

如何处理通过 UUU 工具将 android 镜像下载到 i.MX8MQ MEK 时出现 “等待设备” 的问题

原文: <https://community.nxp.com/docs/DOC-342719>

由 Wigros Sun 员工 于 2019-2-25 创建的文档

问题说明：

1. 运行“ uuu uuu-android-mx8mq-evk-emmc.lst”
下载图像时没问题。
2. 运行“ uuu_imx_android_flash.bat -f imx8mq -a -e”
Windows 控制台上将显示以下几行：

flash the file of u-boot-imx8mq.imx to the partition of bootloader0

<waiting for any devices>

然后下载操作停止。

为了节省开发时间，我分别在 Windows 7 64bit 和 Windows 10 64bit 上测试了上述 2 条
下载镜像的命令。

以下是详细步骤：

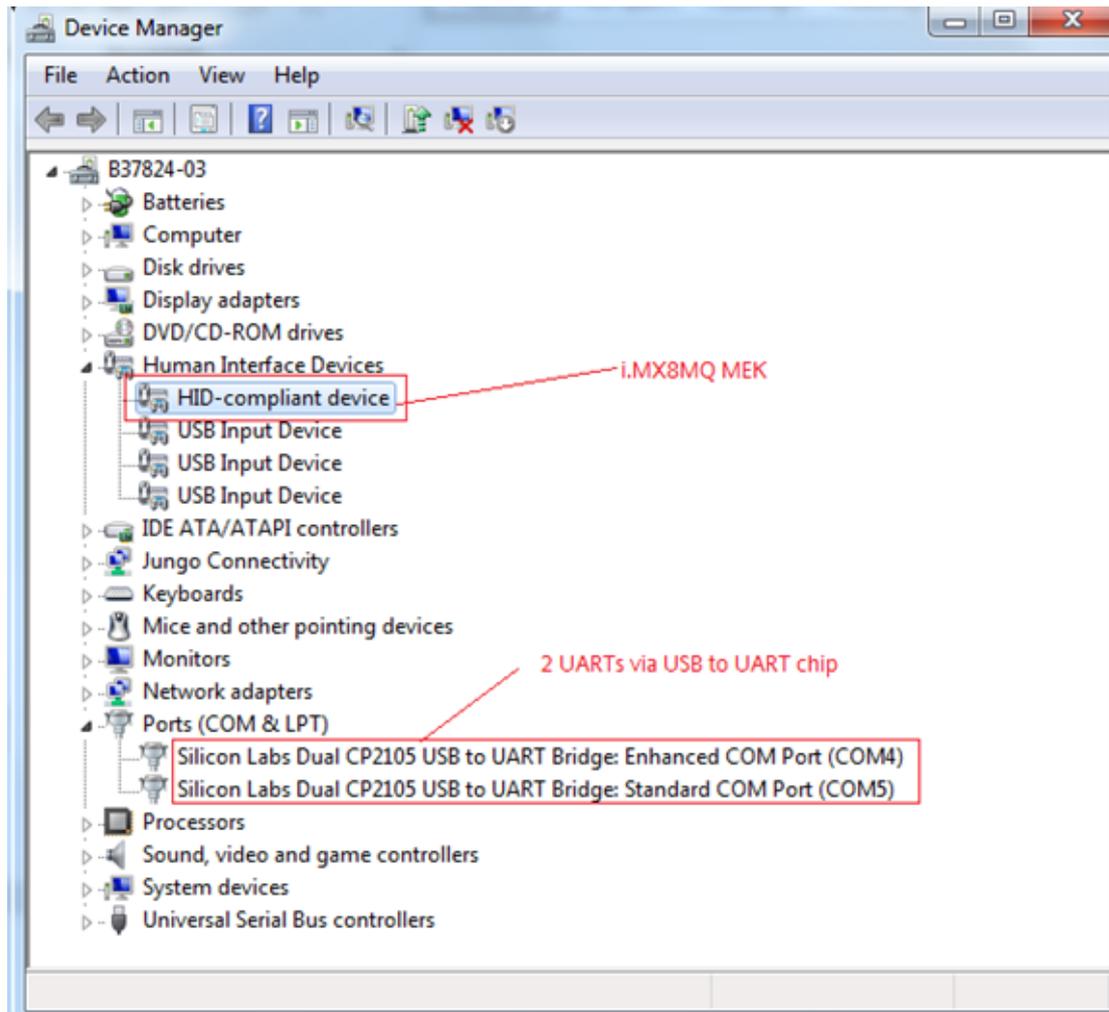
1. 硬件准备

- (1) 在 i.MX8MQ MEK 上切换 SW802，将 1-4 断开，2-3 接通
i.MX8MQ 处于 **USB 串行下载模式**。
- (2) 通过 USB OTG 电缆将 J1701 连接到 PC USB。
- (3) 通过 USB 3.0 电缆将 J901(usb type c) 连接到 PC USB。
- (4) 将 12V@3.5A 适配器插入电源插座 (J902)
- (5) 通过 SW701 开关打开 I.MX8MQ 板的电源

2. 软件准备

(1) i.MX8MQ MEK 的相关 Windows 驱动程序

Windows 7 64bit 或 Windows 10 64bit 将查找新设备并开始搜索和安装相应的驱动程序，
如下图示：



Windows 10 64bit 可能无法从制造商的官方网站自动安装 CP2105 驱动程序：
<https://www.silabs.com/products/development-tools/software/usb-to-uart-bridge-vcp-drivers>

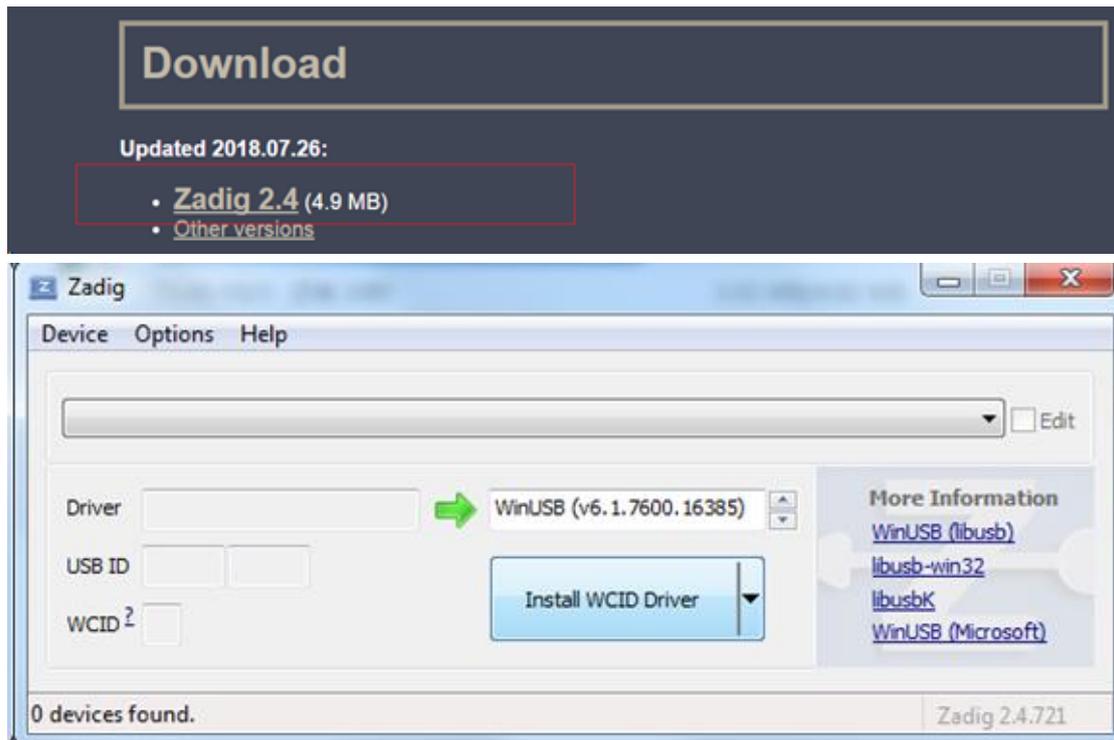
那就手动安装。

(2) 关闭 i.MX8MQ MEK

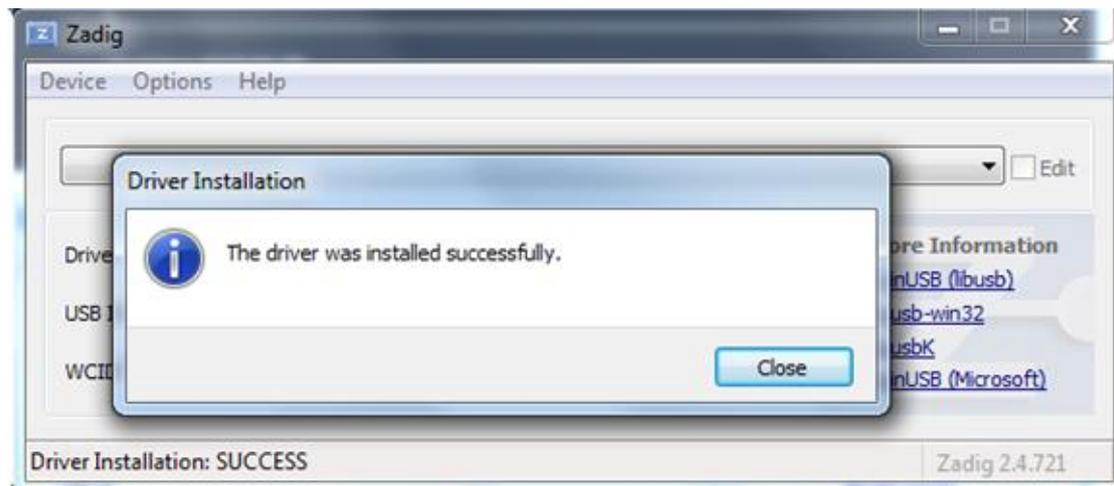
(3) 通过 zadig 安装 winusb 驱动程序

根据 uuu.pdf 中描述的方法，从 <https://zadig.akeo.ie/> 下载 zadig 工具，并将其安装到 Windows 7 64bit。

[注意] Windows 10 64bit 不需要安装 winusb 驱动程序。



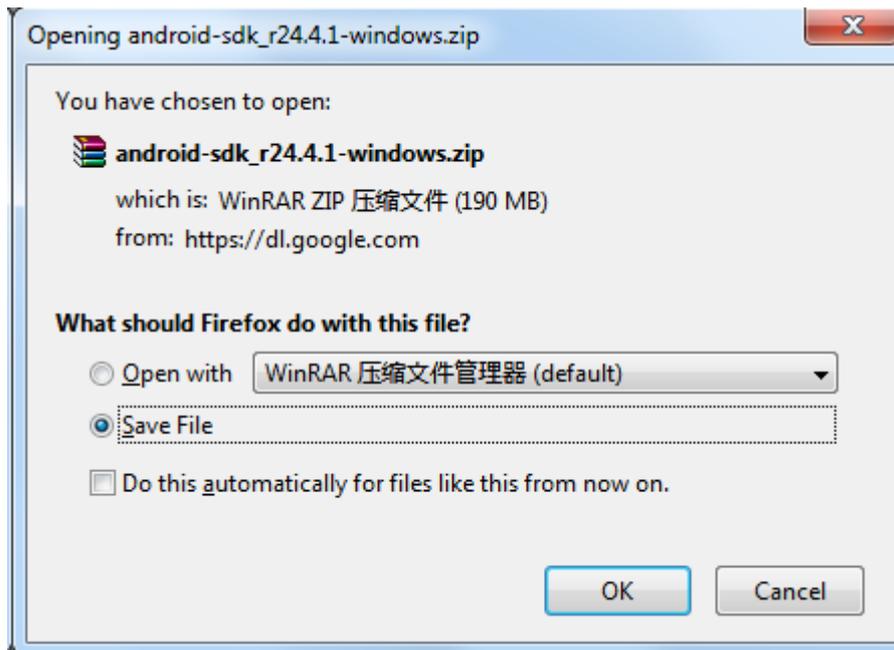
按下“安装 WCID 驱动程序”按钮



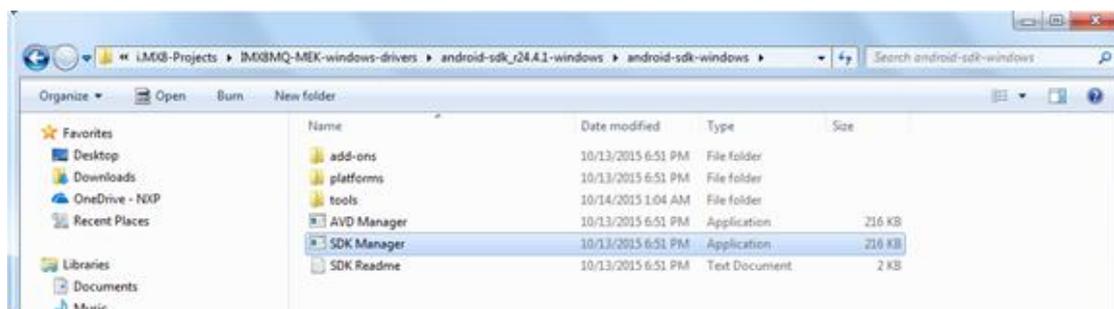
(4) 下载 Android SDK Manager

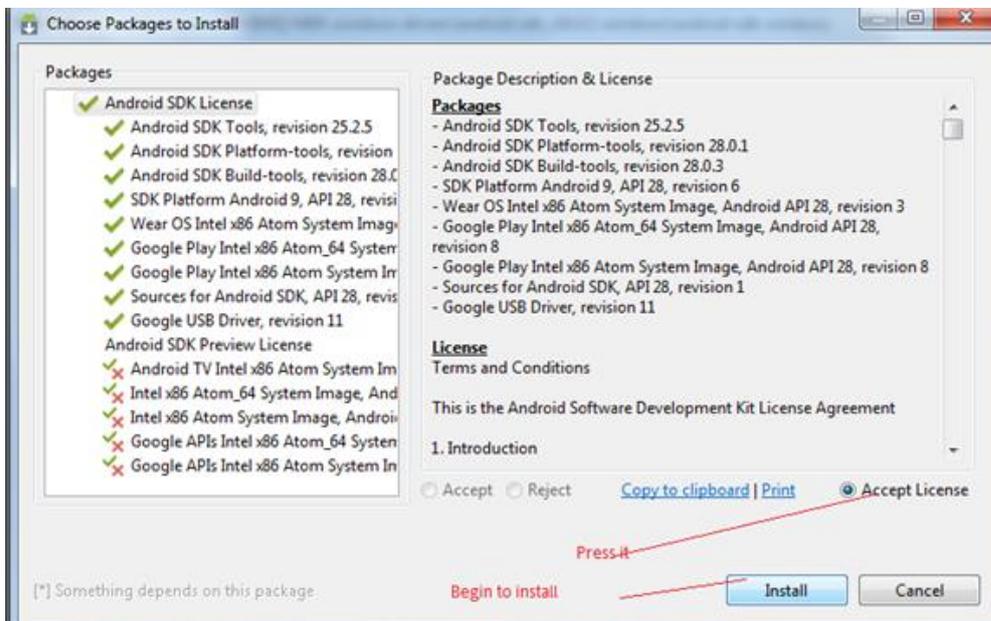
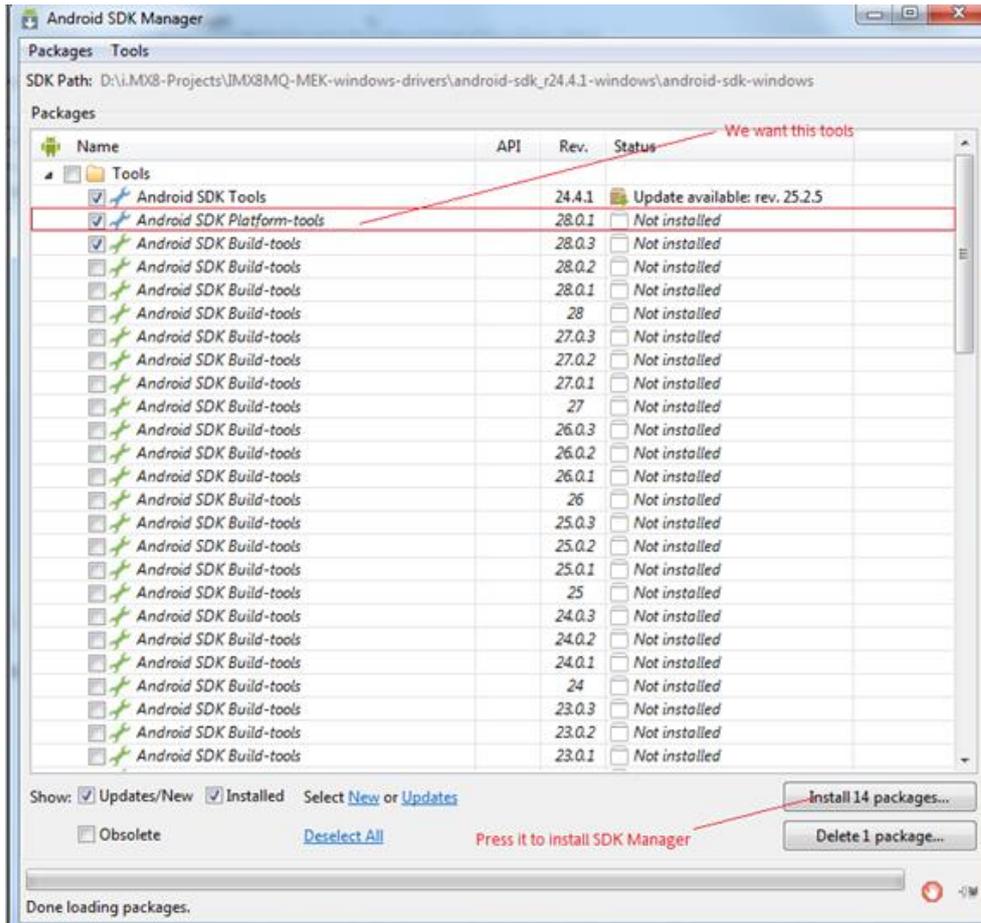
从以下位置下载 SDK Manager :

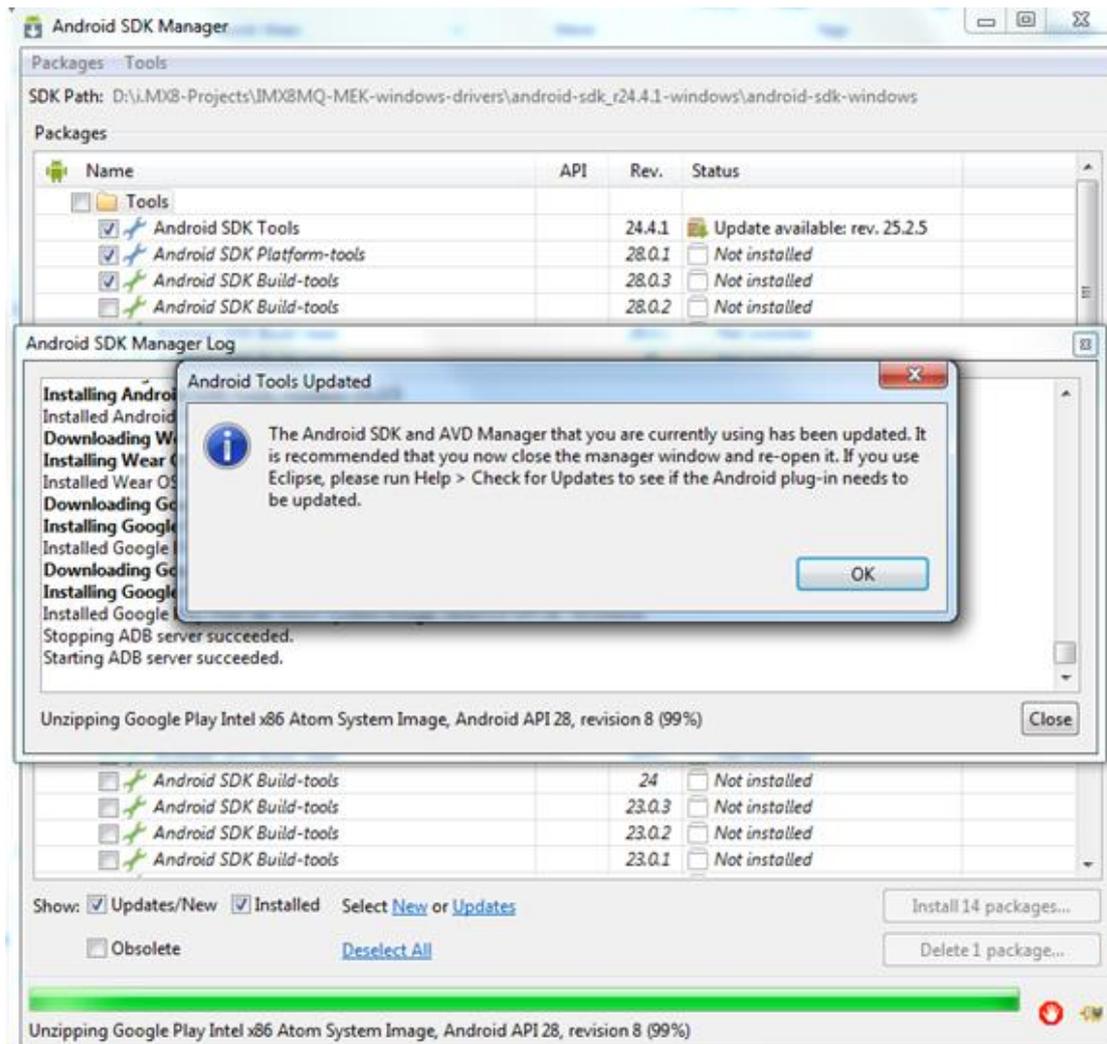
http://visualgdb.com/android/install_redir?item=SDK



下载后，将其解压缩，然后运行 SDK Manager 应用程序：







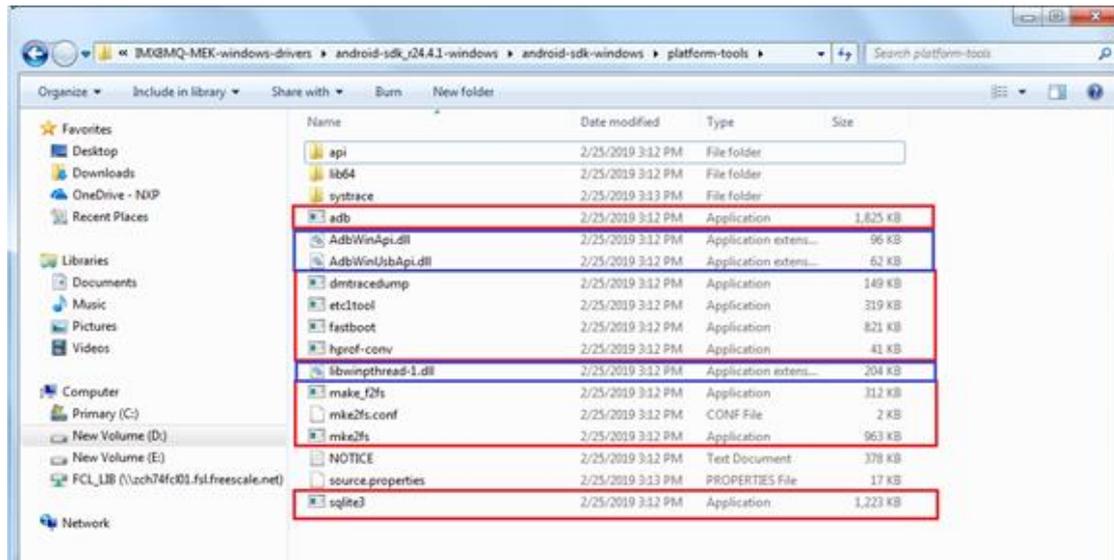
按确定。

然后按“关闭”

关闭 SDK Manager 安装指南。

找到 SDK Manager 安装目录，输入“ platform-tools”，如下所示：

D:\i.MX8-Projects\IMX8MQ-MEK-windows-drivers\android-sdk_r24.4.1-
windows\android-sdk-windows\platform-tools



将蓝色矩形中的项目复制到 C:\windows\system
 将红色矩形中的项目复制到 C:\windows\system32

3.开始通过 UUU 工具将 android 图像下载到 I.MX8MQ MEK

(1) 为 i.MX8MQ MEK 下载 android DEMO 图像

https://www.nxp.com/support/developer-resources/software-development-tools/i.mx-developer-resources/evaluation-kit-for-the-i.mx-8m-applications-processor:MCIMX8M-EVK?tab=Design_Tools_Tab

Board Support Packages (14)



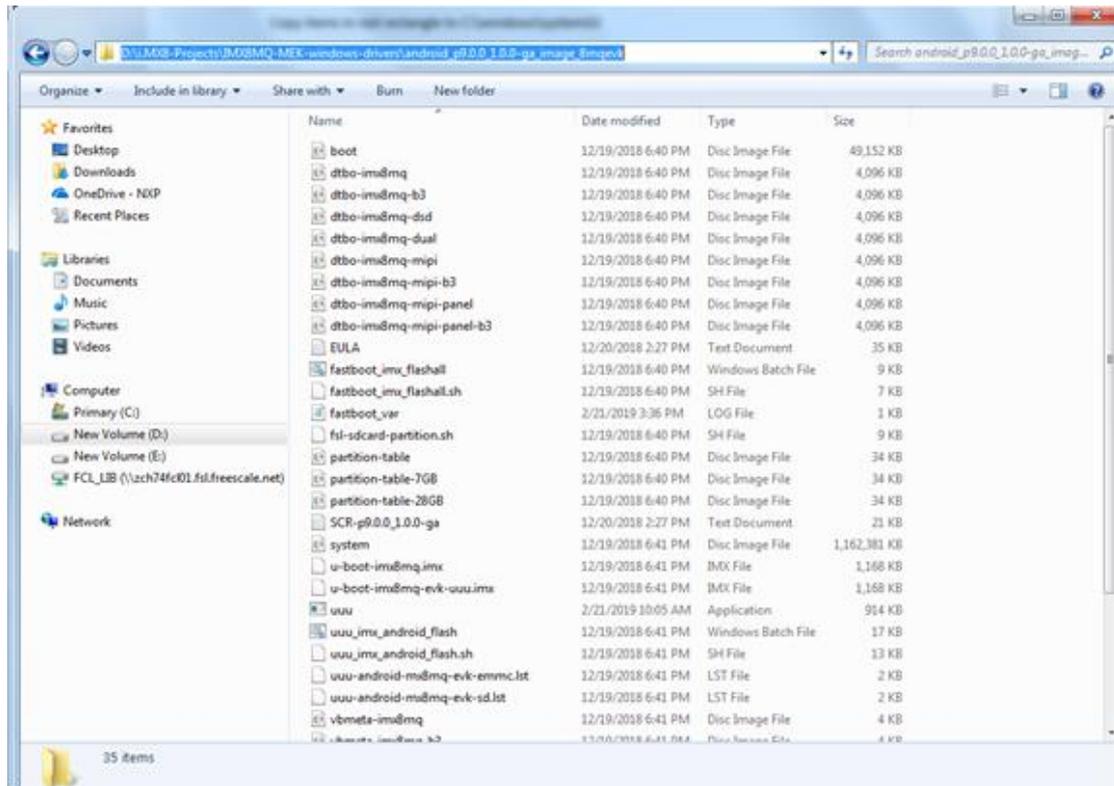
P9.0.0_1.0.0_GA_DEMO_8MQ (REV P9.0.0_1.0.0)

Prebuilt images with NXP extended features for the i.MX 8M Quad EVK

GZ P9.0.0_1.0.0_GA_DEMO_8MQ

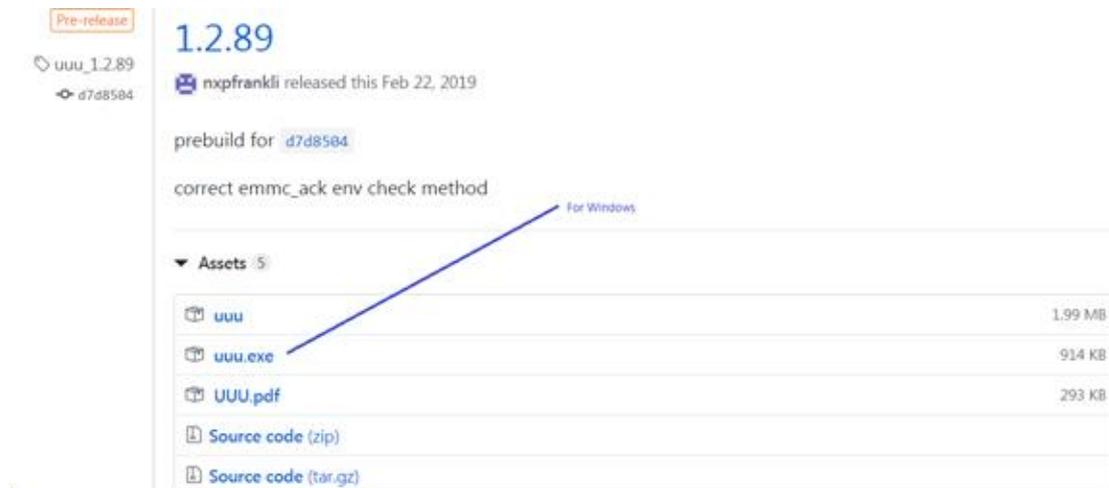
2019-01-24 10:24:00

下载后，将其解压缩到目录。如下所示：



(2) 下载 UUU 工具

<https://github.com/NXPmicro/mfgtools/releases>



下载 uuu.exe 后，将其复制到 android 9.0 demo image 的目录，请参见上文。

(3) 运行命令“uuu_imx_android_flash.bat -f imx8mq -a -e”

----打开 i.MX8MQ MEK。

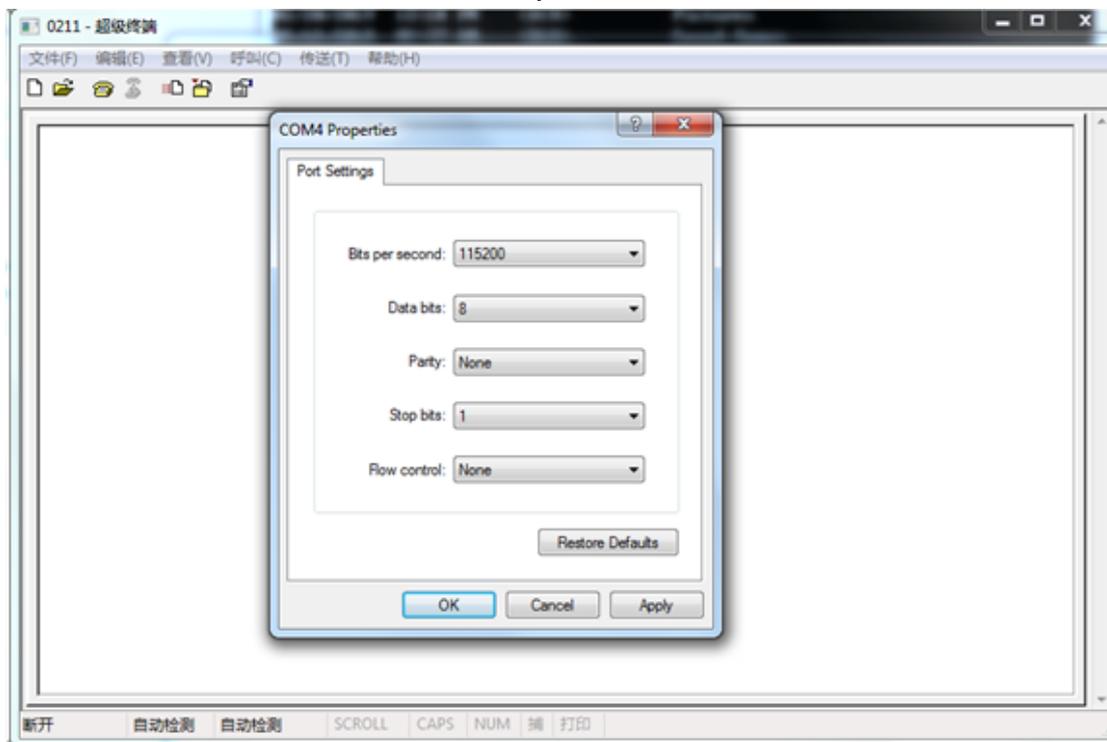
----打开命令行窗口

```
Administrator: C:\windows\system32\cmd.exe
02/11/2019 08:50 AM <DIR> OneDrive
02/25/2019 07:58 AM <DIR> OneDrive - NXP
02/20/2019 12:18 PM <DIR> Pictures
09/19/2018 09:37 AM <DIR> Saved Games
09/19/2018 09:37 AM <DIR> Searches
02/21/2019 03:18 PM <DIR> usb_driver
09/19/2018 09:37 AM <DIR> Videos
0 File(s) 0 bytes
20 Dir(s) 138,375,651,328 bytes free

C:\Users\B37824>d:

D:\i.MX8-Projects\IMX8MQ-MEK-windows-drivers\android_p9.0.0_1.0.0-ga_image_8mqev
k>uuu_imx_android_flash.bat -f imx8mq -a -e_
```

---打开超级终端（将其设置为 115200 bps）



运行“ uuu_imx_android_flash.bat -f imx8mq -a -e”

对于 Windows 10 64 位，下载图像将没有任何错误。

但是对于 Windows 7 64bit，下载图像将在“waiting for any devices”时停止。

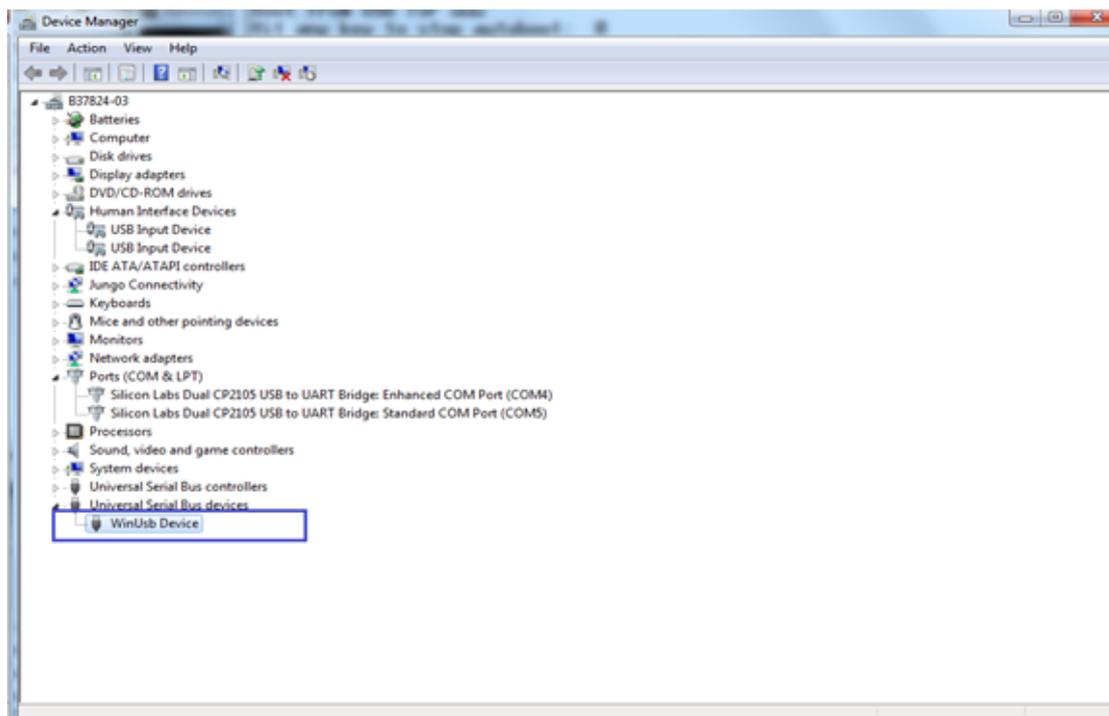
这意味着将需要 Android ADB 驱动程序。 请按照以下步骤解决问题。

```
Administrator: C:\windows\system32\cmd.exe - uuu_imx_android_flash.bat -f imx8mq -a -e
=====
SDPS:  MX8QXP          0x1fc9  0x012f  [0x0002..0xffff]
SDPS:  MX8QM          0x1fc9  0x0129  [0x0002..0xffff]
SDP:   MX7D           0x15a2  0x0076
SDP:   MX6Q           0x15a2  0x0054
SDP:   MX6D           0x15a2  0x0061
SDP:   MX6SL          0x15a2  0x0063
SDP:   MX6SX          0x15a2  0x0071
SDP:   MX6UL          0x15a2  0x007d
SDP:   MX6ULL         0x15a2  0x0080
SDP:   MX6SLL         0x1fc9  0x0128
SDP:   MX7ULP         0x1fc9  0x0126
SDP:   MXRT106X       0x1fc9  0x0135
SDP:   MX8MM          0x1fc9  0x0134
SDP:   MX8MQ          0x1fc9  0x012b
SDPU:  SPL            0x0525  0xb4a4  [0x0000..0x04ff]
SDPU:  SPL1           0x0525  0xb4a4  [0x0500..0x9998]
SDPU:  SPL            0x0525  0xb4a4  [0x9999..0x9999]
FBK:   FBK            0x066f  0x9afe
FBK:   FBK            0x066f  0x9bff
FB:    FB             0x0525  0xa4a5
FB:    FB             0x18d1  0x0d02

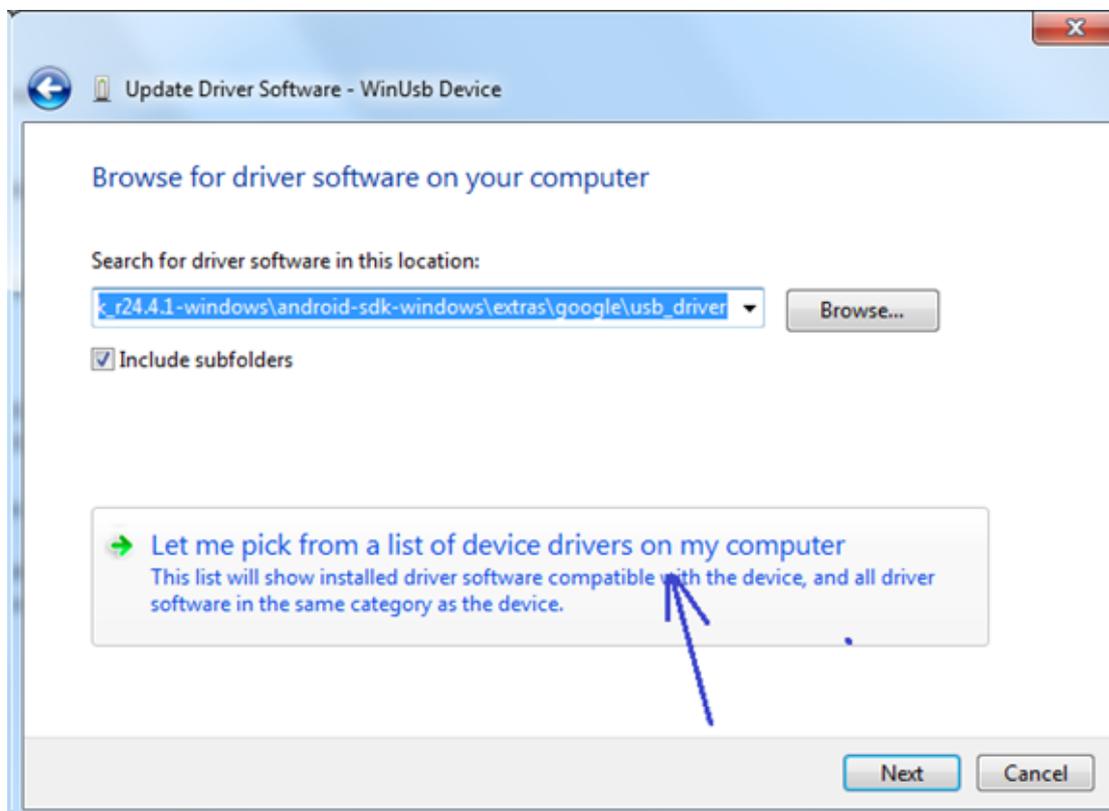
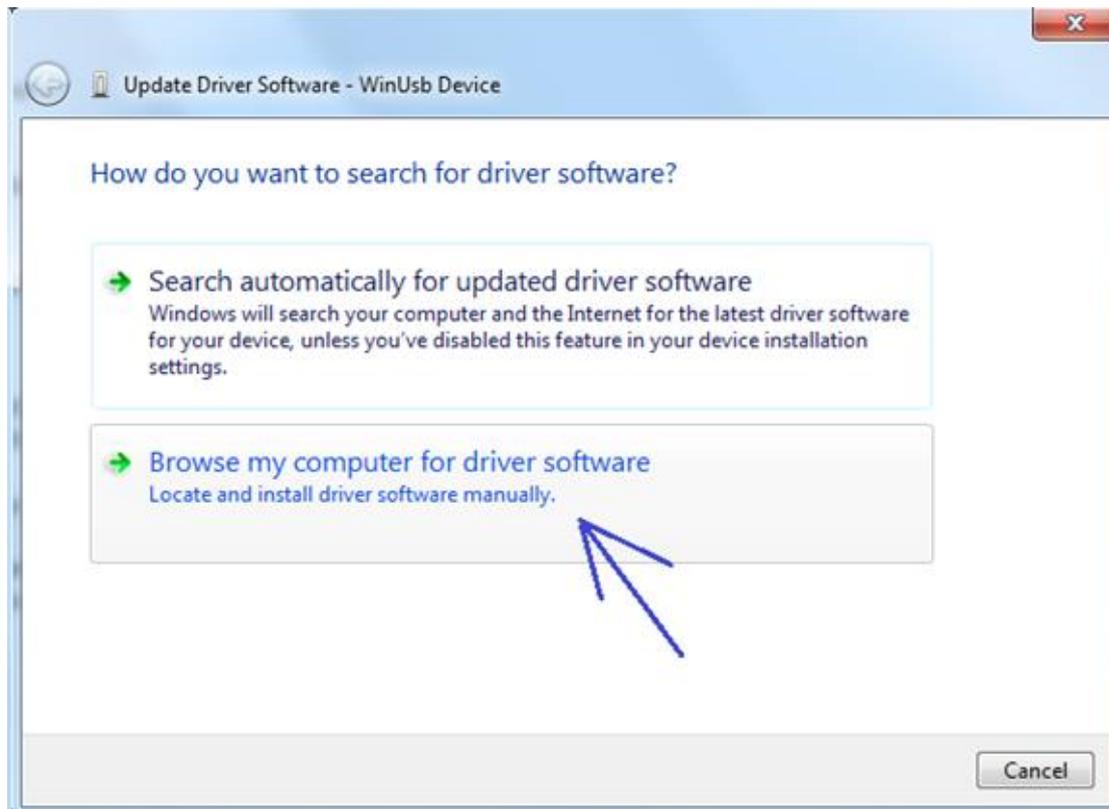
Wait for Known USB Device appear...
>Start Cmd:FB: ucmd mmc partconf 0 1 1 1
New USB Device Attached at 1:152
1:152>Okay

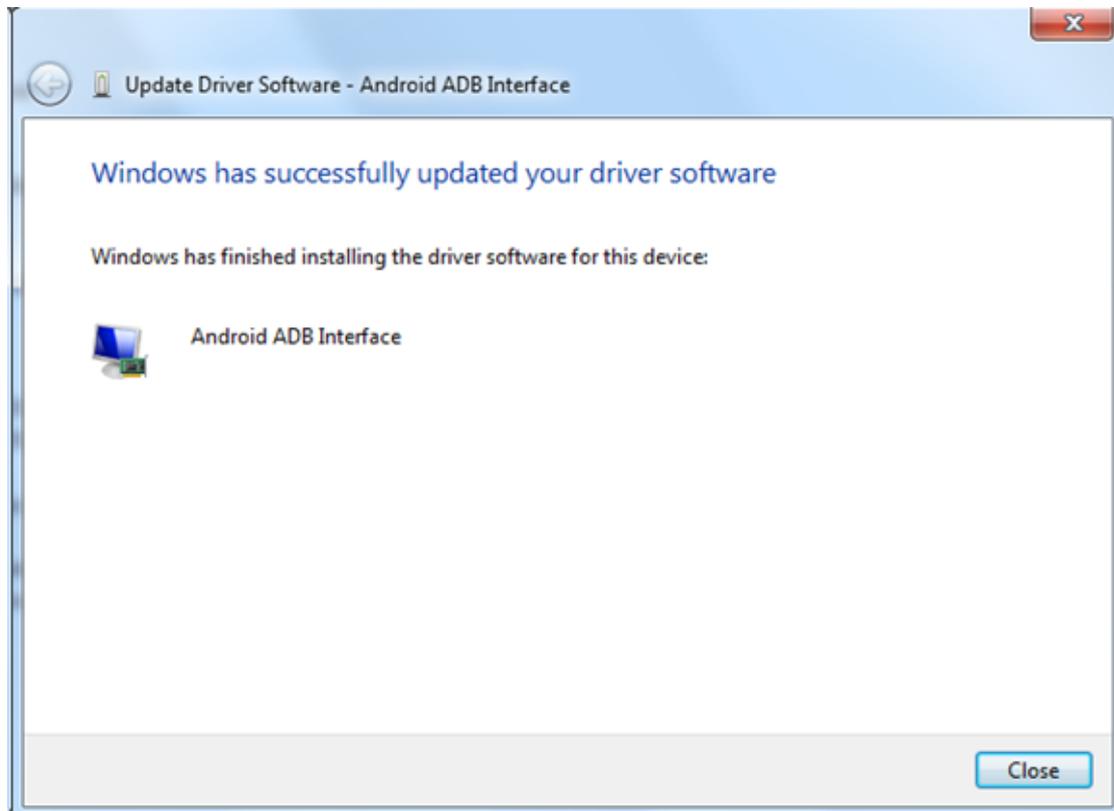
Okay
+{?25h

flash the file of u-boot-imx8mq.inx to the partition of bootloader0
< waiting for any device >
```

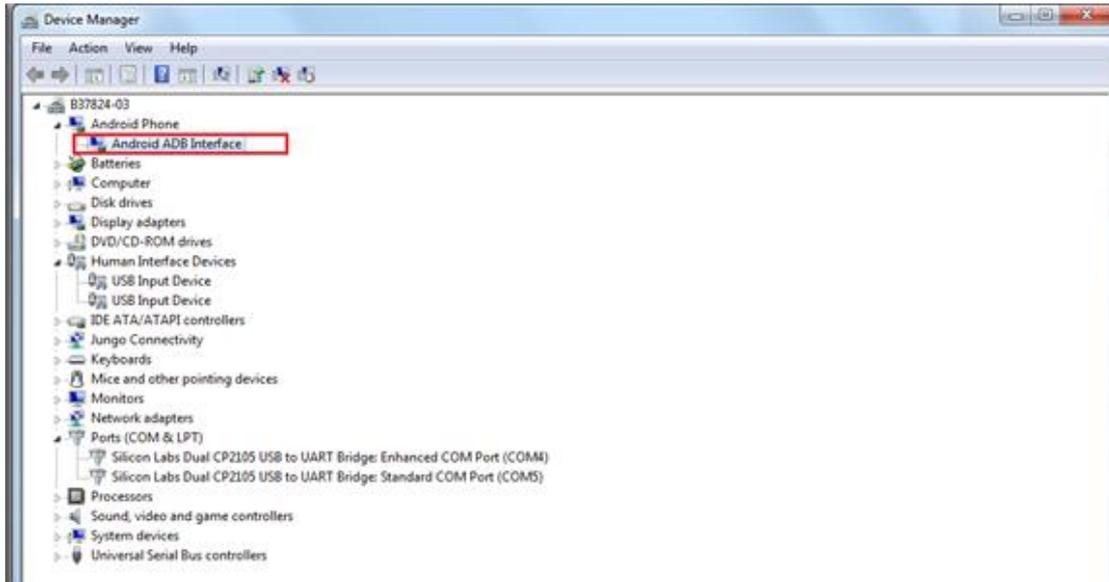


右鍵单击“update driver”

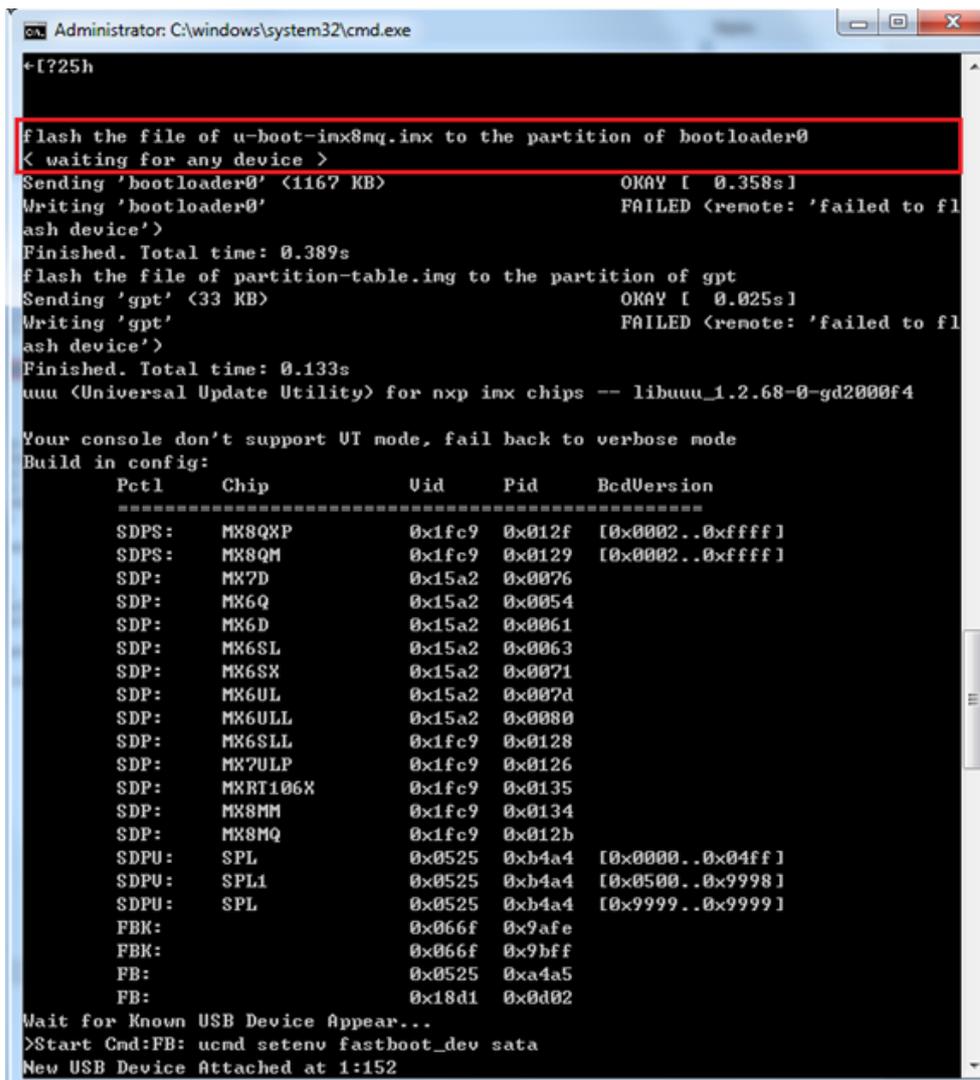




关闭它。



然后下载操作将自动继续。



```
Administrator: C:\windows\system32\cmd.exe

Okay
+{?25h

flash the file of dtbo-imx8mq.img to the partition of dtbo_a
Sending 'dtbo_a' (4096 KB) OKAY [ 0.217s]
Writing 'dtbo_a' OKAY [ 0.278s]
Finished. Total time: 0.517s
flash the file of boot.img to the partition of boot_a
Sending 'boot_a' (49152 KB) OKAY [ 2.323s]
Writing 'boot_a' OKAY [ 1.345s]
Finished. Total time: 3.728s
flash the file of system.img to the partition of system_a
Sending sparse 'system_a' 1/2 (1048572 KB) OKAY [ 42.814s]
Writing sparse 'system_a' 1/2 OKAY [ 30.461s]
Sending sparse 'system_a' 2/2 (113808 KB) OKAY [ 4.741s]
Writing sparse 'system_a' 2/2 OKAY [ 3.790s]
Finished. Total time: 92.203s
flash the file of vendor.img to the partition of vendor_a
Sending 'vendor_a' (60400 KB) OKAY [ 2.885s]
Writing 'vendor_a' OKAY [ 1.622s]
Finished. Total time: 4.558s
flash the file of vbmeta-imx8mq.img to the partition of vbmeta_a
Sending 'vbmeta_a' (4 KB) OKAY [ 0.020s]
Writing 'vbmeta_a' OKAY [ 0.125s]
Finished. Total time: 0.189s
***** Did you mean to fastboot format this ext4 partition?
Erasing 'userdata' OKAY [183.912s]
Finished. Total time: 183.933s
Erasing 'misc' OKAY [ 0.105s]
Finished. Total time: 0.116s
Erasing 'persistdata' OKAY [ 0.043s]
Finished. Total time: 0.058s
Erasing 'fbmisc' OKAY [ 0.043s]
Finished. Total time: 0.055s
Setting current slot to 'a' OKAY [ 0.027s]
Finished. Total time: 0.036s
#####ALL IMAGE FILES FLASHED#####

D:\i.MX8-Projects\IMX8MQ-MEK-windows-drivers\android_p9.0.0_1.0.0-ga_image_8nqev
k>
```

完成。