

SRG-IMX8P OS RECOVERY SOP

Date: 2022/9/28

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Part A: Prepare the recovery SD card

Step 1: Prepare micro SD card

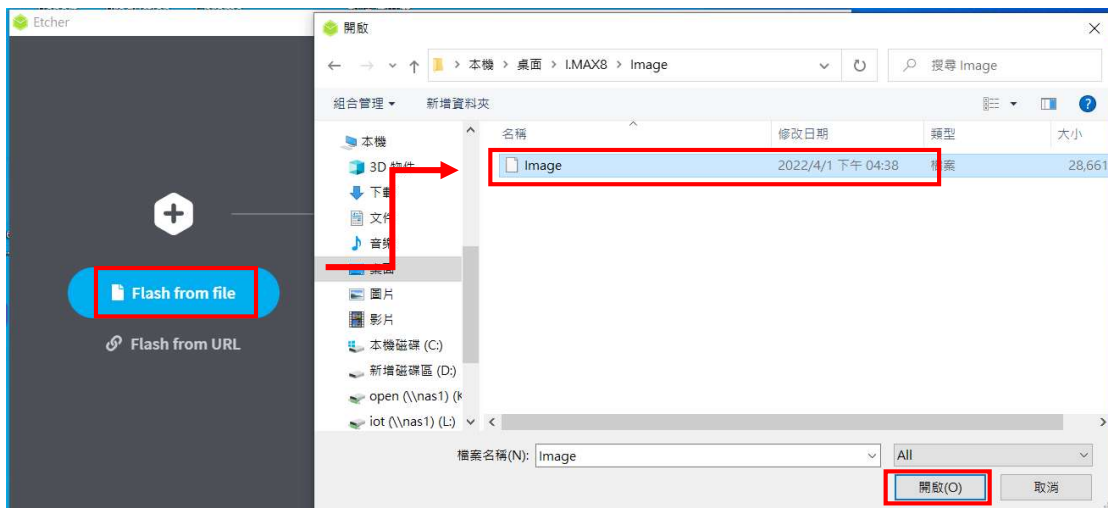
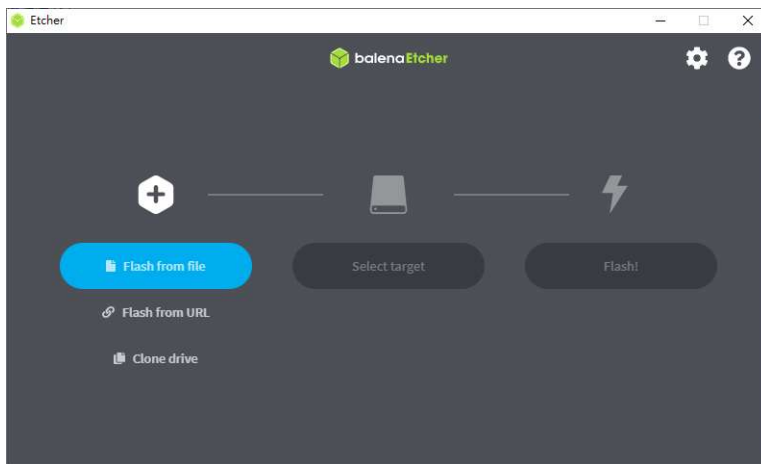
Prepare a micro SD card that the capacity above 8 GB, and insert into the laptop via SD card reader.

Step 2: Download the recovery image

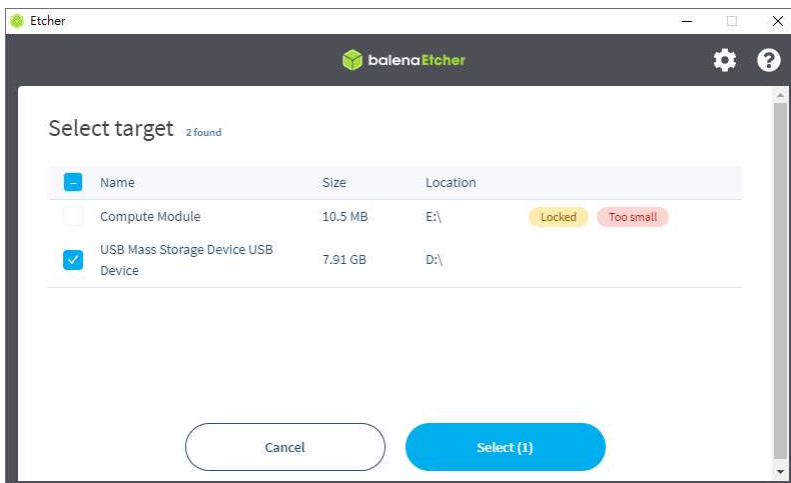
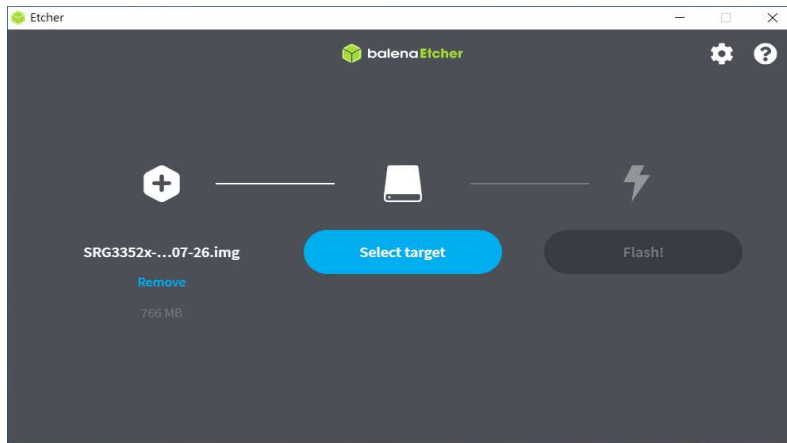
Please download the image file from the AAEON website and use the free tools “balenaEtcher” to flash the image file into the SD card.

The tool official website: <https://www.balena.io/etcher/>

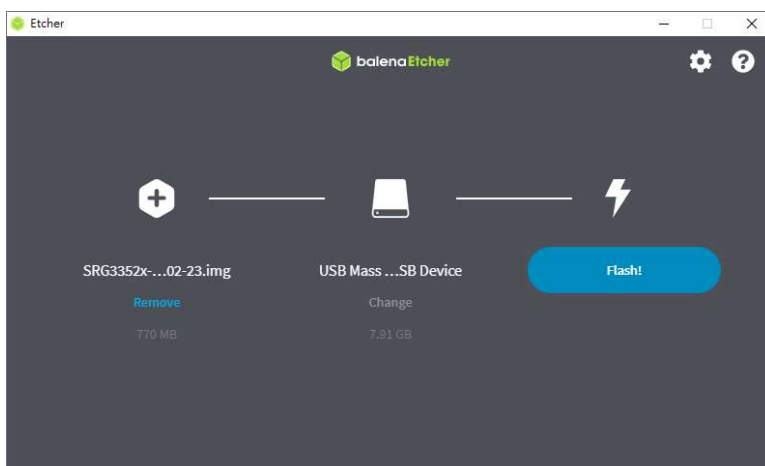
Step 3: Select the image file.



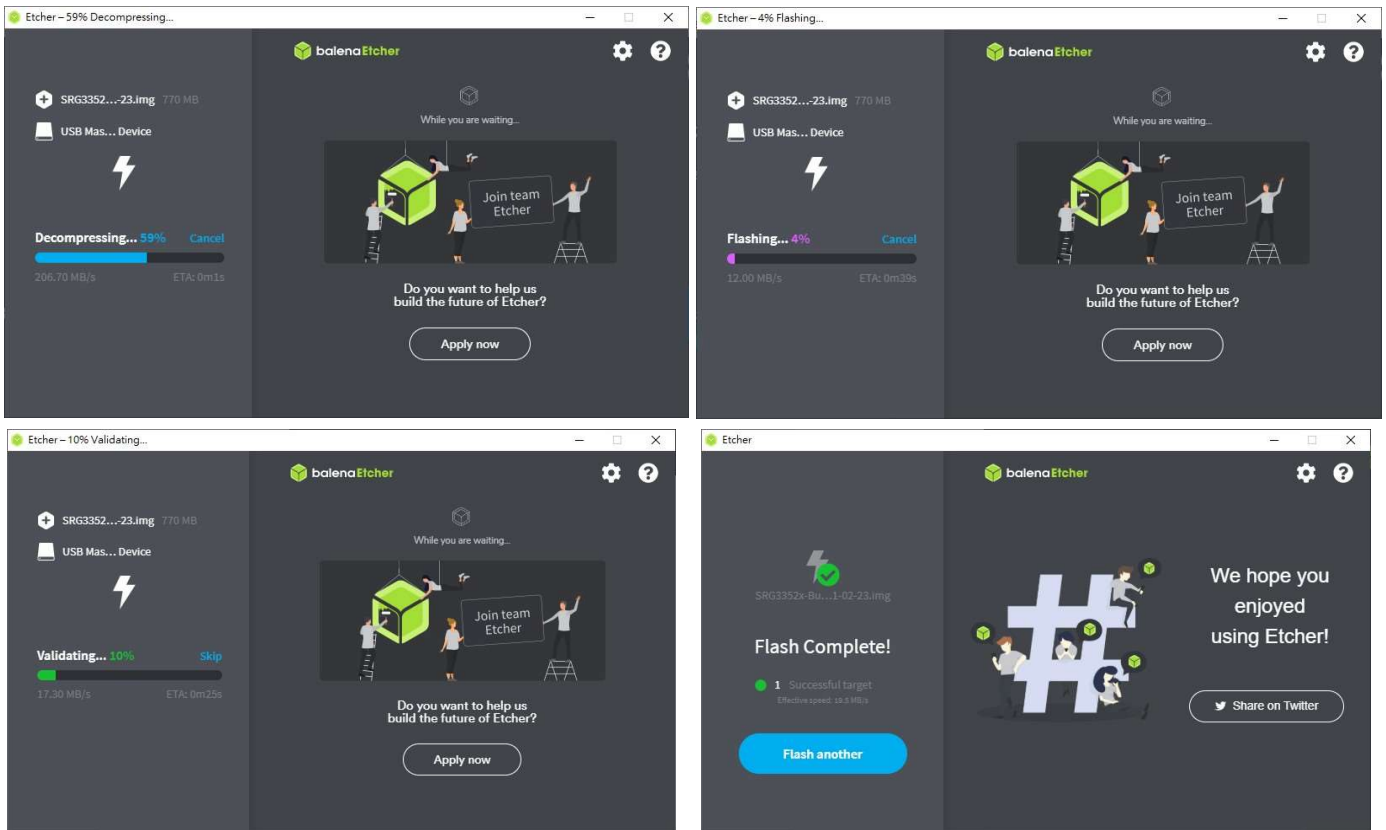
Step 4: Select the SD card device.



Step 5: Click the “Flash” to make the recovery SD card.



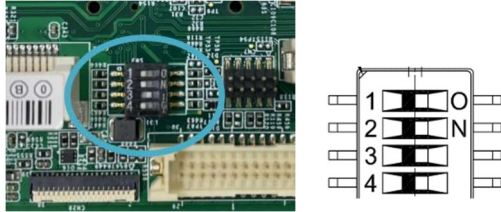
Step 6: Wait until the flashing process done.



Part B: Setup the gateway to boot from the SD card

Step 1: Download the PuTTY tools: <https://www.putty.org/>

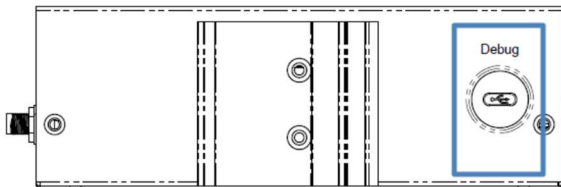
Step 2: Insert SD card and switch jumper (SW3) to 0011



PIN1,2 switch to OFF.
PIN3,4 switch to ON.

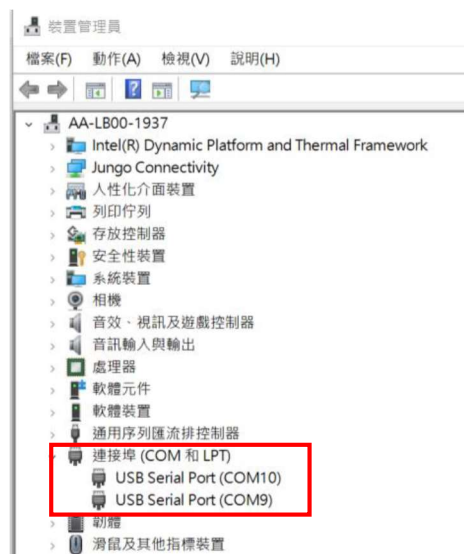
Step 3: Connect the gateway via a USB cable.

Connect computer to the SRG-IMX8P using the micro USB port.



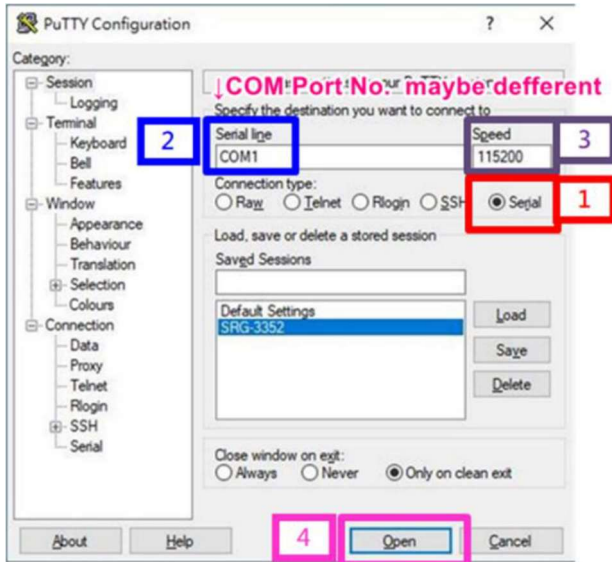
Step 4: Open Device Manager and locate Multifunction Composite Gadget.

Double click on the device. A pop-up should appear, with a notice that the CDC Serial is unrecognized



Step 5: Open the PuTTY application.

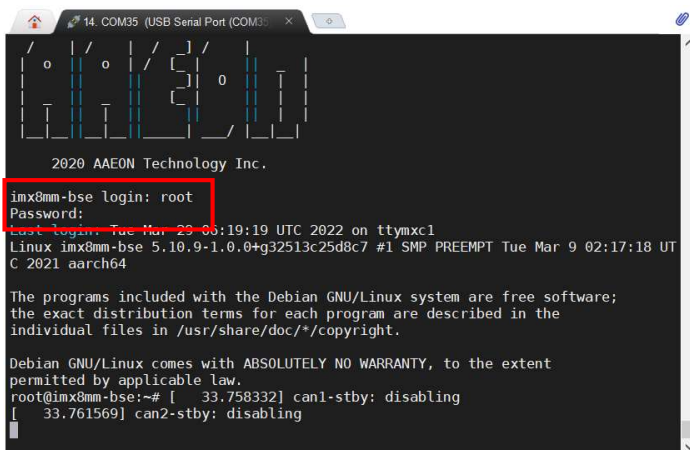
In the configuration menu to choose 'Serial' category. Select "Serial" under the connection. Type heading type in the COM port No., and type 115200 in the Speed column, then click the Open button to run PuTTY.



Step 6: Login to the gateway

Username: root

Password: aaeon



Step 7: Execute the following command to force the gateway to boot from SD card.

`/usr/sbin/imx8_plus_emmc_flasher.sh`

Caution: This action will erase the data from the eMMC, please do the data backup when doing this action.

```
permitted by applicable law.  
root@imx8mm-bse:~# [ 33.758332] can1-stby: disabling  
[ 33.761569] can2-stby: disabling  
root@imx8mm-bse:~# /usr/sbin/imx8_plus_emmc_flasher.sh
```

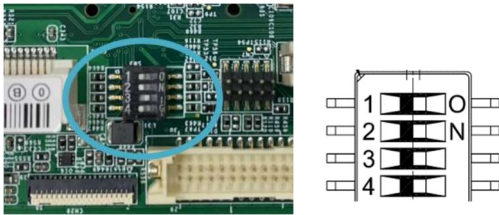
```
14. COM35 (USB Serial Port (COM3))  
[ 269.003590] systemd-shutdown[1]: Syncing filesystems and block devices.  
[ 269.271663] systemd-shutdown[1]: Sending SIGTERM to remaining processes...  
[ 269.286499] systemd-journald[205]: Received SIGTERM from PID 1 (systemd-shutdown).  
[ 269.331694] systemd-shutdown[1]: Sending SIGKILL to remaining processes...  
[ 269.347572] systemd-shutdown[1]: Unmounting file systems.  
[ 269.355153] [737]: Remounting '/' read-only in with options '(null)'.  
[ 269.435002] EXT4-fs (mmcblk1p2): re-mounted. Opts: (null)  
[ 269.467975] systemd-shutdown[1]: All filesystems unmounted.  
[ 269.473580] systemd-shutdown[1]: Deactivating swaps.  
[ 269.478675] systemd-shutdown[1]: All swaps deactivated.  
[ 269.483909] systemd-shutdown[1]: Detaching loop devices.  
[ 269.491695] systemd-shutdown[1]: All loop devices detached.  
[ 269.497305] systemd-shutdown[1]: Stopping MD devices.  
[ 269.502647] systemd-shutdown[1]: All MD devices stopped.  
[ 269.507971] systemd-shutdown[1]: Detaching DM devices.  
[ 269.513315] systemd-shutdown[1]: All DM devices detached.  
[ 269.518731] systemd-shutdown[1]: All filesystems, swaps, loop devices, MD devices and DM devices detached.  
[ 269.537750] systemd-shutdown[1]: Syncing filesystems and block devices.  
[ 269.544469] systemd-shutdown[1]: Halting system.  
[ 269.540180] kvm: exiting hardware virtualization  
[ 269.593569] reboot: System halted
```

Wait until the process done and show `'system halted'` .

Step 8: Power off to shut down the gateway.

Part C: Recovery the OS from the SD card

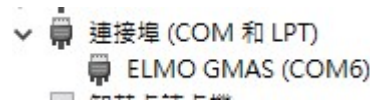
Step 1: Switch jumper (SW3) to 0010



PIN1,2,4 switch to OFF.
PIN3 switch to ON.

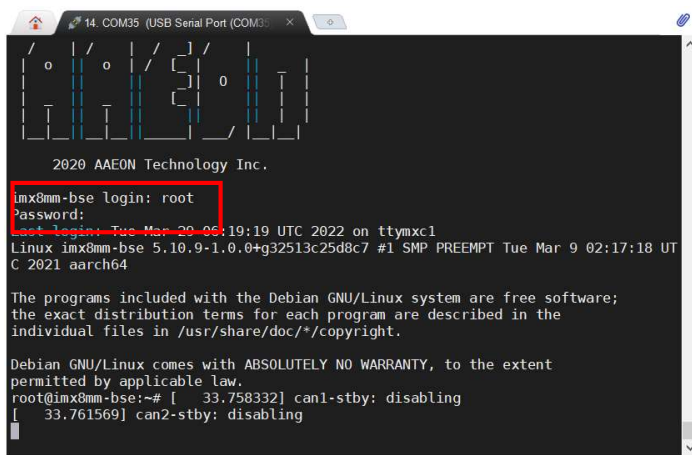
Step 2: Insert the SD card and power up the gateway.

If the gateway successful boot up from the SD card, it will show “COM” port in the hardware manager like this:



Step 3: Login to the gateway.

Username: root
Password: aaeon



Step 4: Execute the following command to confirm the new OS is OK.

cat /etc/os-release

```
root@imx8mm-bse:~# cat /etc/os-release
PRETTY_NAME="Debian GNU/Linux 10 (buster)"
NAME="Debian GNU/Linux"
VERSION_ID="10"
VERSION="10 (buster)"
VERSION_CODENAME=buster
ID=debian
HOME_URL="https://www.debian.org/"
SUPPORT_URL="https://www.debian.org/support"
BUG_REPORT_URL="https://bugs.debian.org/"
IMAGE_VERSION="V4"
root@imx8mm-bse:~#
```