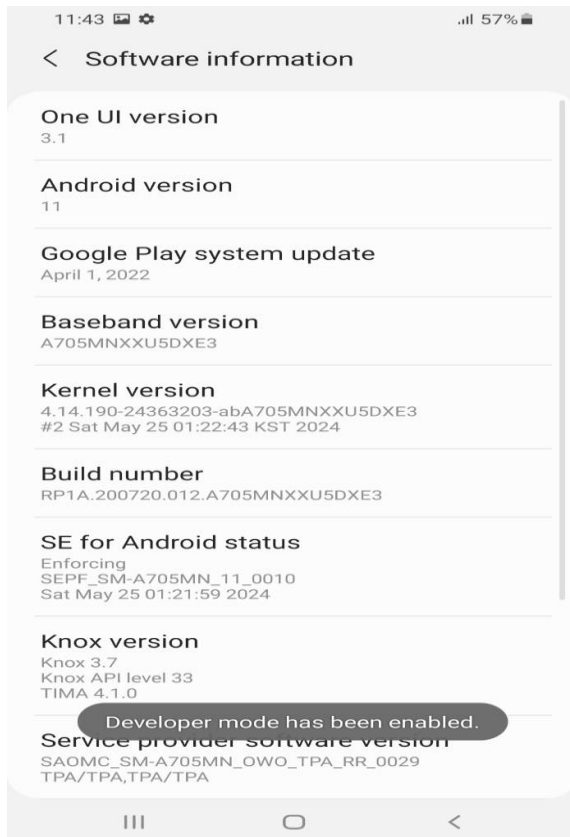
Downloading the necessary apps: ADB, Fastboot, TWRP, Odin, Ubuntu Touch ROM.

I start by saving my current phone state, since I want to be able to try again if anything corrupts. (can be skipped)

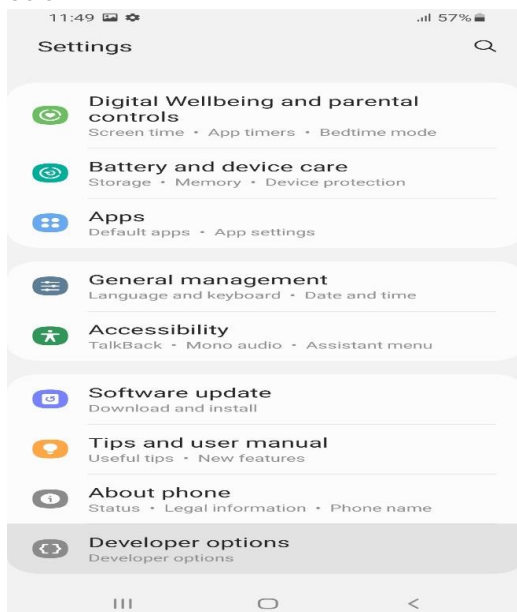
- Make sure adb and fastboot are installed ([google dev](#)).
- Enable developer mode on the a70 by clicking “settings>about phone>software information>build number” 7 times. Without doing this, I wouldn't be able to access some very necessary settings like usb debugging, that lets the pc modify the phone.



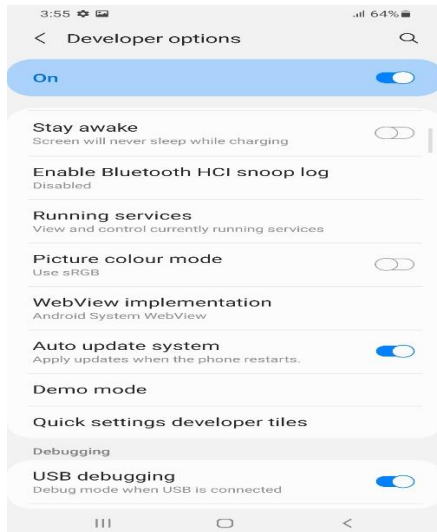
- If it worked, we should get a message saying, 'Developer mode has been enabled.'



- Now in the new developer settings that appear, I switch usb debugging and OEM unlock to “yes.” Usb debugging is needed if I plan to use adb to flash the phone or such.

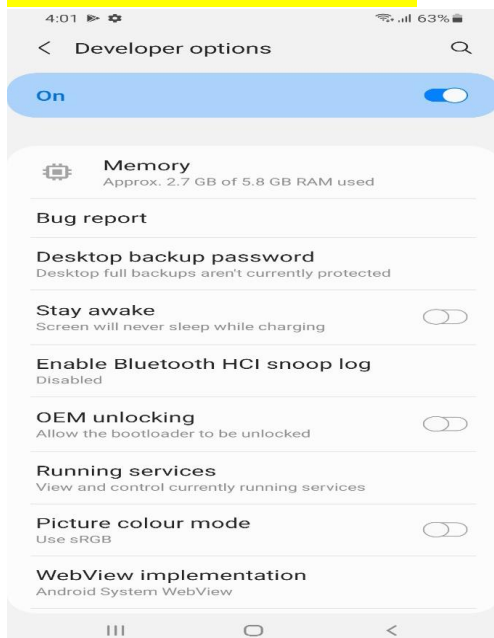


Now I ran into an error. Usb debugging was visible, and I switched it, but not unlocking OEM. Back when I started, I didn't know how crucial it is but now I know that without it, no new “image” can be flashed to it.



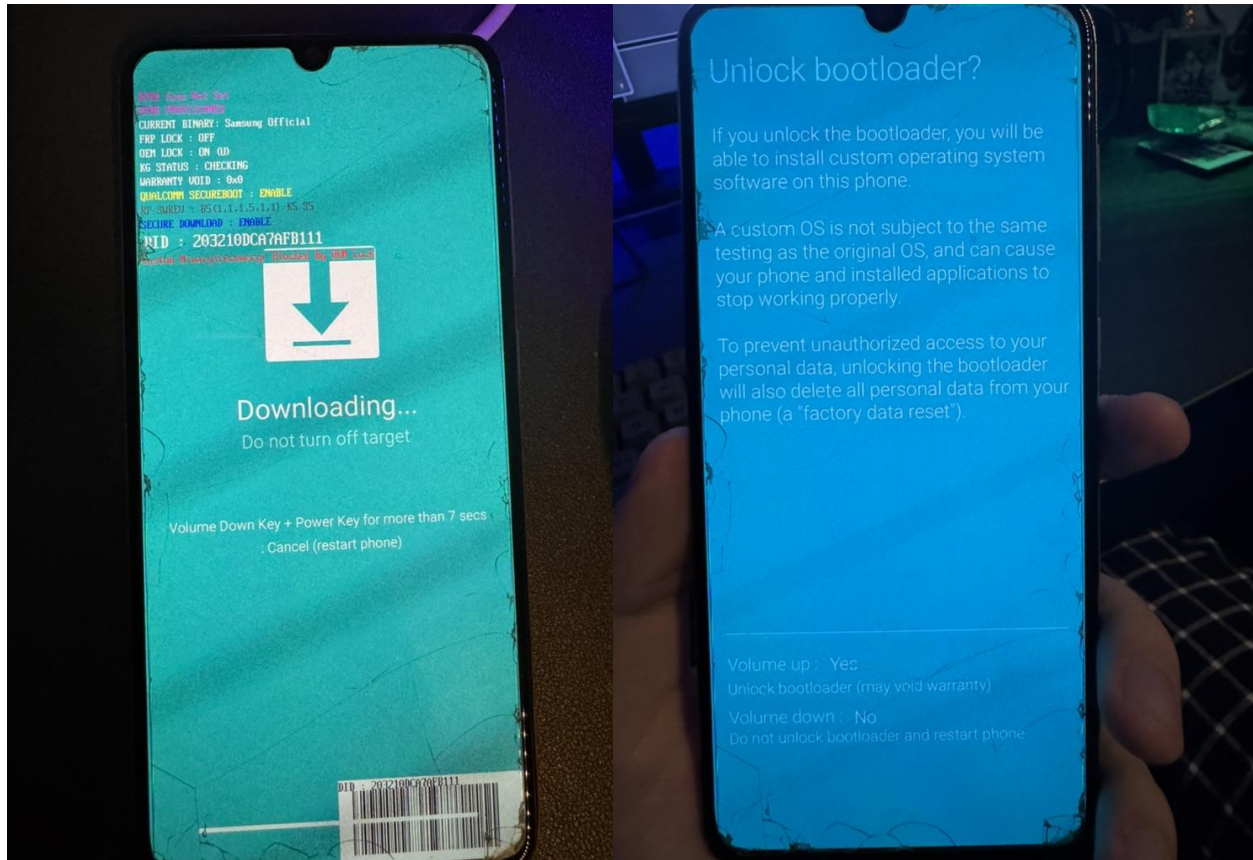
To fix the issue of the OEM Unlock option not being visible, I connected to Wi-Fi and triggered a connection to Samsung's update server. I did this by going to Settings > Software Update, starting the update check, and then canceling it. This step refreshed the system's server connection, making the OEM Unlock option appear in Developer Options.

I discovered this solution from a few low-quality videos online. In those videos, the person connected to Wi-Fi and opened YouTube, which also connects to the server. Since my phone was factory reset and didn't have YouTube installed, I realized that any action requiring a connection to Samsung's servers (like checking for updates) would suffice—and it worked!



*May need to follow more steps to fully unlock (should not be hard) *
I had to do the following to fully unlock the OEM.

Turned off the phone, pressed volume up, volume down, and power whilst the phone was connected to the pc by cable. On the new menu that appears, press volume up to confirm disabled the security (UNLOCKING OEM). Wait for the phone to boot (it factory resets), then follow the (enabling developer mode) steps to enable usb debugging again. This time, OEM will already be checked and blurred.



Back to the preparation the next day – Saturday 23rd November

- Now, with the [TWRP.img.tar file](#) specifically for the a70 downloaded, first boot the phone into bootloader.

‘Keep file as zip’:  twrp-3.7.0_9-0-a70q.img.tar

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1. Press and hold **Volume Down + Power** while connecting your phone to the PC via USB.

2. When the Download Mode screen appears, choose ‘reboot to bootloader’ and press **Power Off** to confirm.

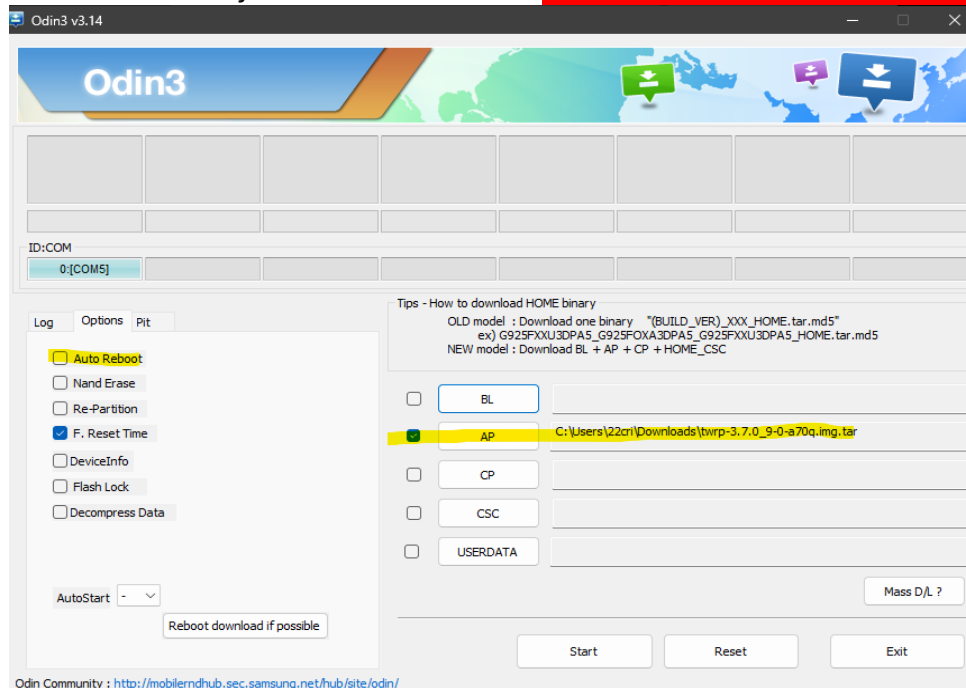
}

- Now, I downloaded and opened Odin ([latest version](#)) from their website. Boot the .exe file.

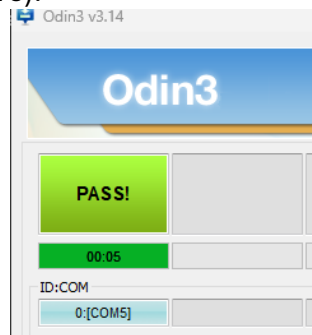
In the Odin folder, I opened highlighted one (.exe):

Odin3.ini	2024-11-22 12:23 AM	Configuration sett...	1 KB
Odin3_v3.14.4.exe	2024-11-22 12:23 AM	Application	3,094 KB
Official Website	2024-11-22 12:23 AM	Internet Shortcut	1 KB
SS_DL.dll	2024-11-22 12:23 AM	Application exten...	2,496 KB
cpprest141_2_10.dll	2024-11-22 12:23 AM	Application exten...	5,091 KB
Credits.txt	2024-11-22 12:23 AM	Text Document	1 KB
How to Use	2024-11-22 12:23 AM	Internet Shortcut	1 KB

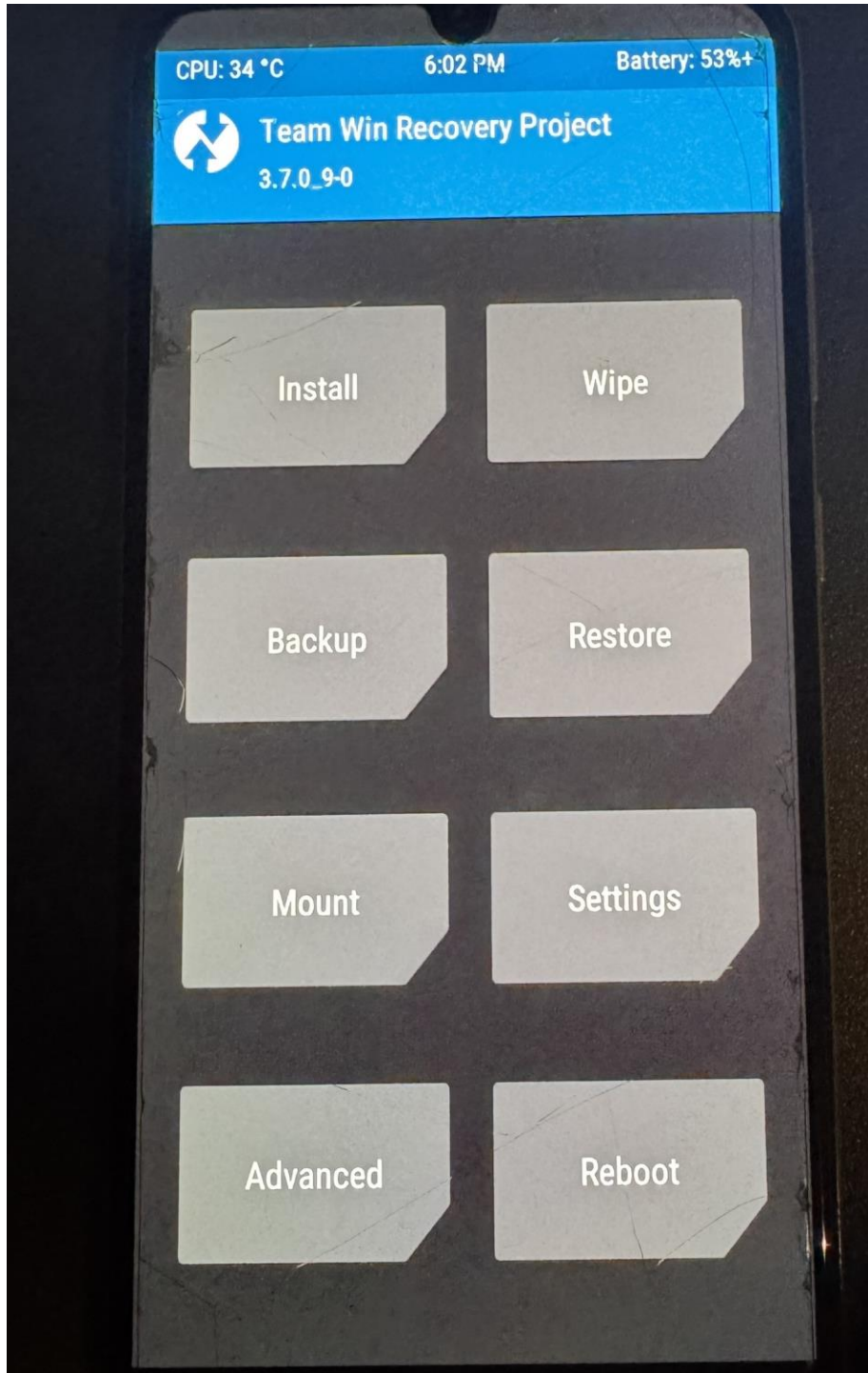
- Click AP and put the .tar file.
- Check options on the left and make sure auto reboot is off, so the phone does not automatically overwrite the TWRP. **READ UP TO STEP 5 BEFORE STARTING**



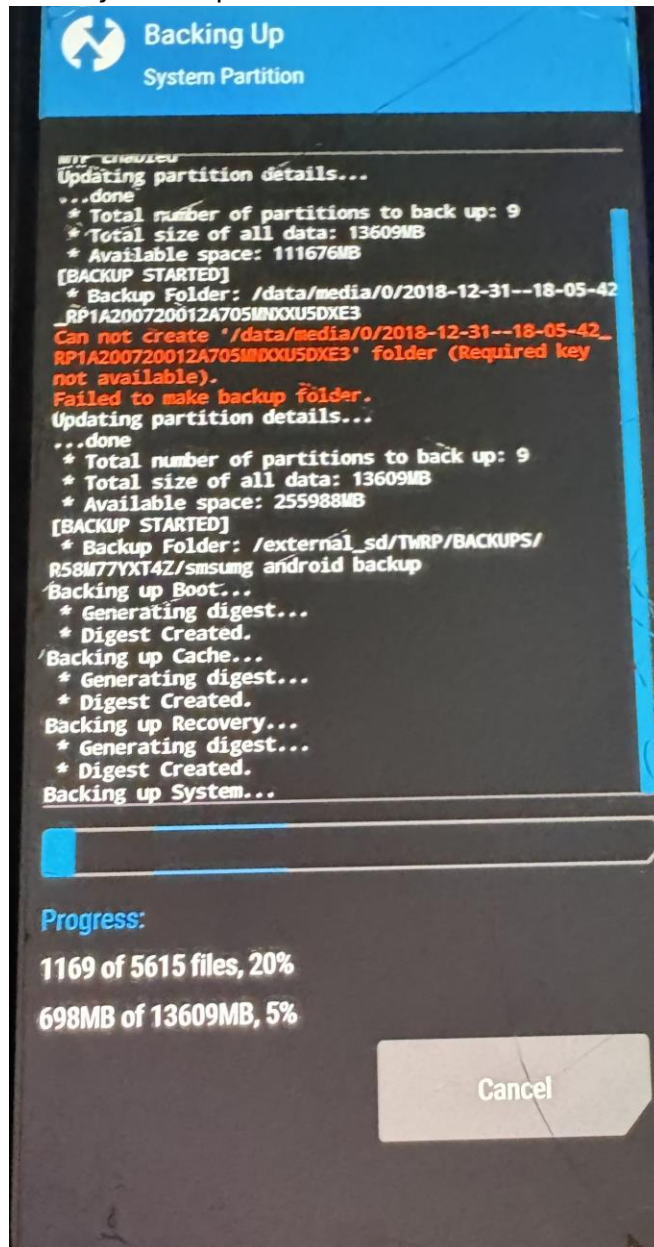
- Start, if it is not passed, a step must have been overlooked. (I wrote everything here).



4. As soon as it says PASS, immediately press power + volume down to force restart. And as soon as screen is black immediately press power + volume up until TWRP appears. Not doing this correctly, will make the Samsung OS overwrite the TWRP image (had to restart from Odin a lot lol).
5. Once TRWP is on, swipe right to accept its control over the phone. Boom, cool menu:



6. Go to backup, select all partitions, and click backup. (Even if the phone is pretty empty, it took a while for me). I chose internal storage but can be SD card or directly to computer.



*At first, I tried to back it up on an SD card, but it had issues (corrupt SD card), hence the red error messages.

7. I then transferred the file from TWRP folder on the phone to my computer. Backup done.

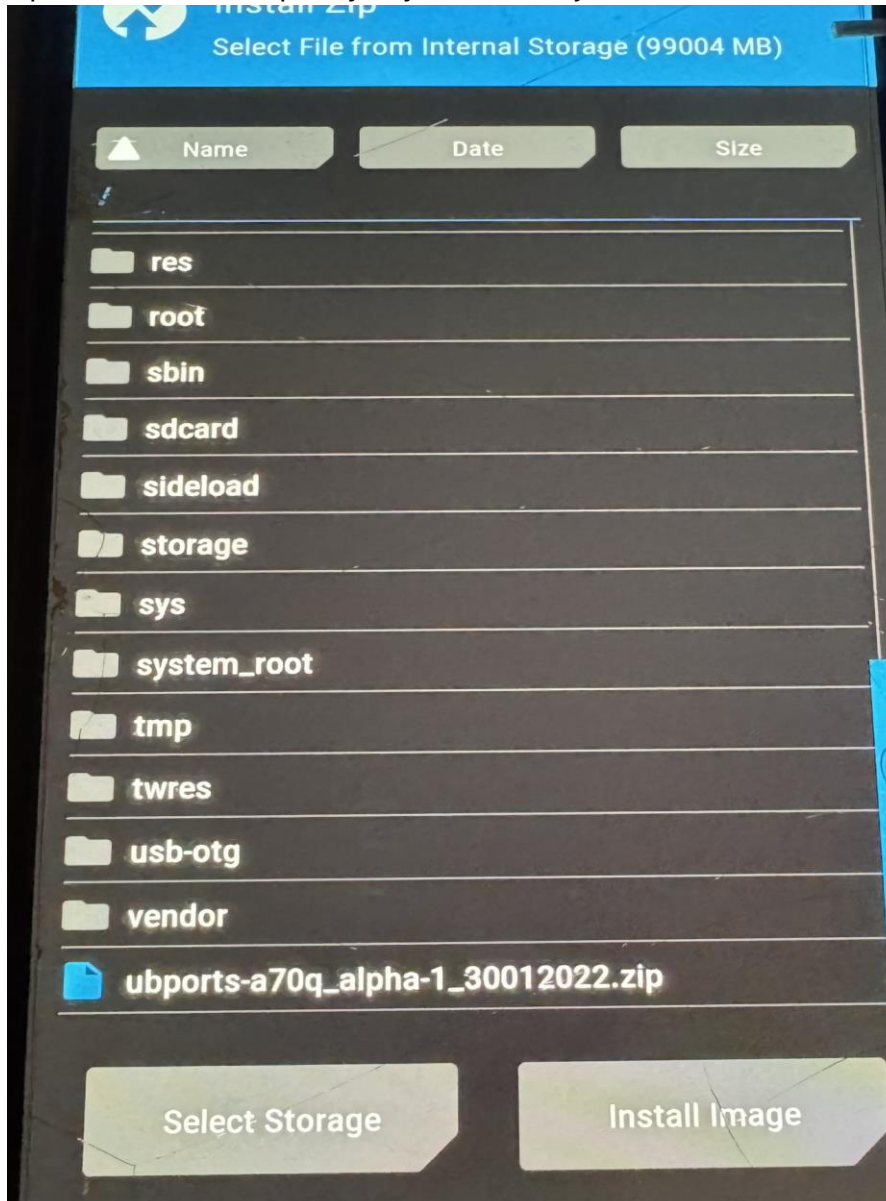
Ubuntu Install – Night of Saturday 23rd November

1. With the download I installed from the first link, I will now find a way to send it to the phone.
2. I can either transfer the file directly using file explorer (phone still connected) or push it with the google tools.

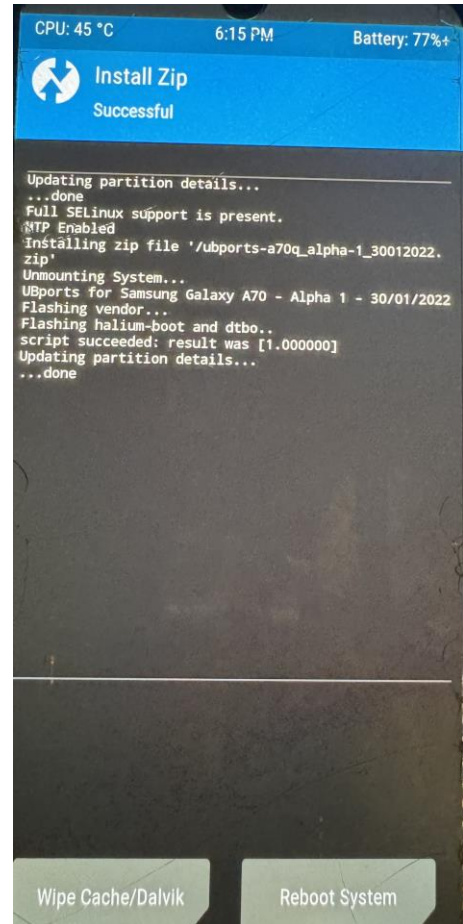
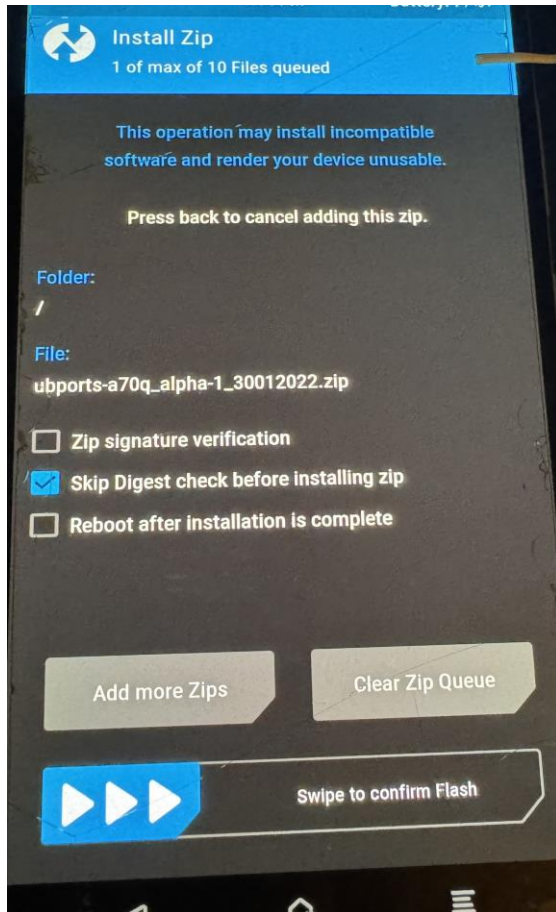
To get more familiar with the command tools, I am trying (push) that first.

```
PS C:\ADBFastBoot> .\adb push "C:\Users\22cri\Downloads\ubports-a70q_alpha-1_30012022.zip" /  
[ 30%] /ubports-a70q_alpha-1_30012022.zip
```

3. Then, still from the TWRP recovery menu, I headed to install and looked for the zip. Since I did not specify any folder, it is just at the end of the list.



4. Without checking anything extra, I just swiped flash after clicking on the file.



This process worked, and I proceeded with Reboot System. But just as I thought I was successful, the device ran into an error (I lost the picture that I took) stating that the vbmeta image was missing.

After researching, I found a potential solution: download a device-specific vbmeta image for the Galaxy A70, go back to the TWRP menu, select Install Image, and then flash the vbmeta image to the appropriate partition.

Another was to run this command with the fastboot tool.:

`.fastboot --disable-verity --disable-verification flash vbmeta vbmeta.img`

However, after hours of struggle, I could not get any of the methods I found to work. The phone was stuck in that mode (same picture that I lost), until its battery died.

Summary

Although I could not accomplish the Ubuntu installation this week, I am happy that I learned about many of the errors that can happen whilst doing any installation on an android phone.

Additionally, I am certainly not giving up and trying again soon.

I found a [forum](#) of a similar problem, and theirs was fixed, so I will try the steps they [took](#) next time.

OTHER METHOD

Another method that I have will try for Ubuntu, is using the ubports installer from ubuntu themselves. It does every manual step I did automatically, even unlocking the bootloader. [The link.](#)

Few other lineage links: [First](#), [Second](#).

GitHub