

Hikey960 UFS issues on kernel branch 4.9

2018年6月4日 1:47

Due to Google kernel <https://android.googlesource.com/kernel/hikey-linaro> , didn't synchronization with the kernel mainline on time, will missing some important patches, when developer checkout to the android-hikey-linaro-4.9 or flash the Linaro Hikey960 daily build firmware

<https://snapshots.linaro.org/96boards/hikey960/linaro/aosp-master/latest/> will get UFS error like log list below, although Hisilicon guys commits patches to google, but patches finally merged, maybe need some time, so Hoperun provides three ways(for three-type developer) to fix it, you can pick out the ideal way.

```
[ 35.977642] ufshcd-hi3660 ff3b0000.ufs: ufshcd_issue_tm_cmd: task management
cmd 0x08 timed-out
[ 35.986602] ufshcd-hi3660 ff3b0000.ufs: ufshcd_eh_device_reset_handler: failed
with err -110
[ 36.106284] ufshcd-hi3660 ff3b0000.ufs: dme-link-startup: error code 1
[ 36.288832] ufshcd-hi3660 ff3b0000.ufs: ufshcd_read_desc_param: Failed reading
descriptor. desc_id 0 param_offset 0 buff_len 31 ret 0
[ 36.301212] ufshcd-hi3660 ff3b0000.ufs: ufs_get_device_info: Failed reading Device
Desc. err = -22
[ 36.310420] ufshcd-hi3660 ff3b0000.ufs: ufs_advertise_fixup_device: Failed getting
device info. err = -22
[ 36.322185] ufs final power mode: gear = 3, lane = 2, pwr = 1, rate = 2
[ 36.328946] ufshcd-hi3660 ff3b0000.ufs: set TX_EQUALIZER 3.5db
[ 36.337630] ufshcd-hi3660 ff3b0000.ufs: check TX_EQUALIZER DB value lane0 = 0x1
[ 36.345114] ufshcd-hi3660 ff3b0000.ufs: check TX_EQUALIZER DB value lane1 = 0x1
[ 46.613656] ufshcd-hi3660 ff3b0000.ufs: ufshcd_task_req_compl: failed, ocs = 0xf
[ 46.621450] ufshcd-hi3660 ff3b0000.ufs: ufshcd_abort: failed with err 15
```

==

A

==

1. If you working on the 4.9 branch and compile Linux kernel by yourself, please cherry pick patches list below, and compile kernel

<https://android-review.googlesource.com/c/kernel/hikey-linaro/+691641>

<https://android-review.googlesource.com/c/kernel/hikey-linaro/+691767>

2. copy Image and dtb to Android and make bootimage following link
<https://source.android.com/setup/build/devices#hikey960> chapter "Building the kernel"
3. Flash boot.img

==

B

==

1. If you compile AOSP, don't compile Linux kernel, please download Hikey kernel images from link : <https://pan.baidu.com/s/1HkXSxbMnTPricXqgkuzxwg>
password : and2

2. copy hi3660-hikey960.dtb-4.9 and Image.gz-dtb-hikey960-4.9 to
android/device/linaro/hikey-kernel

3. make bootimage

4. Flash boot.img

==

C

==

1. If You focus on Android apps developing, please download hikey960 full images from link : <https://pan.baidu.com/s/1zxnsiLo2Yd8wOAvaR3J4fg> password : it46

2. Execute update_Hikey960.bat

BTW: flash process split to two stages, you need press enter key two times

1. When you see notice "Wait for device reboot", please waiting the board finish reboot to fastboot, and you see fastboot device on you computer, please press enter key.
2. When you see notice "Update Sucess", please press enter key, board will reboot to android.

```

C:\>

:start

@echo -----
@echo %date%-%time%
@echo "hikey960 updating:"

fastboot flash xloader hisi-sec_xloader.img
::    @if errorlevel 1 goto error

fastboot flash ptable hisi-ptable.img
      @if errorlevel 1 goto error

fastboot flash fastboot hisi-fastboot.img
      @if errorlevel 1 goto error

fastboot reboot-bootloader
@echo "wait for device reboot"
@pause

fastboot flash nvme hisi-nvme.img
      @if errorlevel 1 goto error

fastboot flash fw_lpm3 hisi-lpm3.img
      @if errorlevel 1 goto error

fastboot flash trustfirmware hisi-bl31.bin
      @if errorlevel 1 goto error

fastboot flash boot boot.img
      @if errorlevel 1 goto error

fastboot flash dts dt.img
      @if errorlevel 1 goto error

fastboot flash system system.img
      @if errorlevel 1 goto error

fastboot flash vendor vendor.img
      @if errorlevel 1 goto error

fastboot flash cache cache.img
      @if errorlevel 1 goto error

fastboot flash userdata userdata.img
      @if errorlevel 1 goto error

@goto sucess

:error
@echo "Update Failed!"
@pause
@goto end

:sucess
@echo "Update Sucess"
@pause
fastboot reboot
:end

```

方法A是针对有能力编译kernel的，方法B是针对编译AOSP的开发者，方法C是针对app的开发者，kernel和android都不编译的

hikey系列开发板

官方购买渠道：

京东：<https://mall.jd.com/index-744226.html>

淘宝：<https://smartfire.taobao.com/>