

How to Download Image for PICO-IMX6

2017/06/08

Configure Board

Please follow below step to configure your PICO-IMX6.

Step 1.

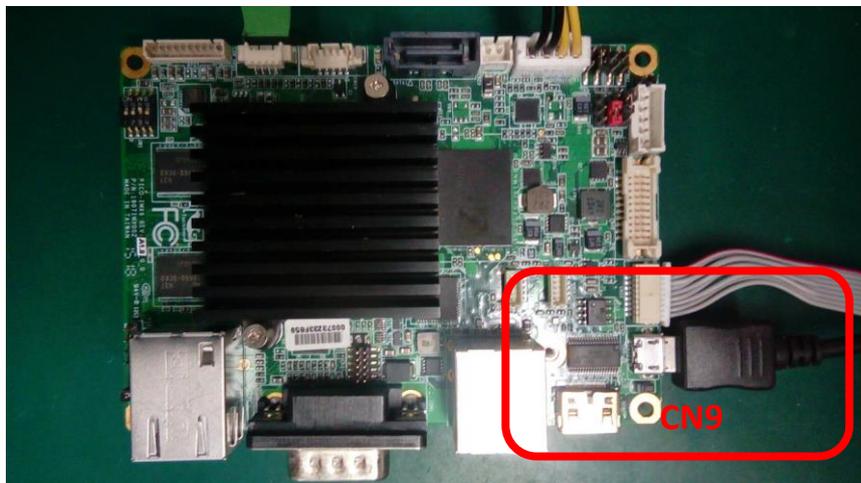
Set PICO-IMX6 to serial downloader mode.

2.4.1 Boot Mode Selection (JP30)



Step 2.

Put the SD card to SD slot (eMMC can ignore) and plug the Micro USB to CN9.



Step 3.

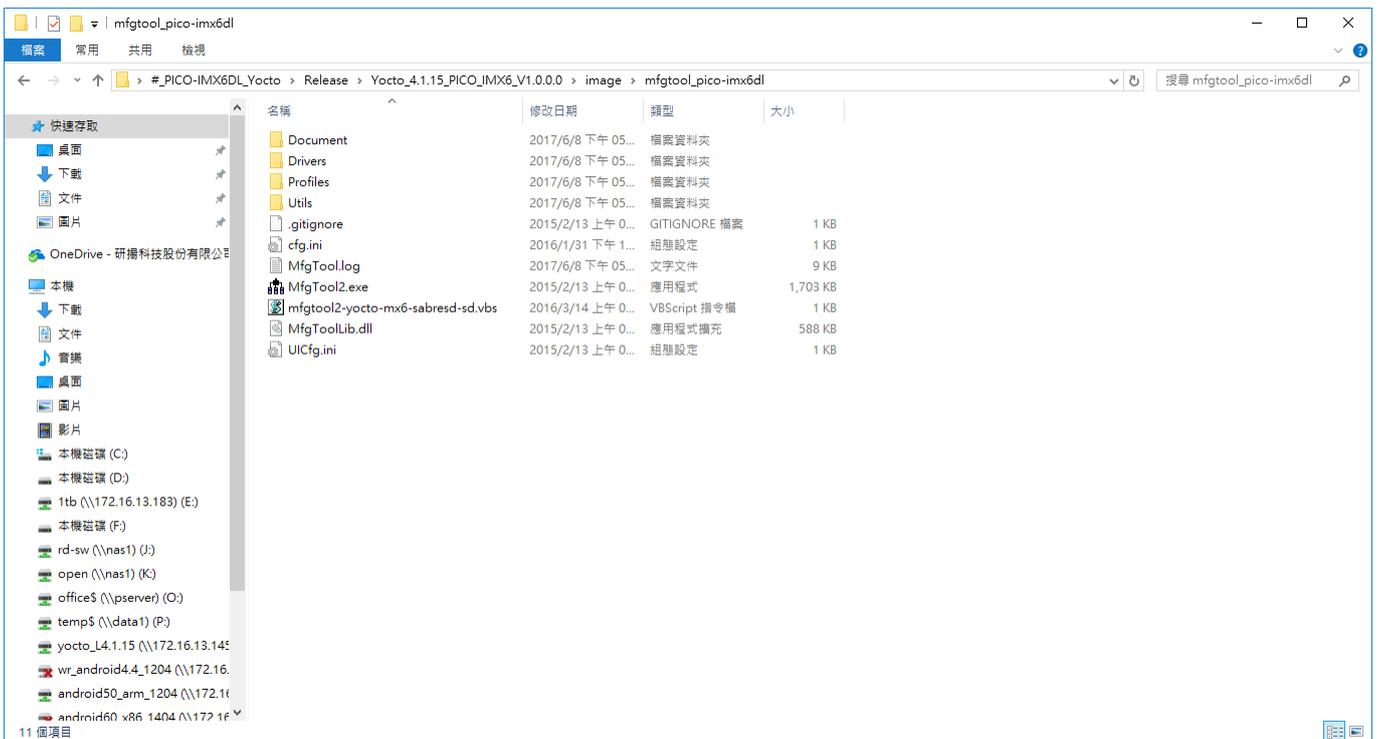
Turn on the PICO-IMX6.

Mfgtool

Please follow below step to download the image.

Step 1.

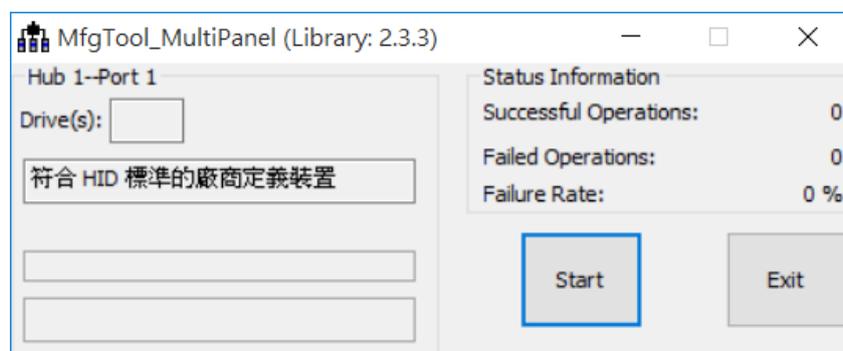
Open the Mfgtool directory.



Step 2.

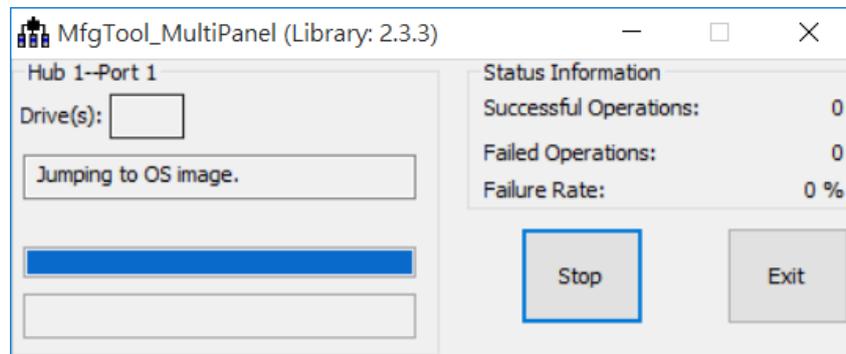
SD: Execute the “mfgtool2-yocto-mx6-sabresd-sd.vbs”.

eMMC: Execute the “mfgtool2- yocto-mx6-sabresd -emmc.vbs”.



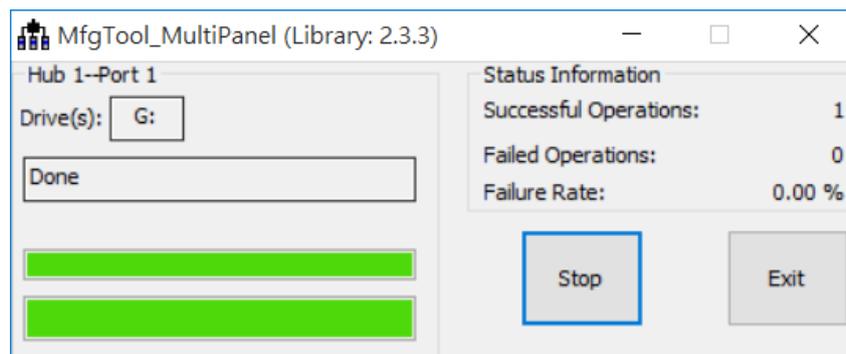
Step 3.

Click “Start” button to download the image.



Step 4.

When download successfully, please click “Stop” button and close the mfgtool.



Step 5.

Turn off the board.

Boot System

Step 1.

Set up PICO-IMX6 to internal boot mode.

2.4.1 Boot Mode Selection (JP30)

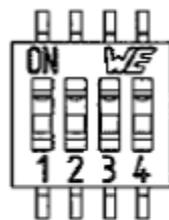


Step 2.

Set boot device to Micro SD or eMMC.

2.6 Boot Configuration Selection Switch (SW1)

This switch allows users to manually customize boot configurations for their needs.



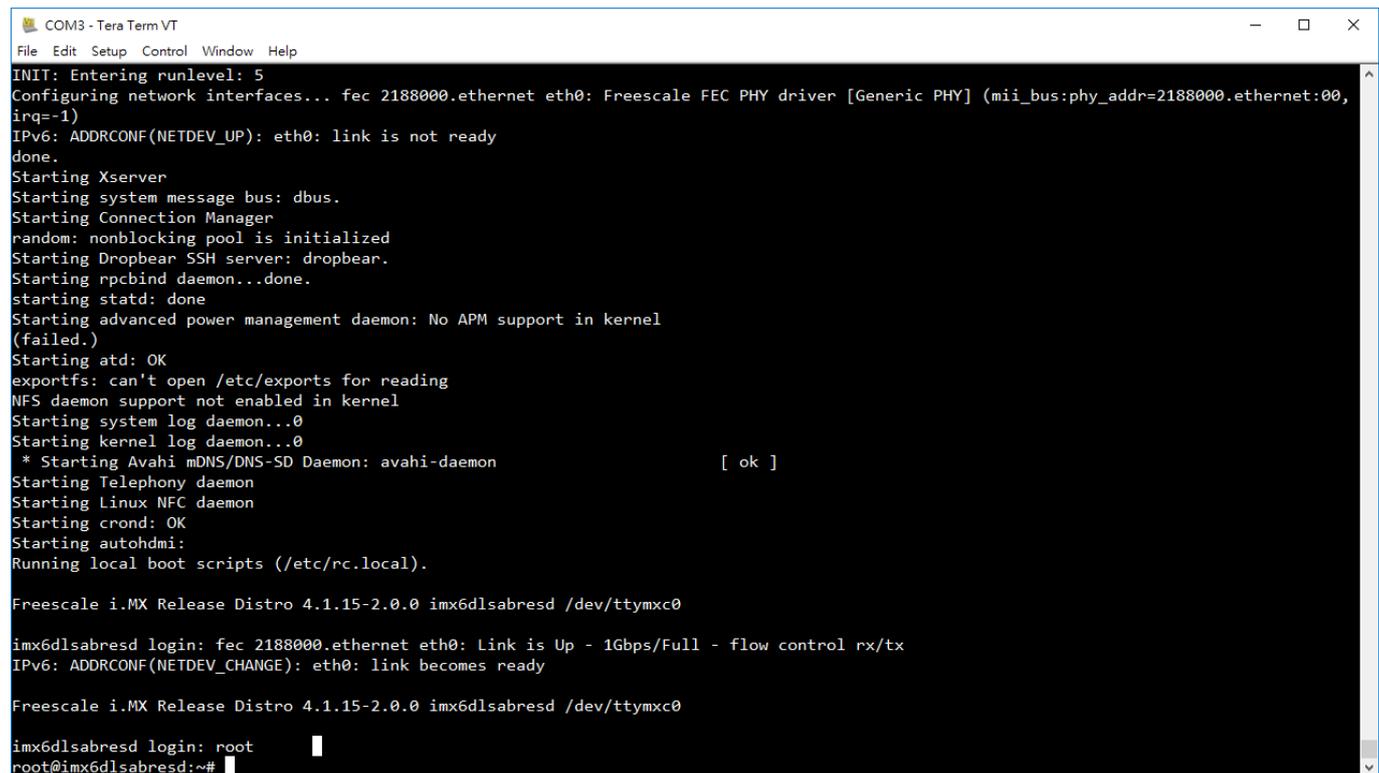
Boot Device	Bit 1	Bit 2	Bit 3	Bit 4	
Micro SD	OFF	OFF	ON	OFF	Default
eMMC	ON	ON	ON	ON	

Step 3.

Connect the debug port to your PC and open serial terminal (Putty or Tera Term).

Step 4.

Turn on the PICO-IMX6 and boot.



```
COM3 - Tera Term VT
File Edit Setup Control Window Help
INIT: Entering runlevel: 5
Configuring network interfaces... fec 2188000.ethernet eth0: Freescale FEC PHY driver [Generic PHY] (mii_bus:phy_addr=2188000.ethernet:00,
irq=-1)
IPv6: ADDRCONF(NETDEV_UP): eth0: link is not ready
done.
Starting Xserver
Starting system message bus: dbus.
Starting Connection Manager
random: nonblocking pool is initialized
Starting Dropbear SSH server: dropbear.
Starting rpcbind daemon...done.
starting statd: done
Starting advanced power management daemon: No APM support in kernel
(failed.)
Starting atd: OK
exportfs: can't open /etc/exports for reading
NFS daemon support not enabled in kernel
Starting system log daemon...0
Starting kernel log daemon...0
* Starting Avahi mDNS/DNS-SD Daemon: avahi-daemon [ ok ]
Starting Telephony daemon
Starting Linux NFC daemon
Starting crond: OK
Starting autohdmi:
Running local boot scripts (/etc/rc.local).

Freescale i.MX Release Distro 4.1.15-2.0.0 imx6dlsabresd /dev/ttymxc0

imx6dlsabresd login: fec 2188000.ethernet eth0: Link is Up - 1Gbps/Full - flow control rx/tx
IPv6: ADDRCONF(NETDEV_CHANGE): eth0: link becomes ready

Freescale i.MX Release Distro 4.1.15-2.0.0 imx6dlsabresd /dev/ttymxc0

imx6dlsabresd login: root
root@imx6dlsabresd:~#
```

Note

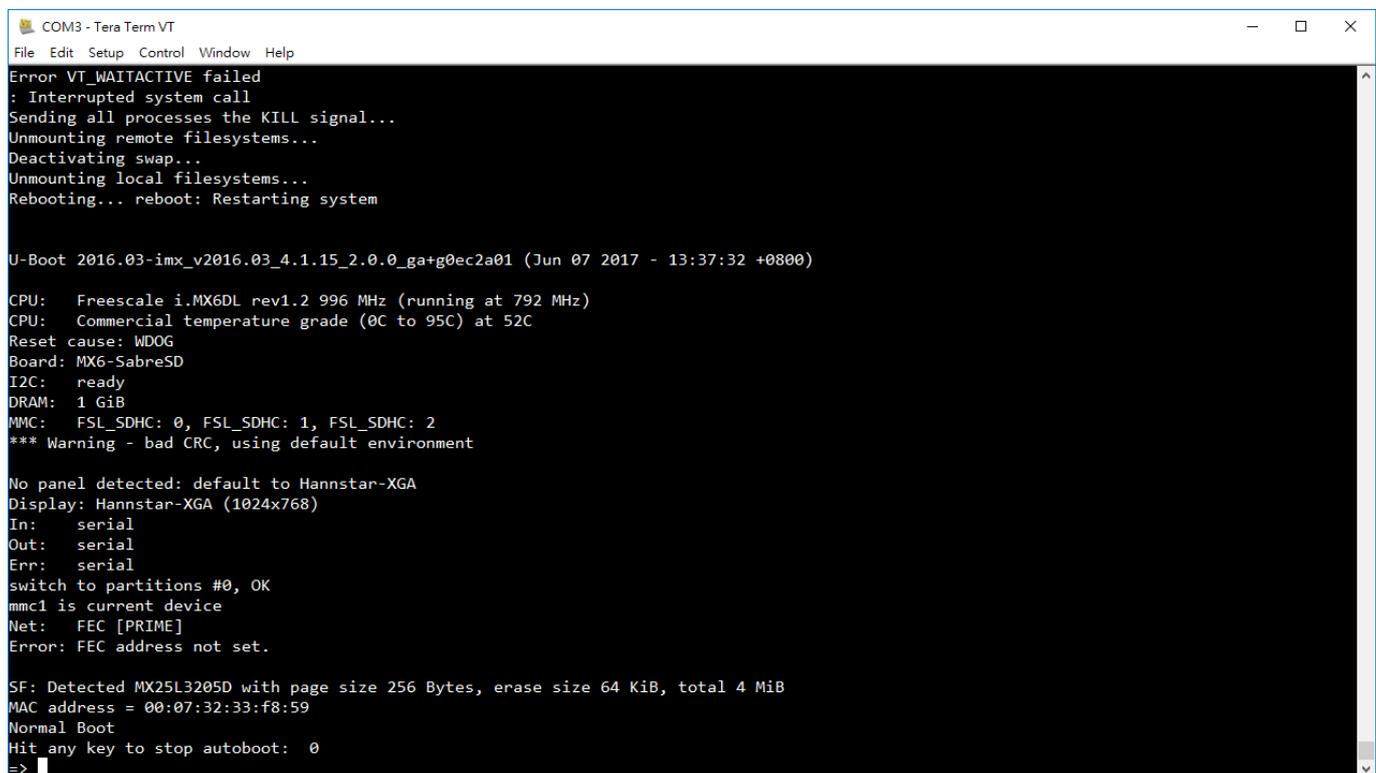
How to change display

Step 1.

Turn on the PICO-IMX6 and boot.

Step 2.

Press any key on U-Boot



```

COM3 - Tera Term VT
File Edit Setup Control Window Help
Error VT_WAITACTIVE failed
: Interrupted system call
Sending all processes the KILL signal...
Unmounting remote filesystems...
Deactivating swap...
Unmounting local filesystems...
Rebooting... reboot: Restarting system

U-Boot 2016.03-imx_v2016.03_4.1.15_2.0.0_ga+g0ec2a01 (Jun 07 2017 - 13:37:32 +0800)

CPU: Freescale i.MX6DL rev1.2 996 MHz (running at 792 MHz)
CPU: Commercial temperature grade (0C to 95C) at 52C
Reset cause: WDOG
Board: MX6-SabreSD
I2C: ready
DRAM: 1 GiB
MMC: FSL_SDHC: 0, FSL_SDHC: 1, FSL_SDHC: 2
*** Warning - bad CRC, using default environment

No panel detected: default to Hannstar-XGA
Display: Hannstar-XGA (1024x768)
In: serial
Out: serial
Err: serial
switch to partitions #0, OK
mmc1 is current device
Net: FEC [PRIME]
Error: FEC address not set.

SF: Detected MX25L3205D with page size 256 Bytes, erase size 64 KiB, total 4 MiB
MAC address = 00:07:32:33:f8:59
Normal Boot
Hit any key to stop autoboot: 0
=>
  
```

Step 3.

1.

Boot up the system by HDMI (default):

=> setenv pri_dis video=mxcfb0:dev=hdmi,1920x1080M@60,if=RGB24

Boot up the system by LVDS:

=> setenv pri_dis video=mxcfb0:dev=ldb,if=RGB666

2. Save environment

=> saveenv

3. Reboot

=> reset