

Pre-built OS Image Installation Guide

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TechNexion

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1. Support Hardware

These are the systems covered in this guide:

System-on-Modules:

- EDM1-CF-IMX6
- EDM1-CF-IMX6P
- EDM1-CF-IMX6QP
- EDM1-CF-IMX6SX
- EDM2-CF-IMX6
- PICO-IMX6
- PICO-IMX6POP

Carrier Boards:

- EDM1-FAIRY
- EDM1-GOBLIN
- EDM2-ELF
- Toucan-0700
- PICO-DWARF
- PICO-HOBBIT
- PICO-NYMPH

Box industrial PC:

- TEK3-IMX6
- TEP5-IMX6

2. Download Pre-Built OS image

Please visit Technexion download page:

ftp://ftp.technexion.net/demo_software

Choose the HW platform you have. There are prebuilt images for different OS, e.g. android, ubuntu, yocto with different display type.

3. Make eMMC installer

Unzip the file you download.



There are three files:

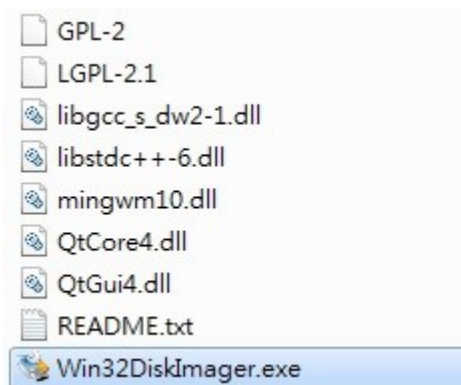
edm_yocto_release_note.txt

edm1-cf-imx6_edm1-fairy_yocto-1.5-qt5_demo_lvds-1024x600_2014xxxxx.img

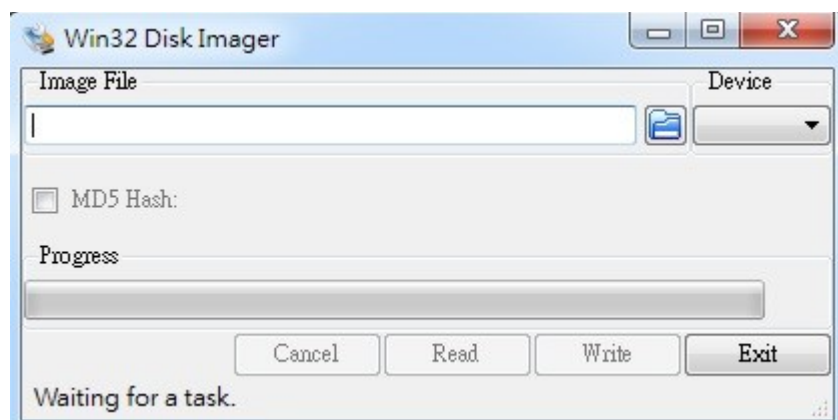
win32diskimager.zip

If your PC runs Windows OS:

Please unzip the win32diskimager.zip:

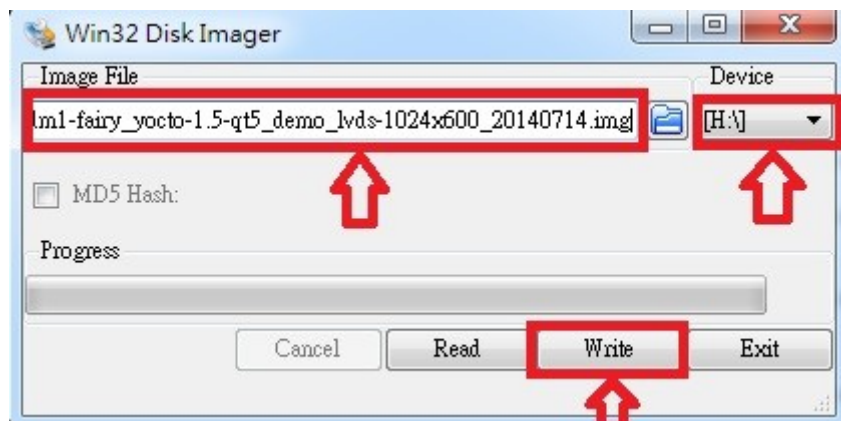


Execute **Win32DiskImager.exe**.



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Prepare a microSD card. Insert this microSD card into the card reader of PC.



Choose microSD you insert as “Device”.

Select the “**edm1-cf-imx6_edm1-fairy_yocto-1.5-qt5_demo_lvds-1024x600_2014xxxx.img**” as “Image File”.

Then, press “Write”. **Win32DiskImager** will flash yocto installer image into microSD card.

If your PC runs Ubuntu OS:

Prepare a microSD card. Insert this microSD card into the card reader of PC.

Use 'dd' command to flash yocto installer image into microSD card.

```
$ sudo dd if=edm1-cf-imx6_edm1-fairy_yocto-1.5-qt5_demo_lvds-1024x600_2014xxxx.img of=/dev/sd<partition> bs=1M && sync
```

Or

Use “imageWriter” tool.

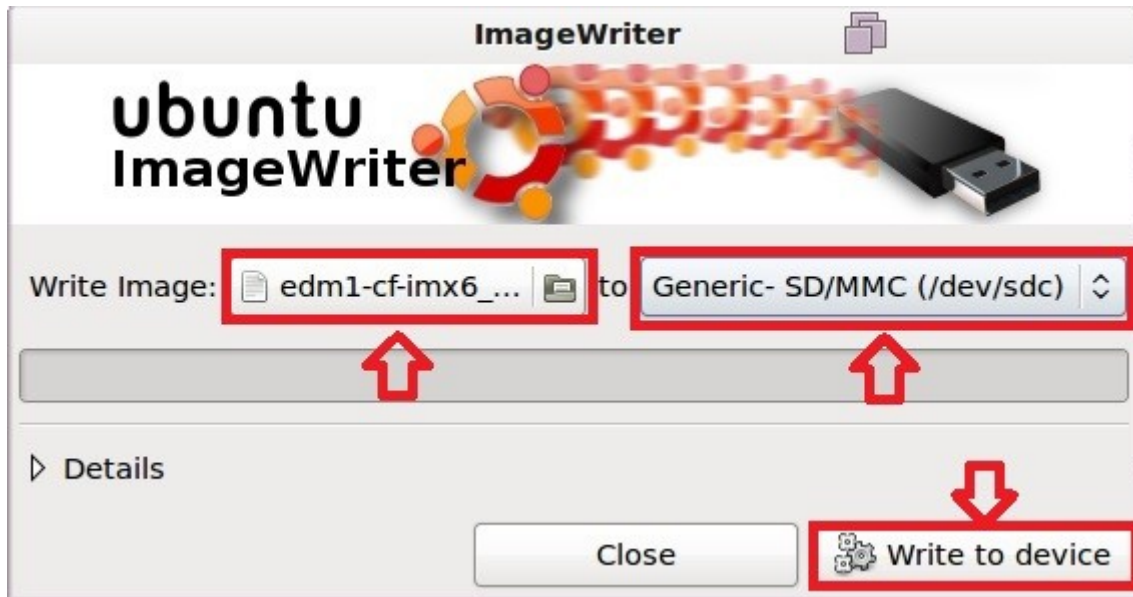
<https://apps.ubuntu.com/cat/applications/precise/usb-imagewriter/>

Install “imageWriter”:

```
sudo apt-get install usb-imagewriter
```

Execute “imageWriter”:

```
sudo imagewriter
```



Choose microSD you insert as “Device”.

Select the “**edm1-cf-imx6_edm1-fairy_yocto-1.5-qt5_demo_lvds-1024x600_2014xxxx.img**” as “Write Image”.

Then, press “Write to device”. **imagewriter** will flash Yocto installer image into microSD card.

4. Run eMMC installer image on target board

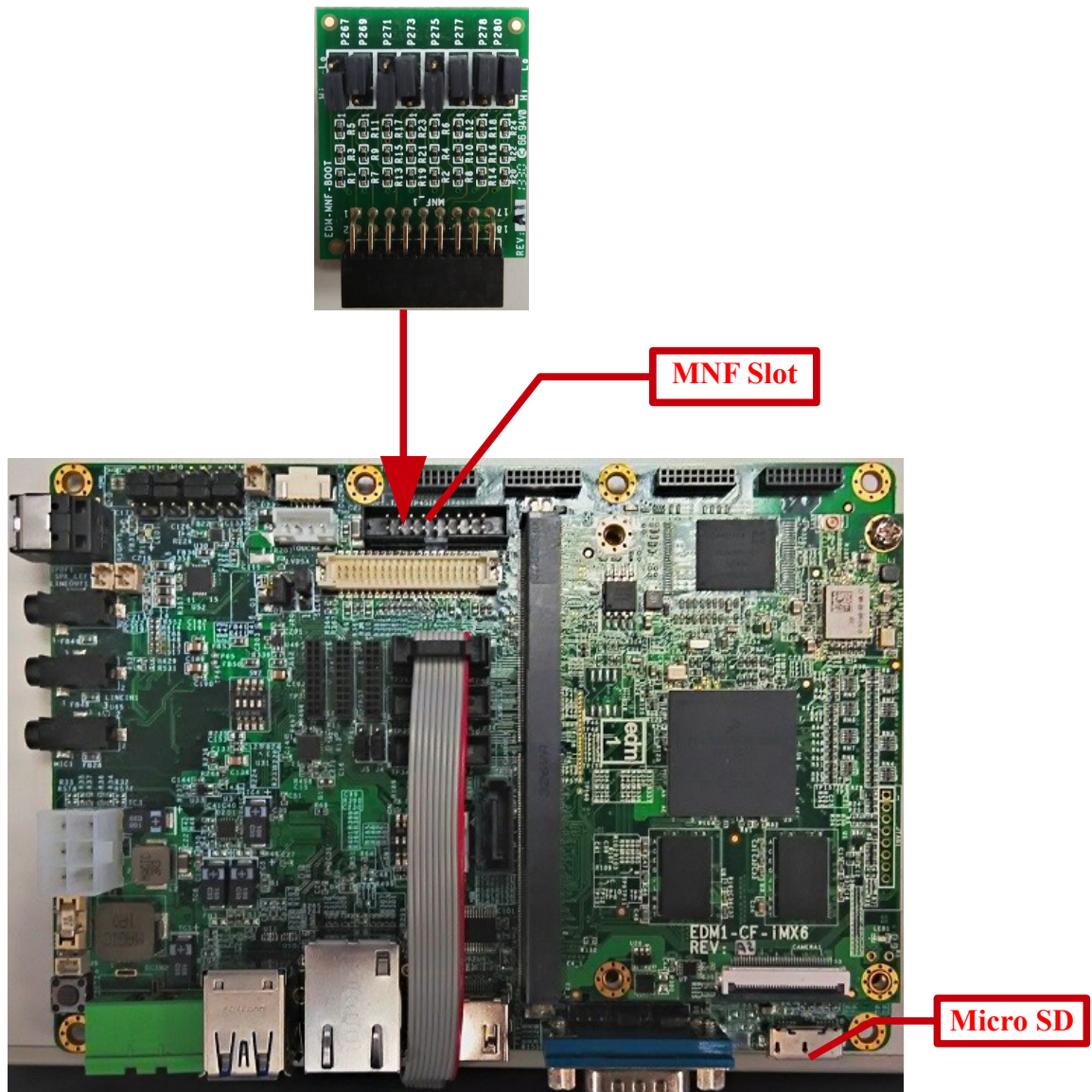
4.1 Set up boot mode

Switch the boot mode to boot from SD card of baseboard to run installer image.
The installer image will install OS image into eMMC of CPU module.

4.1.1 EDM1-FAIRY/EDM1-GOBLIN/EDM2-ELF

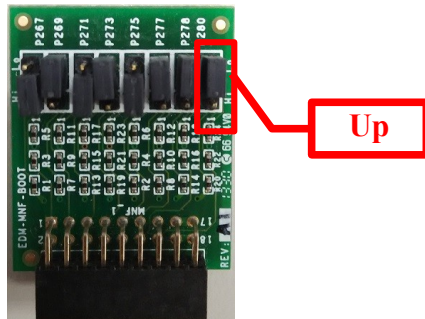
Plug “EDM-MNF-BOOT PCB” into MNF slot on EDM1-Fairy baseboard.
It will cause EDM1-Fairy boot from external microSD card instead of eMMC.
Then, insert MicroSD card with yocto installer image inside into EDM1-Fairy baseboard.

EDM-MNF-BOOT PCB

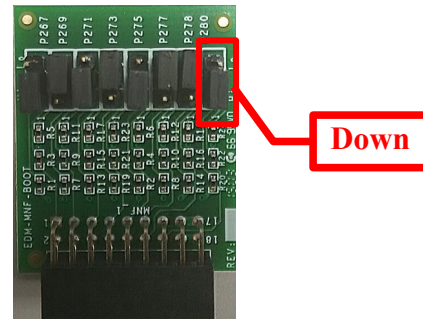


Note: The rightmost jumper of EDM-MNF-BOOT PCB is different on EDM1-CF-IMX6 and EDM1-CF-IMX6SX.

For EDM1-CF-IMX6



For EDM1-CF-IMX6SX



4.1.2 Toucan-0700

There is on-board eMMC on EDM1-CF-IMX6 CPU module. Run installer on SD card will install pre-built image into eMMC.

Insert the SD card into Toucan baseboard. Hold down “S1” and press “RST” button.

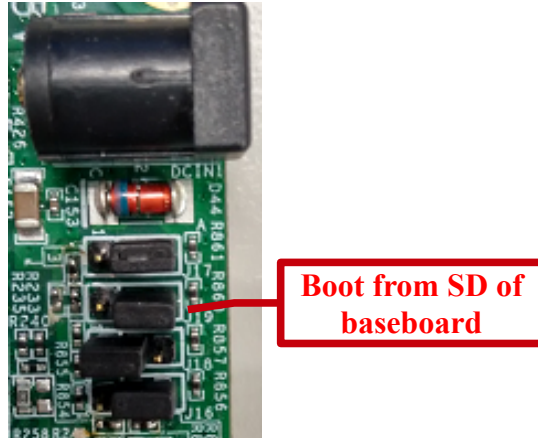
(PS. Hold down “S1” button will switch the boot mode to SD card. Then press “RST”, the board will reboot from SD card.)



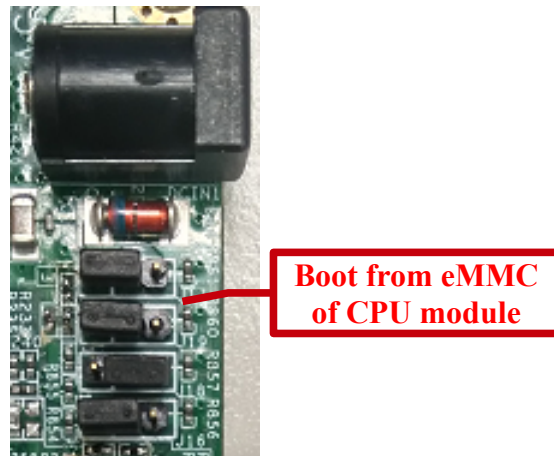
Then, power on target board.

4.1.3 PICO-IMX6-DWARF

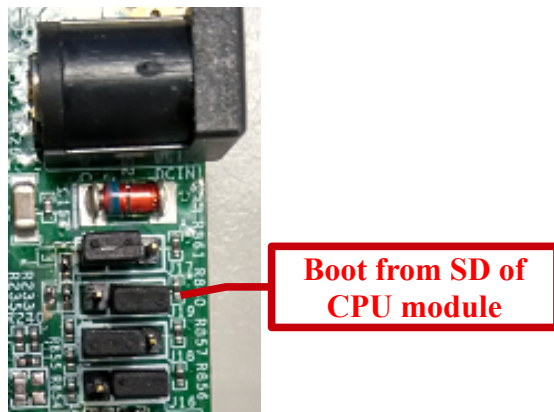
Install jumpers as below, and board will boot from SD card of baseboard:



Install jumpers as below, and board will boot from eMMC card of CPU module:

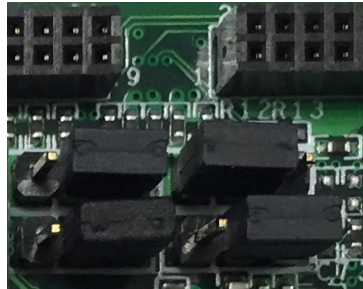


Install jumpers as below, and board will boot from SD card of CPU module:



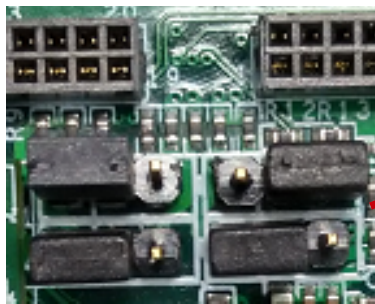
4.1.4 PICO-IMX6-HOBBIT

Install jumpers as below, and board will boot from SD card of baseboard:



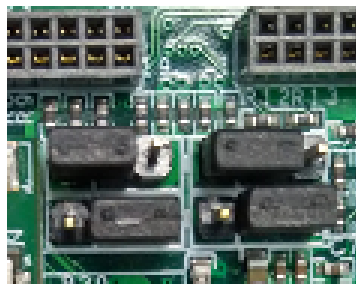
**Boot from SD of
baseboard**

Install jumpers as below, and board will boot from eMMC card of CPU module:



**Boot from eMMC
of baseboard**

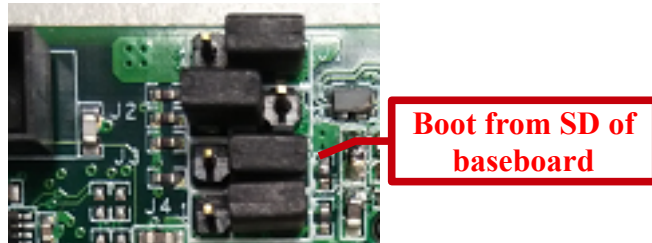
Install jumpers as below, and board will boot from SD card of CPU module:



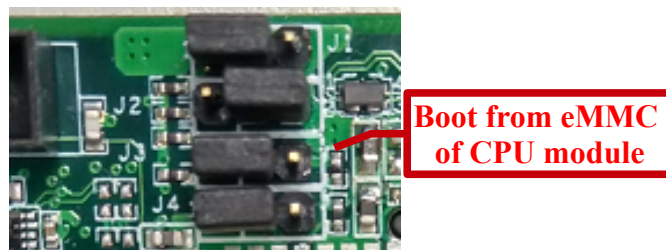
**Boot from SD of
CPU module**

4.1.5 PICO-IMX6-NYMPH

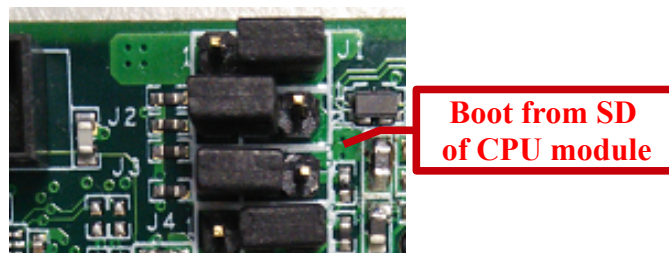
Install jumpers as below, and board will boot from SD card of baseboard:



Install jumpers as below, and board will boot from eMMC card of CPU module:

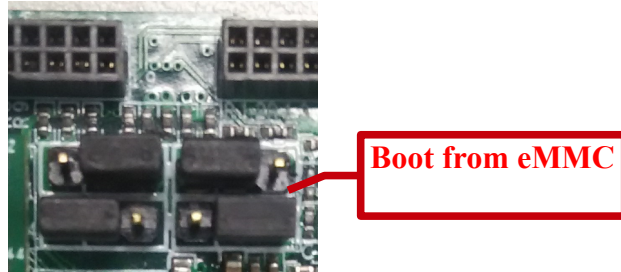


Install jumpers as below, and board will boot from SD card of CPU module:

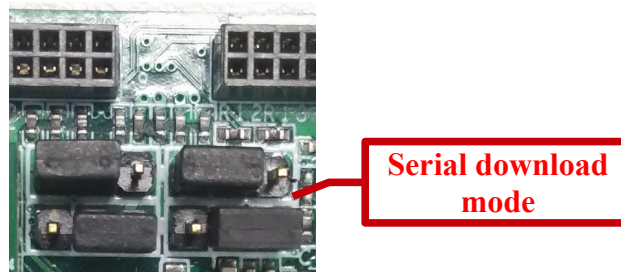


4.1.6 PICO-IMX6UL-EMMC-HOBBIT

Install jumpers as below, and board will boot from eMMC of CPU module:

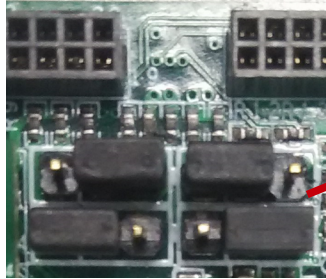


Install jumpers as below, and board will boot from serial boot loader:



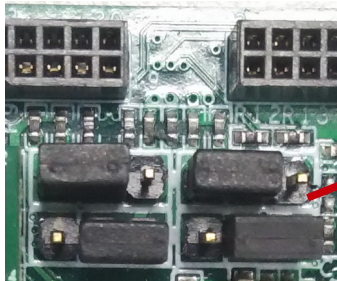
4.1.7 PICO-IMX6UL-NAND-HOBBIT

Install jumpers as below, and board will boot from SD card of baseboard:



**Boot from SD of
baseboard**

Install jumpers as below, and board will boot from NAND of CPU module:



**Boot from NAND
of CPU module**

4.1.8 TEK3-IMX6/TEP5-IMX6

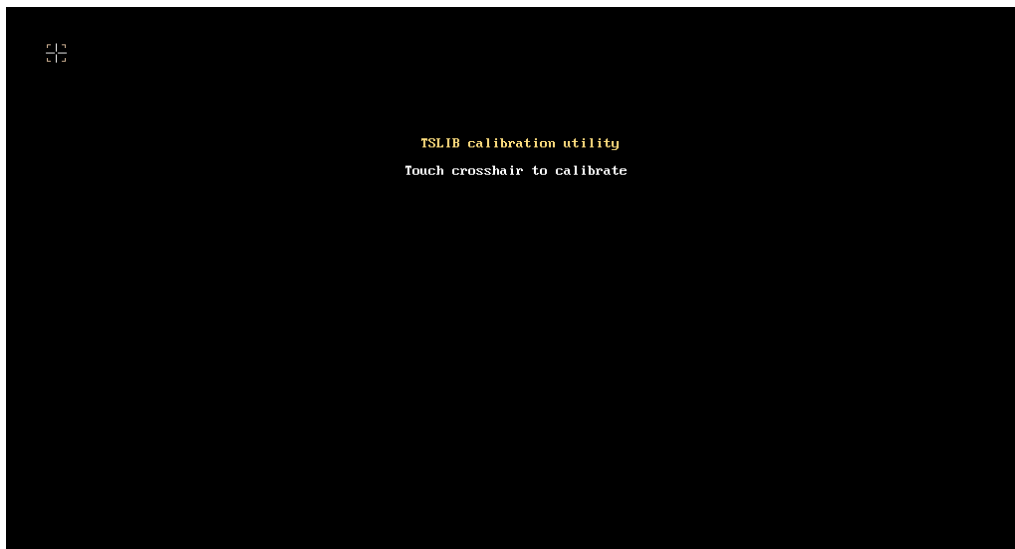
Insert the SD card into TEK3-IMX6 board. Hold down “S1” and press “RST” button.

(PS. Hold down “S1” button will switch the boot mode to boot from SD card. Then press “RST”, the board will reboot from SD card.)



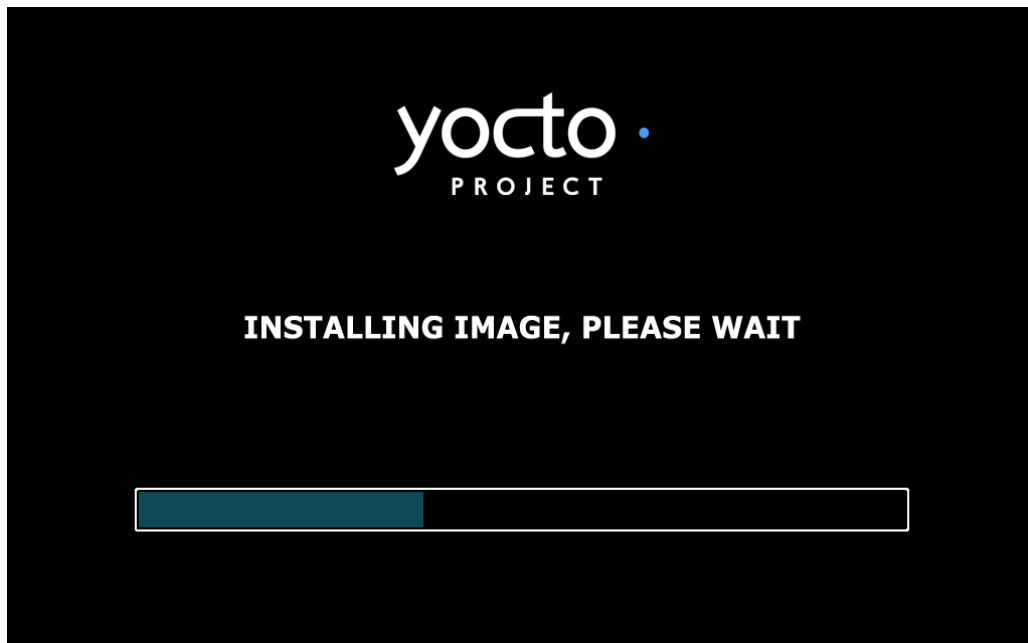
4.2 Resistive touch calibration

If the touch panel is resistive touch panel, installer program will enter into calibration mode first.

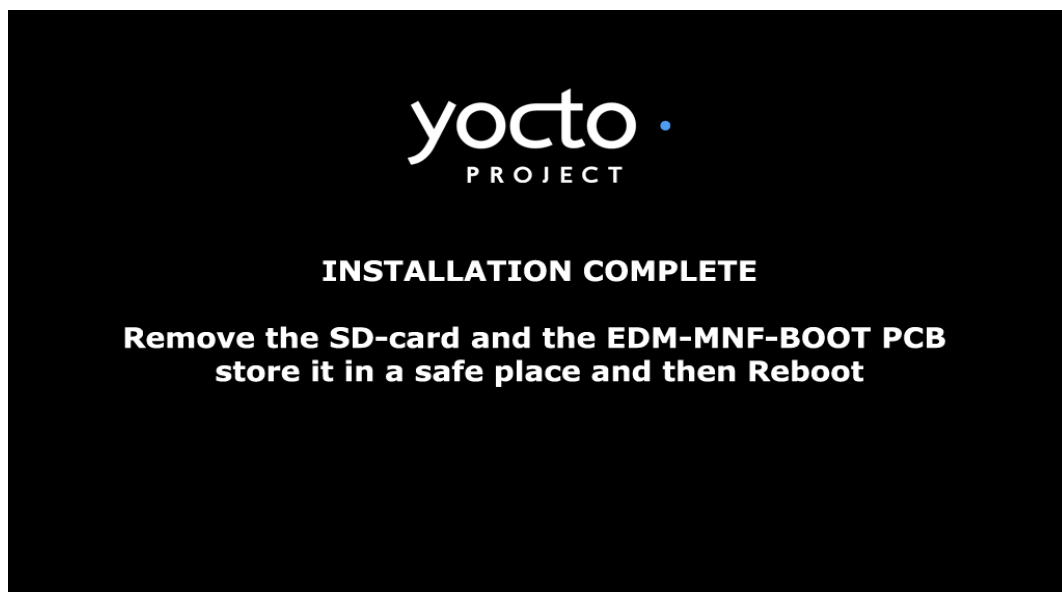


(Capacitive touch panels don't need to be calibrated.)

After calibration is done, the installer program will start to flash Yocto image to eMMC.



Please wait until the installation complete.



For EDM1-FAIRY/EDM1-GOBLIN/EDM2-ELF:

Please remove microSD card and “EDM-MNF-BOOT PCB”.

After removing “EDM-MNF-BOOT PCB”, EDM1-Fairy board will boot from eMMC.

For PICO-IMX6-DWARF/PICO-IMX6-HOBBIT:

Please remove microSD card and switch boot mode into “boot from eMMC”.

Then, reboot the board.