Xiaomi Redmi 7A

Redmi Note 8

1.1. Specifications

[+]

1.2. Unlock Device

See new tool:

https://github.com/Canny1913/miunlock[3]

1. First enable develoepr options
    - Configuració > Quant al telèfon > Versió MIUI > (Prem 7 vegades a sobre)

      Settings > About this phone > MIUI Version > (Press 7 times on top of it)
2. Then enable USB debugging
    - Configuració > Configuració addicional > Opcions per a desenvolupadors > Depuració USB

      Settings > Additional settings > Developer options > Enable USB Debugging
3. Enable OEM unlock
    - Configuració > Configuració addicional > Opcions per a desenvolupadors > Desbloqueig

de l'OEM

Settings > Additional settings > Developer options > OEM unlock

Then Boot into Fastboot mode. Poweroof the device. And press volumne down while pressing also the power on button. This will trigger the **Fastboot mode**. Once you see "Fastboot" in the screen, you can plug your smartphone to the usb port of your computer.

See:

- This or a linux approach without sms or waiting time:
  https://github.com/francescotescari/XiaoMiToolV2/issues/23#issuecomment-907744264[4]

For Ubuntu 20.04:

- https://github.com/francescotescari/XiaoMiToolV2/issues/23#issuecomment-1017677848[5]

Or this other info, which requires a windowws computer plus logging inn xiaomi website with valid personal account, etc.
https://www.hardreset.info/devices/xiaomi/xiaomi-redmi-7a/faq/faq/xiaomi-bootloader-unlock-miui10/[6]

1.3. Flash PBRP from stock MIUI

Instructions from https://pitchblackrecovery.com/docs/how-to-install/[7]
From PC #

1. Download PitchBlack Recovery flashable zip from above
2. Extract the PBRP zip
3. Goto fastboot mode in your device (Volume down + Power button)
4. Flash the recovery.img by `sudo fastboot flash boot recovery.img`
5. Boot into PBRP this way:
   - type in the terminal window:

```
xavi@tricholoma:~/Progs_per_Instal_lar/Android/Xiaomi_Pine_Lineage_18_1$
sudo fastboot flash boot recovery.img
target reported max download size of 535821312 bytes
sending 'boot' (65536 KB)...
OKAY [  2.284s]
writing 'boot'...
OKAY [  0.705s]
finished. total time: 2.989s
```

```
    xavi@tricholoma:~/Progs_per_Instal_lar/Android/Xiaomi_Pine_Lineage_18_1$
```

and hit enter **while you keep the volume up button pressed** (to force rebooting into recovery mode, otherwise, you won't see the PBRP UI but the MIUI default reinstall first screen or similar).

```
    xavi@tricholoma:~/Progs_per_Instal_lar/Android/Xiaomi_Pine_Lineage_18_1$
    fastboot reboot
    rebooting...

    finished. total time: 0.052s
    xavi@tricholoma:~/Progs_per_Instal_lar/Android/Xiaomi_Pine_Lineage_18_1$
```

   ○ and unplug the usb cable
6. Copy the zip to internal storage
   ○ plug in the USB stick in the USB OTG slot and copy that PBRP zip file into the internal storage of the phone
7. Flash it (through the PBRP UI, to make it permanent as a custom recovery)
8. Enjoy

Former instructions

[+]

1.4. Flash crDroid + NickGapps core

With the help of Alex in the Tiana meeting of G1 libremoney meeting.
September 2021.

1.4.1. Issues detected and workarounds

Workaround found:

- dialer app didn't show up neither when receiving phone calls not attempting to make phone calls. I had to install an extra dialer app, A simple/easy one from F-droid was enough, and Google Phone also worked fine.
- Dialer doesn't allow to self record all calls.
   ○ You can set that from external software such as "Cube ACR" (which also allows recording whatsapp calls and telegram calls, etc).
- Can't set app to take photos to store files in sd card (when sd card used as external storage compatible to share with other devices). I need to keep them stored locally at the internal memory.
   ○ workaround: set the external sd card to be used as extra internal storage only for this

phone.
- Can't get text to speach (TTS) to work from the map & navigation apps: neither OsmAnd+, OasAnd or Here WeGo Maps. Same iissue even after selecting spanish as language for tts, or installing google speach services.
    - you need to try several times, and it ends up worlking.

No workaround found yet:

- Whatsapp doesn't allow to share photos from the camera/gallery: this format is not compatible.

1.5. Flash crDroid 7.8 + NickGapps omni

After the guidance by Alex in the Tiana meeting of G1 libremoney meeting.
October 2021.

1. If you don't boot into recovery automatically, then force entering recovery with the "Volumne up + power" key bottons
2. .PWRP > Wipe > Format data
3. PWRP > Wipe > Advanced > Wipe /system, /data and /cache and /vendor
4. .Flash ROM Zip
    - PBRP > Install > /external_sd/crDroidAndroid-11.0-20210713-pine-v7.8.zip
5. Flash any add-ons if you want to like Gapps, Magisk, Etc.
    - Magisk-v23.0.apk
    - ~~open_gapps-arm64-11.0-micro-20211013.zip (293 Mb)~~ no funciona la versió descarregada, aparentment
    - ~~open_gapps-arm64-11.0-mini-20211013.zip (531 Mb)~~ no funciona la versió descarregada, aparentment
    - NikGapps-omni-arm64-11-20210918-signed.zip (315,7Mb)
6. Reboot & enjoy!

1.6. Clean Flash crDroid 7.12 (no NickGapps neededs since core gapps bundled)

November 2021. It seems that ssince crdroid 7.12 (or maybe 7.11 already) there is no need to addd gapps manually after flashing crdroid, since it already includes a core versions of gapps.

1. If you don't boot into recovery automatically, then force entering recovery with the "Volumne up + power" key bottons
2. .PWRP > Wipe > Format data
3. PWRP > Wipe > Advanced > Wipe /system, /data and /cache and /vendor
4. .Flash ROM Zip

- PBRP > Install > /external_sd/crDroidAndroid-11.0-2021114-pine-v7.12.zip
5. Flash any add-ons if you want to like Magisk, Etc.
    - Magisk-v23.0.apk
6. Reboot & enjoy!

Call recording from default dialer app works again, after resetting by hand default dailer to use the android dialer, and rebooting system.
And sharing pics from gallery to whatsapp works again by default, since crdroid included the miui camera in their image.

1.7. Clean Flash crDroid 8.0

Clean flash:

1. .PWRP > Wipe > Format data
2. PWRP > Wipe > Advanced > Wipe /system, /data and /cache and /vendor
3. .Flash ROM Zip
    - PBRP > Install > /external_sd/crDroidAndroid-12.0-2021228-pine-v8.0.zip
4. Flash any add-ons if you want to like Magisk, Etc.
    - Magisk-v23.0.apk
5. Reboot & enjoy!

"

crDroid 8.0 | BETA | ANDROID 12 | pine

Target: Xiaomi Redmi 7A pine
Author: @randomas3000
Build Date: January 2nd 2022
Kernel: 4.9.294 lineageos

Changelog:
Source Upstream
Removed some props

Download[9] | Screenshots[10]

Known issues:
crDroid sources is still in WIP so do expect some bugs. If you found any, just report to me with logs.

Notes:
-Clean flash is required
-Delete bootanimation.zip before booting (mount system, go to system/product/media)

1.7.1. Issues detected and workarounds

?

1.8. Flash Lineage 18.1 + magisk + NickGapps core

October 2021.
Derived from:
https://forum.xda-developers.com/t/rom-arm64-unofficial-lineageos-18-1-for-redmi-7a-pine.4267861/[11]

Enable Developer tools in your phone:

- press 7 timees on the android version screen

Enter Seetings > optional settings > developer tools > enable usb debugging

Download files to your computer:

- LineageOS Latest ROM Zip
    - Example:
      https://github.com/TTTT55/Lineage-OTA/releases/download/pine-20210507/lineage-18.1-20210507-UNOFFICIAL-pine.zip[12]
- PBRP zip
- Magisk apk
- Gapps zip

Decommmpress a copy of PBRP zip file, and extract TWRP/recovery.img to the same location where you downloaded the other files.

Copy those files to the microsd card that you will end up placinng in your phone

- extract microsd card, place in sd + usb adapter, and plug in your computer usb drive.
- copy the files over the sd

- extract sd from computer and insert inyour phone again

How to flash

1. . First Important Step is to Backup (though depends on you if you wanna be safe or no :p)
2. . Install any 64bit custom recovery built for pine.
   For exemple, PBRP[13]
   - Boot into fastboot.
     - Power off your phone
     - Press Volume down + power button keys (to enter fastboot)
   - check that the device is listed:

     Command in a terminal at your computer

     ```
     sudo fastboot devices
     ```

     you should get your device listed.
   - flash the pbrp recovery img file to your phone, from the folder where you downloaded the twrp-based file (PBRP in this case):

     Command in a terminal at your computer

     ```
     xavi@tricholoma:~/tmp_ext4$ sudo fastboot flash recovery recovery.img
     target reported max download size of 535821312 bytes
     erasing 'recovery'...
     OKAY [  0.005s]
     sending 'recovery' (65536 KB)...
     OKAY [  2.067s]
     writing 'recovery'...
     OKAY [  0.719s]
     finished. total time: 2.791s
     xavi@tricholoma:~/tmp_ext4$ sudo fastboot reboot
     rebooting...

     finished. total time: 0.152s
     xavi@tricholoma:~/tmp_ext4$
     ```

3. If you don't boot into recovery automatically, then force entering recovery with the "Volumne up + power" key bottons
4. .PWRP > Wipe > Format data
5. PWRP > Wipe > Advanced > Wipe /system, /data and /cache and /vendor
6. .Flash ROM Zip
   - PBRP > Install > /external_sd/lineage-18.1-20210507-UNOFFICIAL-pine.zip

7. Flash any add-ons if you want to like Gapps, Magisk, Etc.
   ○ Magisk-v23.0.apk
   ○ NikGapps-core-arm64-11-20210918-signed.zip (70Mb)
8. Reboot & enjoy!

1.8.1. Extra remarks from Lineage 18.1

Pros:

- It's nice that you are offered to restore apps and settings from a backup with a previous lineageos-bsed phone.

Cons:

- Can't install getaround app from Google Play Store.

1.9. Former Failed attemps

[+]

1.10. MIUI details

Call recording, onced enabled, is stored at:
Phone Memory -> MIUI -> sound_recorder -> call_rec

Optional: fastboot through XiaomiTool V2

[+]

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[1] https://www.xatakandroid.com/analisis/redmi-7a-by-xiaomi-analisis-caracteristicas-precio-especificaciones

[2] https://www.mi.com/es/redmi-7a/

[3] https://github.com/Canny1913/miunlock

[4] https://github.com/francescotescari/XiaoMiToolV2/issues/23#issuecomment-907744264

[5] https://github.com/francescotescari/XiaoMiToolV2/issues/23#issuecomment-1017677848

[6] https://www.hardreset.info/devices/xiaomi/xiaomi-redmi-7a/faq/faq/xiaomi-bootloader-unlock-miui10/

[7] https://pitchblackrecovery.com/docs/how-to-install/

[8] https://pitchblackrecovery.com/docs/how-to-install/

[9] https://roms.cirrus-ci.workers.dev/0:/pine/crDroidAndroid-12.0-20220102-pine-v8.0.zip

[10] https://t.me/crdroid_pine/994?single

[11] https://forum.xda-developers.com/t/rom-arm64-unofficial-lineageos-18-1-for-redmi-7a-pine.4267861/

[12] https://github.com/TTTT55/Lineage-OTA/releases/download/pine-20210507/lineage-18.1-20210507-UNOFFICIAL-pine.zip

[13] https://pitchblackrecovery.com/docs/how-to-install/

[14] https://xiaomifirmware.com/guides-and-tips/how-to-install-twrp-and-magisk-root-on-redmi-7a/

[15] https://xiaomifirmware.com/download/13321/

[16] http://theupgradeguide.com/2020/03/25/install-android-10-on-xiaomi-redmi-7a-lineageos-17-how-to-guide/

[17] https://fossbytes.com/install-lineageos-on-xiaomi-redmi/

[18] https://www.getdroidtips.com/lineage-os-17-redmi-7a/

[19] https://lineageos.org/

[20] https://www.getdroidtips.com/unlock-bootloader-any-xiaomi-devices/

[21] https://www.getdroidtips.com/backup-android-phone-without-root/

[22] https://sourceforge.net/projects/pine-dev/files/LineageOS/

[23] https://www.getdroidtips.com/lineageos-17-gapps/

[24] https://www.getdroidtips.com/download-latest-xiaomi-usb-drivers/

[25] https://www.getdroidtips.com/twrp-recovery-redmi-7a-root/

[26] https://www.getdroidtips.com/boot-custom-recovery-twrp-cwm/

[27] https://www.getdroidtips.com/boot-custom-recovery-twrp-cwm/

[28] https://www.getdroidtips.com/lineage-os-17/

[29] https://www.getdroidtips.com/lineage-os-17-redmi-7a/

[30] https://www.xiaomitool.com/V2/

[31] https://account.xiaomi.com