

Xflash User Manual

Revision	Date	Description
V1.0	2016/07/01	Xflash run in windows
V2.0	2016/07/10	Add ubuntu environment

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2016/7/19

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1. Introduction

Xflash tool is designed to support flexible download methodology, the xflash tools can let your boards into fastboot mode, and then you can use fastboot script to download your normal images.

2. Prepare

2.1. OS

- ❖ Microsoft Windows(windows 7 eg.)
- ❖ Linux(Ubuntu eg.)

2.2. Tools

You need prepare 6 components(windows):

1. xflash.exe(win)/xflash(linux)
2. Normal load(Include image files and scatter file etc.)
3. Special images and scatter file(To load board into fastboot mode)
4. lib.cfg.xml
5. fastboot.exe(win)/fastboot command(linux)
6. fastboot command script file

3. Windows Download

3.1. Prepare

- ❖ xflash.exe
 \xflash\bin\win\xflash.exe
- ❖ Normal images and scatter file
 You can put it in anywhere, eg, \xflash\bin\win\img
- ❖ Special images and scatter file
 You can put it in anywhere, eg, \xflash\bin\win\FES.How to build it, pls see “How to build special images”
- ❖ lib.cfg.xml
 \xflash\bin\win\config
- ❖ fastboot.exe
 \xflash\bin\win, you shoud put it in normal load folder
- ❖ fastboot command script file
 Writen by your self, you should put it in normal load folder

 eg:fastboot command script file named xflash.bat

 fastboot devices
 fastboot flash gpt PGPT

 fastboot flash userdata userdata.img
 fastboot reboot

3.2. Download

3.2.1. Make a device to enter fastboot mode

- ❖ Prepare special images and corresponding scatter file.
- ❖ Run program in command line mode like this:(Link to Special Image)
xflash.exe enter-fastboot “G:\xflash\bin\win\FES\MT6797_Android_scatter.txt”

```
G:\xflash\bin\win>xflash.exe enter-fastboot "G:\xflash\bin\win\FES\MT6797_Android_scatter.txt"
```

```
START.  
wait for device.
```

- ❖ Then plug in USB cable to device without power adapter
- ❖ Plug in power adapter then
- ❖ Xflash will scan and open device COM port and connect it, download some necessary images to devices, then make device to enter fastboot mode.

```
connect boot rom.  
boot from preloader.  
download required partition images.  
#1 write to lk  
#2 write to logo  
#3 write to tee1  
jump to: tee1  
END.
```

3.2.2. Run fastboot command script file

- ❖ Enter the Normal Image folder
- ❖ You need write a download script.

Such as xflash.bat

```
fastboot devices  
fastboot flash gpt PGPT  
fastboot flash preloader preloader_amt6797_64_open.bin  
fastboot flash recovery recovery.img  
fastboot flash scp1 tinysys-scp.bin  
fastboot flash scp2 tinysys-scp.bin  
fastboot flash lk lk.bin  
fastboot flash lk2 lk.bin  
fastboot flash boot boot.img  
fastboot flash logo logo.bin  
fastboot flash tee1 trustzone.bin  
fastboot flash tee2 trustzone.bin  
fastboot flash system system.img  
fastboot flash cache cache.img  
fastboot flash userdata userdata.img  
fastboot reboot
```

- ❖ Run the download script, download success

4. Linux Download

4.1. Prepare

- ❖ xflash

\xflash\bin\linux\xflash

- ❖ Normal images and scatter file

You can put it in anywhere, eg, \xflash\bin\linux\img

- ❖ Special images and scatter file

You can put it in anywhere, eg, \xflash\bin\linux\FES.How to build it? pls see “How to build special images”

- ❖ lib.cfg.xml

\xflash\bin\linux\config

- ❖ fastboot

If your OS doesn't support fastboot command, pls install this command frist.

- ❖ fastboot command script file

Written by your self, you should put it in normal load folder

4.2. Download

4.2.1. Make a device to enter fastboot mode

- ❖ Prepare special images and corresponding scatter file.

- ❖ Run program in command line mode like this:

```
sudo ./xflash enter-fastboot "/**/xflash/bin/linux/FES/MT6797_Android_scatter.txt"
```

- ❖ Then plug in USB cable to device without power adapter

- ❖ Plug in power adapter then

- ❖ Xflash will scan and open device COM port and connect it, download some necessary images to devices, then make device to enter fastboot mode.

4.2.2. Run fastboot command script file

- ❖ Enter the Normal Image folder
- ❖ You need write a download script.

Such as xflash.sh

```
#!/bin/bash
```

```
fastboot devices
fastboot flash gpt PGPT
fastboot flash preloader preloader_amt6797_64_open.bin
fastboot flash recovery recovery.img
fastboot flash scp1 tinysys-scp.bin
fastboot flash scp2 tinysys-scp.bin
fastboot flash lk lk.bin
fastboot flash lk2 lk.bin
fastboot flash boot boot.img
fastboot flash logo logo.bin
fastboot flash tee1 trustzone.bin
fastboot flash tee2 trustzone.bin
fastboot flash system system.img
fastboot flash cache cache.img
fastboot flash userdata userdata.img
fastboot reboot
```

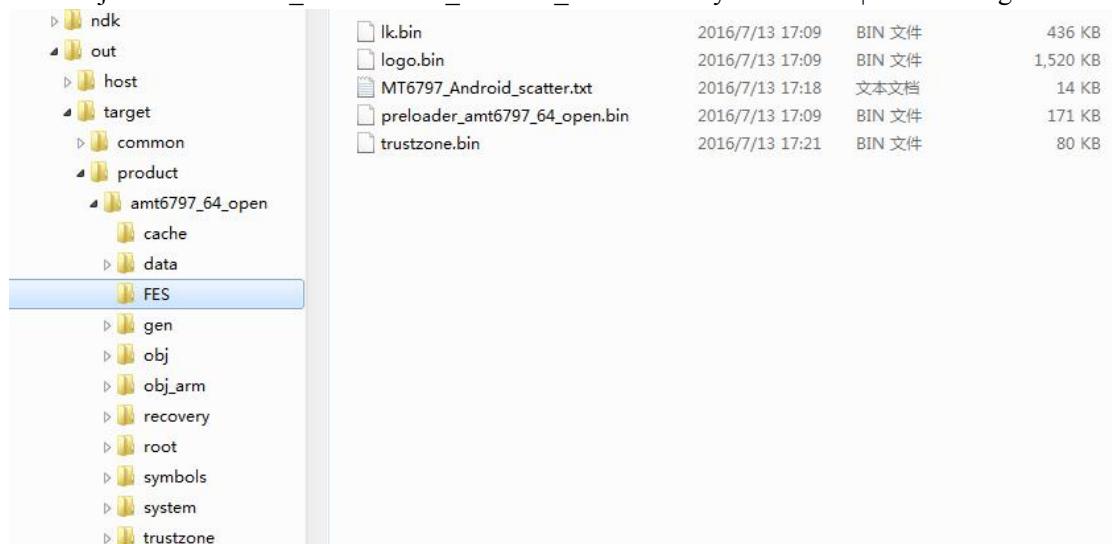
- ❖ Run the download script, download success

5. Appendix

5.1. How to build special images

Execute following commands, build system will automatically create FES folder and come out the special lk.bin, where FES store the needed files for xflash download to target before entering fastboot mode.

```
#source build/envsetup.sh  
#lunch full_amt6797_64_open-eng  
#make -j16 PLATFORM_FASTBOOT_EMPTY_STORAGE=yes -k 2>&1 | tee build.log
```



Then, you can find a folder named FES

PATH : \out\target\product\amt6797_64_open\FES

5.2. Q&A

- ❖ download partition error. code 0x10004 when run ubuntu xflash
sudo apt-get purge modemmanager