

# **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-IMX6SX
- EDM2-CF-IMX6
- PICO-IMX6

Carrier Boards:

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

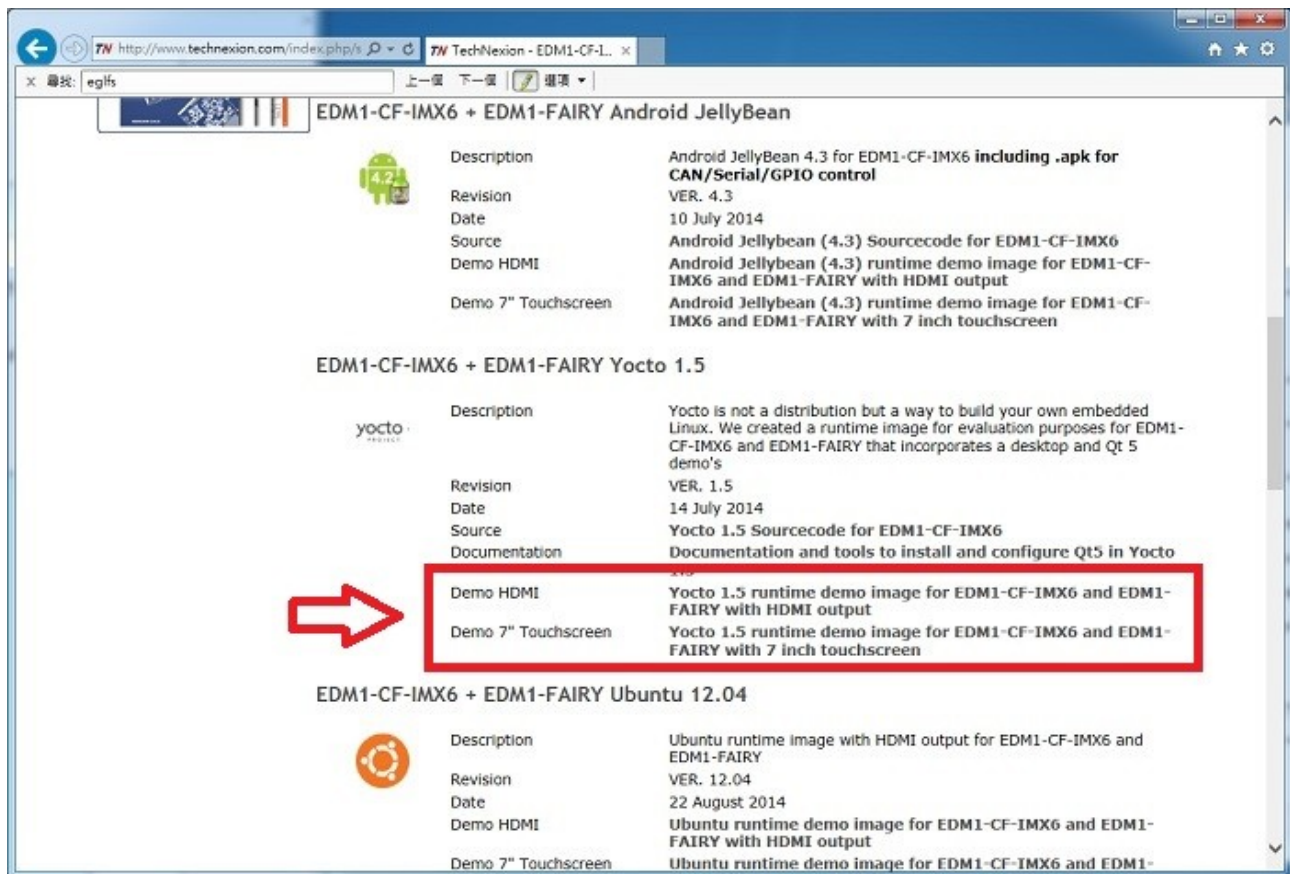
Box industrial PC:

- TEK3-IMX6

## **2. Download Pre-Built OS image**

Please visit Technexion download page:

<http://www.technexion.com/index.php/support/edm/edm1-cf-imx6>



Select the download link of pre-built image for HDMI or 7-inch LVDS display panel. There are options for different OS, e.g. android, ubuntu, yocto.

### 3. Make eMMC installer

Unzip the file you download.

edm\_yocto\_release\_note.txt  
edm1-cf-imx6\_edm1-fairy\_yocto-1.5-qt5\_demo\_lvds-1024x600\_20140714.img  
win32diskimager.zip

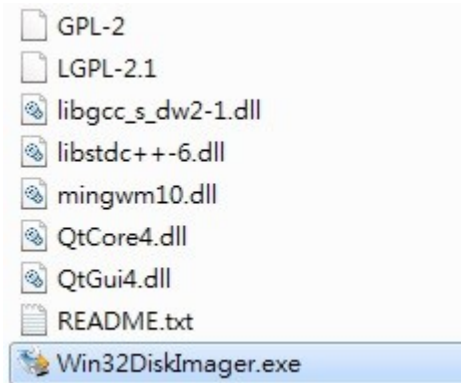
There are three files:

edm\_yocto\_release\_note.txt  
edm1-cf-imx6\_edm1-fairy\_yocto-1.5-qt5\_demo\_lvds-1024x600\_2014xxxx.img  
win32diskimager.zip

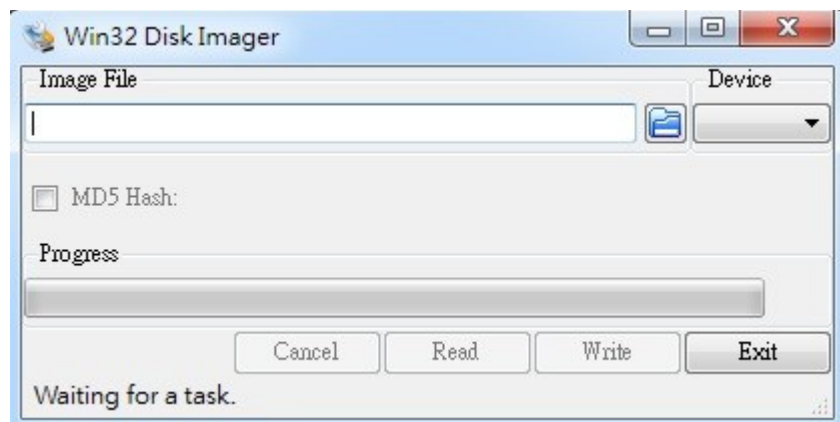
If your PC runs Windows OS:

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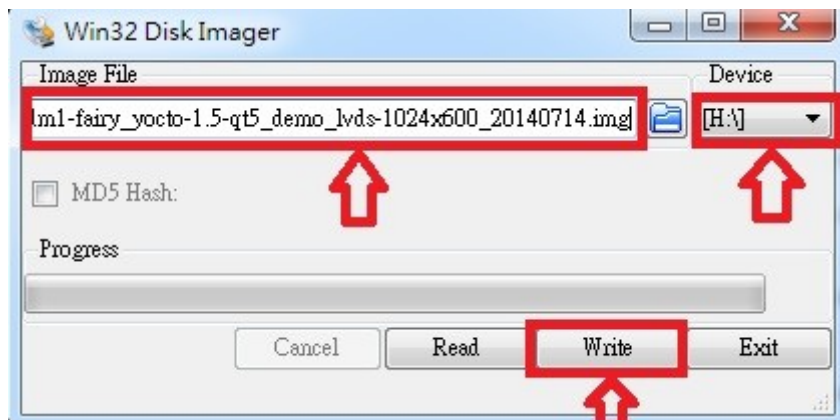
Please unzip the win32diskimager.zip:



Execute **Win32DiskImager.exe**.



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\_lvs-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.

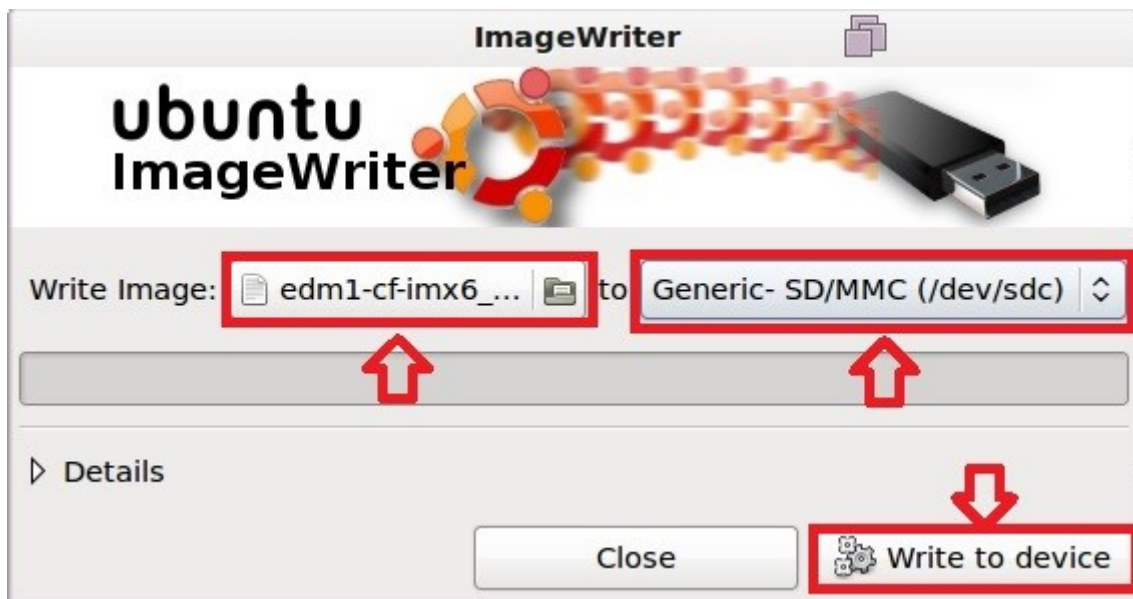
<https://apps.ubuntu.com/cat/applications/precise/usb-imagewriter/>

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

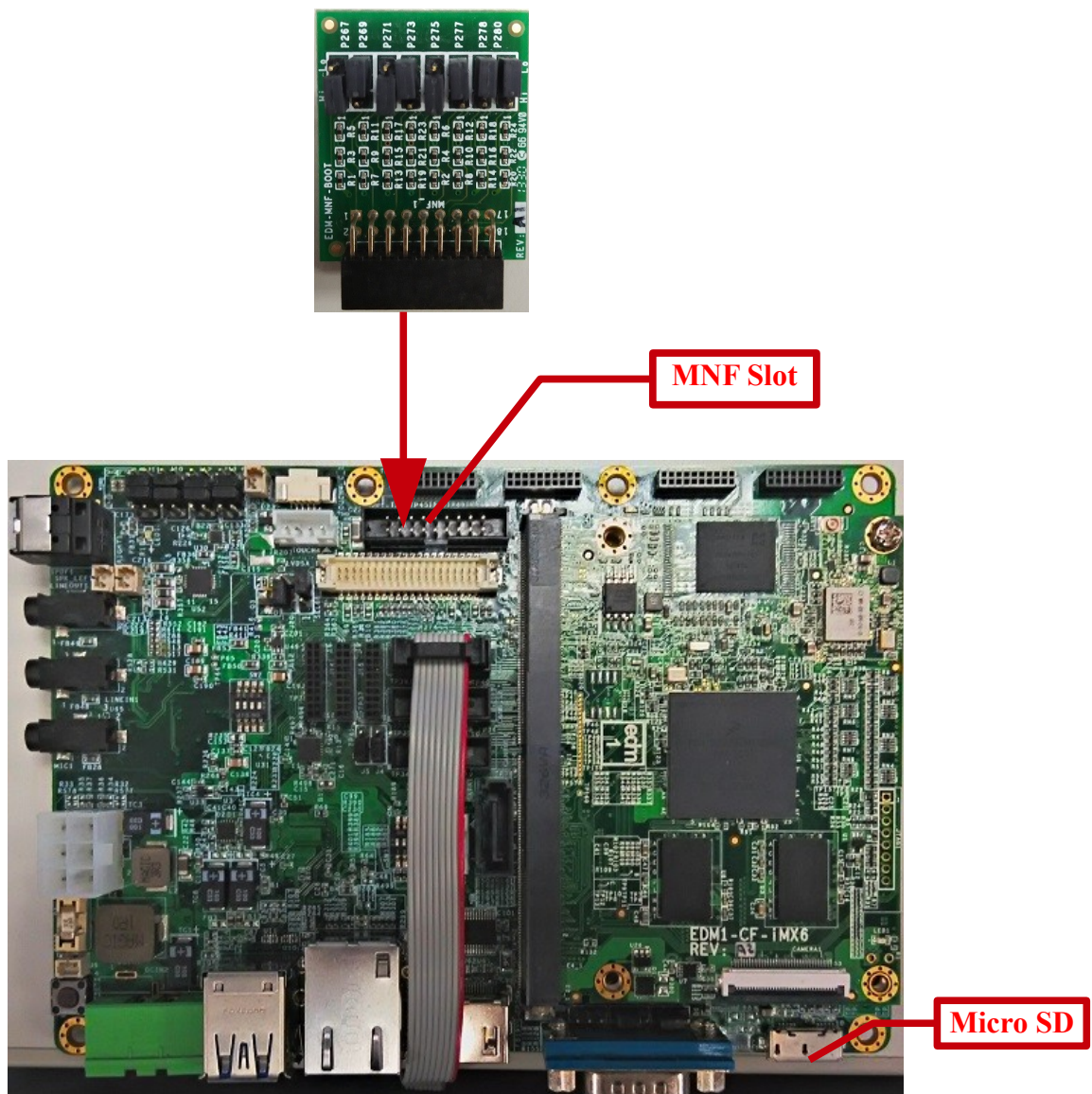
### 4.1 Set up boot mode

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.

#### For 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.

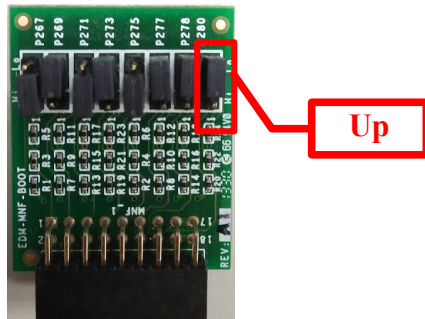
#### EDM-MNF-BOOT PCB



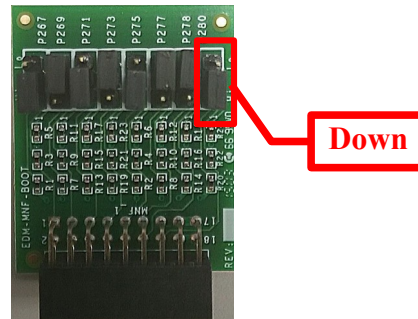


**Note:** The rightmost jumper of EDM-MNF-BOOT PCB is different for EDM1-CF-IMX6 and EDM1-CF-IMX6SX.

**For EDM1-CF-IMX6**



**For EDM1-CF-IMX6SX**



**For 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.)

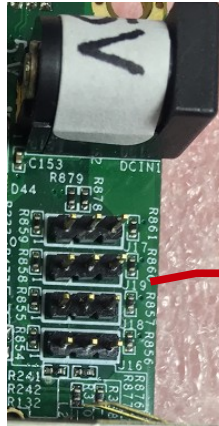


Then, power on target board.



**For PICO-IMX6-DWARF:**

Take out all jumpers on J16, J17, J18, J19. It will switch boot mode to boot from eMMC/SD card of CPU module:



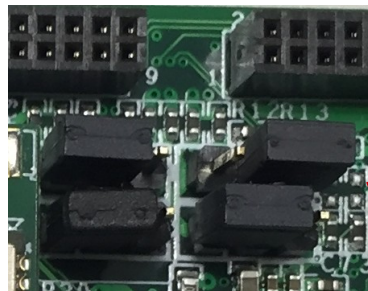
**Boot from eMMC  
of CPU module**

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

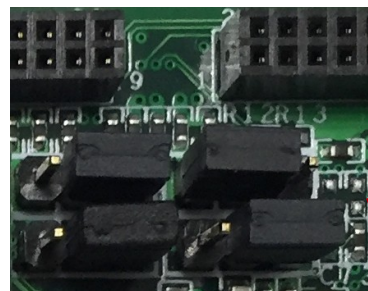


**Boot from SD of  
baseboard**

**For PICO-IMX6-HOBBIT:**



**Boot from eMMC  
of CPU module**



**Boot from SD of  
baseboard**

**For TEK3-IMX6:**

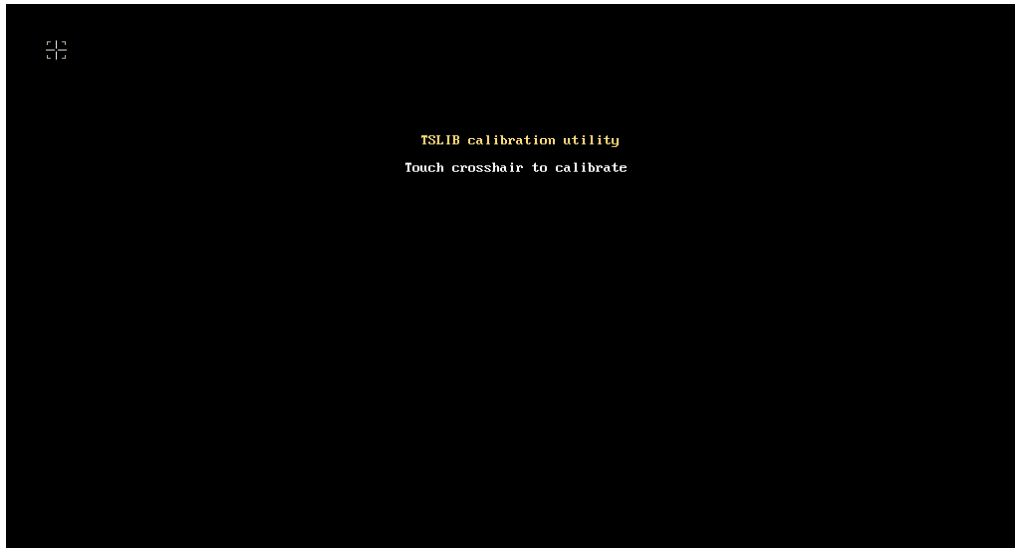
Insert the SD card into TEK3-IMX6 board. Hold down “S1” and press “RST” button.

**(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.)**



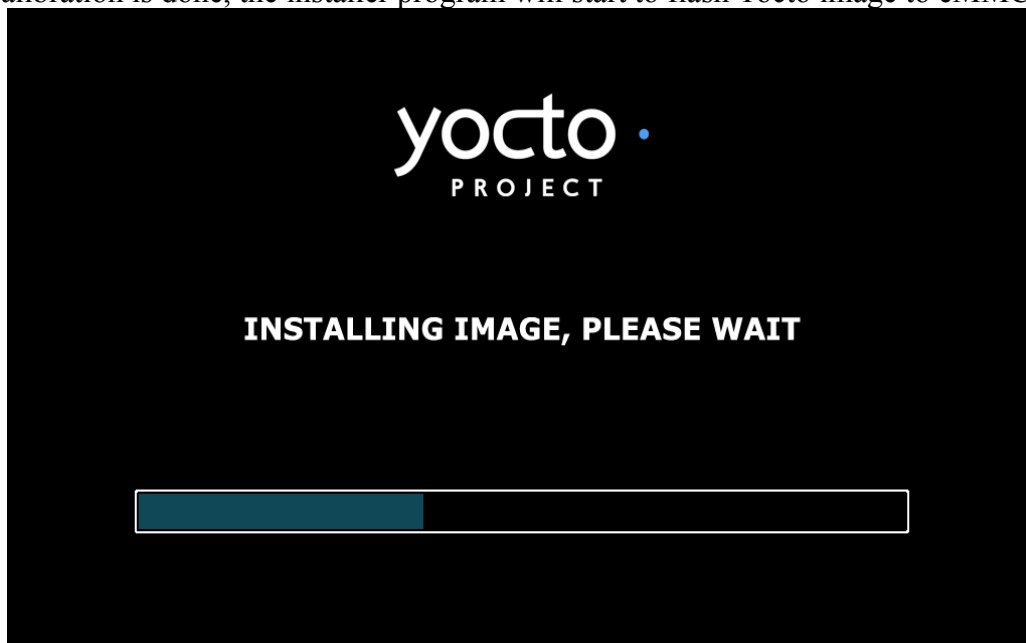
## 4.2 Resistive touch calibration

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



(Capacitive touch panel(eGalax multitouch panel) doesn't require 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.

You will see the boot message.