Technical Note

TN# MCSTN298 Rev#1.0 Release Date : 2023 / 11 / 2	Category: Software Support Model: ATC3750

Subject

How to recovery image of ATC3750

Introduction

The step of use OTG to recovery image of ATC3750

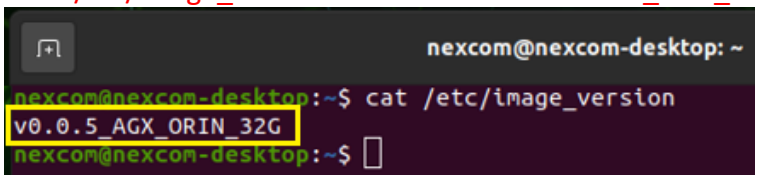
Trouble Shooting Step-by-Step

Prepare materials

A. A computer (Host) and install the Ubuntu 20.04 system.
B. USB flash drive *1 (For images, the capacity depends on the size of the created image, and a minimum capacity of 3GB is required).
C. Micro USB cable.

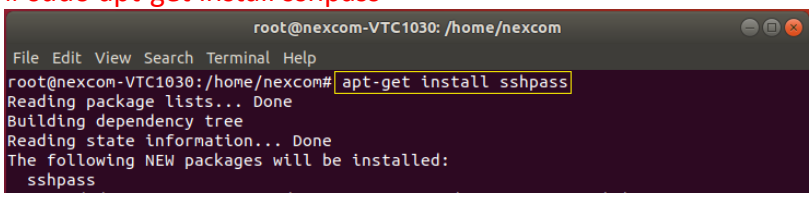
Recovery

1. Boot up the ATC3750 and check current image version.
   # cat /etc/image_version ➔ The version is V0.0.5_AGX_ORIN_32G

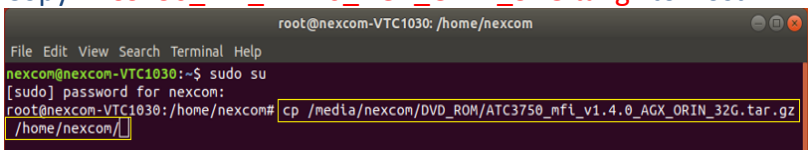


2. Find out the corresponding new version, in this case, the new version is：
   ATC3750_mfi_v1.4.0_AGX_ORIN_32G.tar.gz

3. In Host pc, install sshpass package
   # sudo apt-get install sshpass



4. Copy ATC3750_mfi_v1.4.0_AGX_ORIN_32G.tar.gz to Host.



5. Unzip the ATC3750_mfi_v1.4.0_AGX_ORIN_32G.tar.gz file.
   # sudo tar xpfv ATC3750_mfi_v1.4.0_AGX_ORIN_32G.tar.gz
   Note. The commands need to be modified according to different file names.

```
root@nexcom-VTC1030: /home/nexcom
File  Edit  View  Search  Terminal  Help
root@nexcom-VTC1030:/home/nexcom# sudo tar xpfv ATC3750_mfi_v1.4.0_AGX_ORIN_32G.tar.gz
./ATC3750_mfi_v1.4.0_AGX_ORIN_32G/
./ATC3750_mfi_v1.4.0_AGX_ORIN_32G/tools/
./ATC3750_mfi_v1.4.0_AGX_ORIN_32G/tools/kernel_flash/
./ATC3750_mfi_v1.4.0_AGX_ORIN_32G/tools/kernel_flash/l4t_initrd_flash.func
./ATC3750_mfi_v1.4.0_AGX_ORIN_32G/tools/kernel_flash/initrdflashimgmap.txt
./ATC3750_mfi_v1.4.0_AGX_ORIN_32G/tools/kernel_flash/l4t_initrd_flash.sh
```

6. Using Micro USB cable connects Host to ATC3750 OTG USB port.

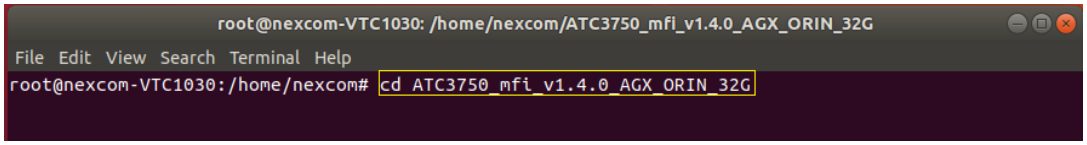
7. Power on ATC3750 and press the reset button immediately, wait for the LED on then release the reset button, after release reset button, the ATC3750 into recovery mode.

8. Open the terminal in the Host system and type "lsusb" to check, if ATC3750 has into recovery mode, you will see the information about NVidia.
   If not, please do the step 7 again.

```
root@nexcom-VTC1030: /home/nexcom
File  Edit  View  Search  Terminal  Help
root@nexcom-VTC1030:/home/nexcom# lsusb
Bus 002 Device 001: ID 1d6b:0003 Linux Foundation 3.0 root hub
Bus 001 Device 006: ID 125f:db8a A-DATA Technology Co., Ltd.
Bus 001 Device 004: ID 045e:0752 Microsoft Corp. Wired Keyboard 400
Bus 001 Device 003: ID 093a:2510 Pixart Imaging, Inc. Optical Mouse
Bus 001 Device 002: ID 8564:4100 Transcend Information, Inc.
Bus 001 Device 008: ID 0955:7223 NVidia Corp.
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
root@nexcom-VTC1030:/home/nexcom#
```

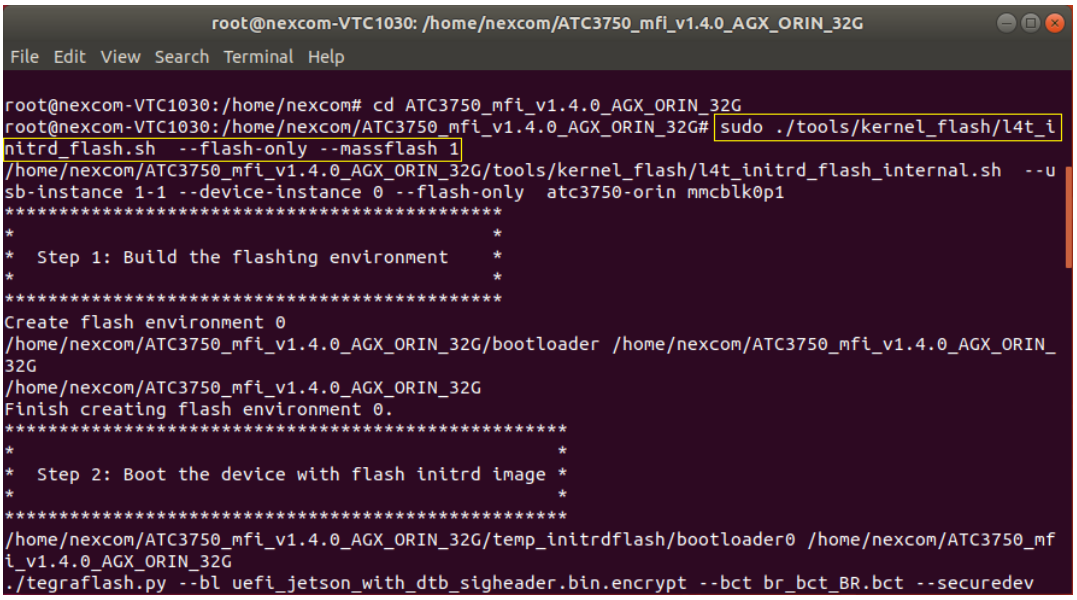
Burning:

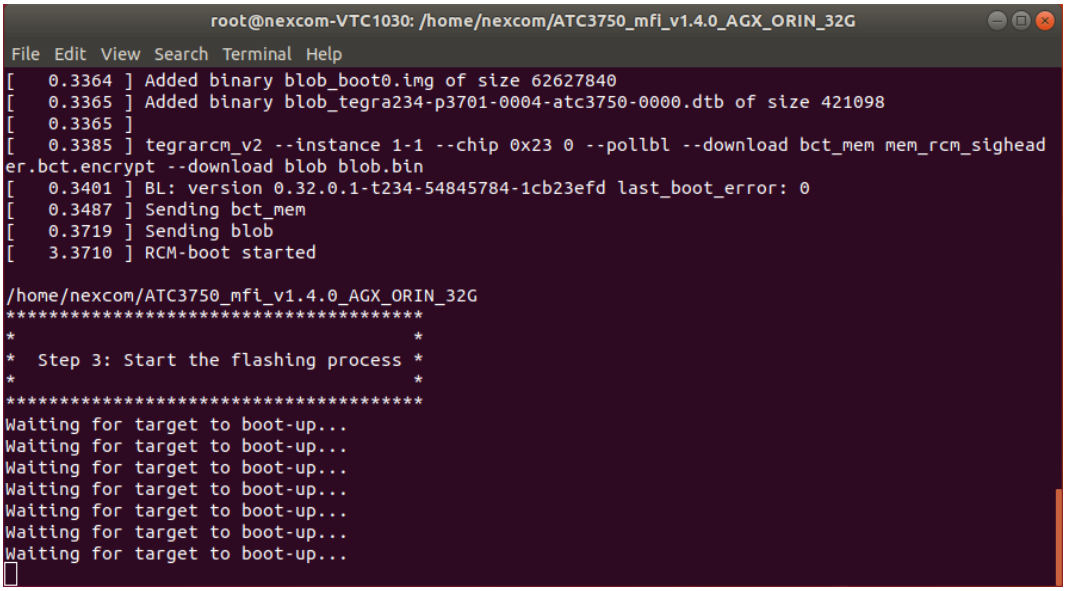
1. Open the terminal and enter the unzipped folder of ATC3750_mfi_v1.4.0_AGX_ORIN_32G in HOST.
   #cd ATC3750_mfi_v1.4.0_AGX_ORIN_32G
   Note. The commands need to be modified according to different file names.



2. Type " sudo ./tools/kernel_flash/l4t_initrd_flash.sh --flash-only --massflash 1 " on the terminal to start burning. (As shown below)

Note: The number 1 behind the command is how many units to burn at a time, if you connect 5 units at a time and burn at the same time, enter 5)





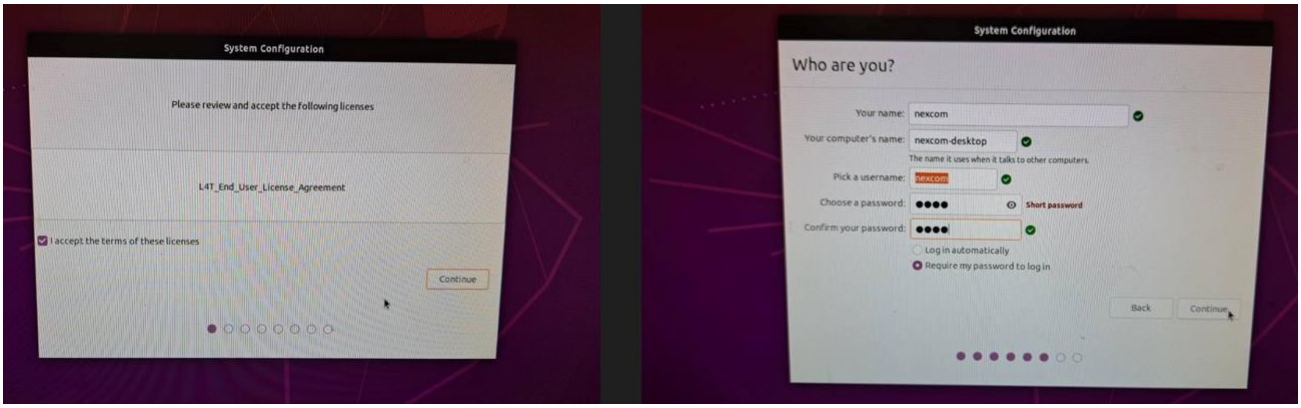
3. In Host pc, it still keep programing, until shows success.

```
root@nexcom-VTC1030: /home/nexcom/ATC3750_mfi_v1.4.0_AGX_ORIN_32G
File  Edit  View  Search  Terminal  Help
tar: Read checkpoint 670000
tar: Read checkpoint 680000
tar: Read checkpoint 690000
tar: Read checkpoint 700000
tar: Read checkpoint 710000
tar: Read checkpoint 720000
tar: Read checkpoint 730000
tar: Read checkpoint 740000
tar: Read checkpoint 750000
tar: Read checkpoint 760000
tar: Read checkpoint 770000
tar: Read checkpoint 780000
writing item=74, 1:3:secondary_gpt, 63652740608, 16896, gpt_secondary_1_3.bin, 16896, fixed-<rese
rved>-0, 4b17d3eb31ab23b79f22c6265251e36423b42b39
[ 536]: l4t_flash_from_kernel: Successfully flash the emmc
[ 536]: l4t_flash_from_kernel: Flashing success

Reboot target
Run command: sync; nohup reboot &>/dev/null & exit on root@fe80::1%enp0s20f0u1
SSH ready
Success
Cleaning up...
Log is saved to Linux_for_Tegra/initrdlog/flash_1-1_0_20231101-230848.log
root@nexcom-VTC1030:/home/nexcom/ATC3750_mfi_v1.4.0_AGX_ORIN_32G#
```

4. After flash finished, in ATC3750 side, it will repeatedly start multiple times to configure the system.

5. Configure finished, the ATC3750 will reboot in to system.



Below is the new image version：V1.4.0_AGX_ORIN_32G.

```
nexcom@nexcom-desktop: ~
nexcom@nexcom-desktop:~$ cat /etc/image_version
V1.4.0_AGX_ORIN_32G
nexcom@nexcom-desktop:~$
```