9008模式及分区提取、刷写

设备

文石 Boox Tab10C CPU: 高通骁龙662

准备

EDL工具: https://github.com/bkerler/edl.git

EDL Loader: https://github.com/bkerler/

qualcomm 662 使用 Loader: qualcomm/factory/sdm662/0014d0e100000000_d40eee56f3194665_FHPRG.bin

(window下Python依赖错误,需在MacOS 或Linux系统下配置并使用)

9008 工具及驱动: 9008工具加驱动.7z

USB驱动安装工具: USB驱动安装zadig-2.9.exe

Android ADB tools: platform-tools-latest-windows.zip

制作9008 USB数据线

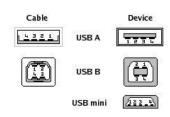
USB数据线(非快充线)制作9008 USB需岸边线 How To Make Qualcomm EDL Cable (9008 in COM 9008) Xiaomi, LG ETC

材料

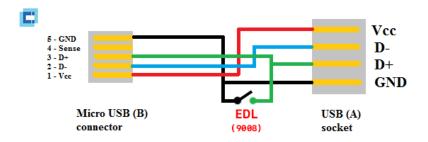
- Cable MicroUSB cable or USB-C (USB线)
- Single switch (开关,可选)
- Small knife to separate the cable casing (小刀,用于分离线芯)
- Screwdrivers to remove the switches, ...

Technical explanation:

The USB cable has 4 microfiber include: **VCC (+ 5V)**, **D**-, **D** + and **GND** - When the shutter (connector) 2 fibers **D** + and **GND** together and connected to the phone, the phone will automatically enter EDL mode (on PC COM port driver the studio 9008)



Pin	Signal	Color	Description
1	VCC		+5∨
2	D-		Data -
3	D+		Data +
4	GND		Ground



进入9008模式

开机状态进入 (正常开机或者卡900E)

USB数据线连接电脑

打开设备管理器,(900E模式时,端口(COM LPT) 可见设备连接,正常开机设备不显示)

短接USB数据线 黑线、绿线

长按电源键强制关机,电脑发出一下"dengdeng"声,设备与电脑备断开连接

松开短接,自动开机进入9008模式,端口(COM LPT) 可见设备连接

关机状态

USB数据线连接电脑

打开设备管理器, (900E模式时, 端口(COM LPT) 无显示)

短接USB数据线 黑线、绿线

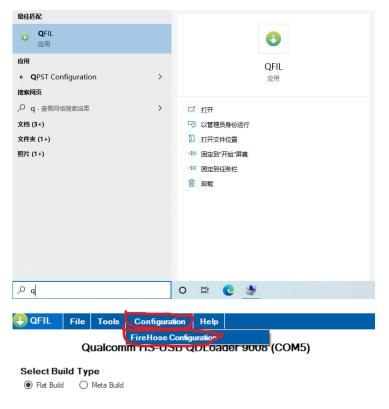
长按电源键后松开(10s以上)

松开短接,自动开机进入9008模式,端口(COM LPT) 可见设备连接

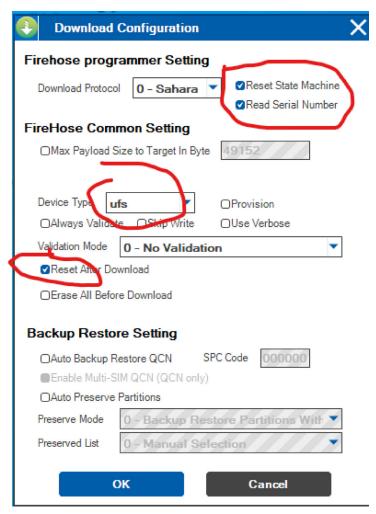
提取分区镜像

Windows

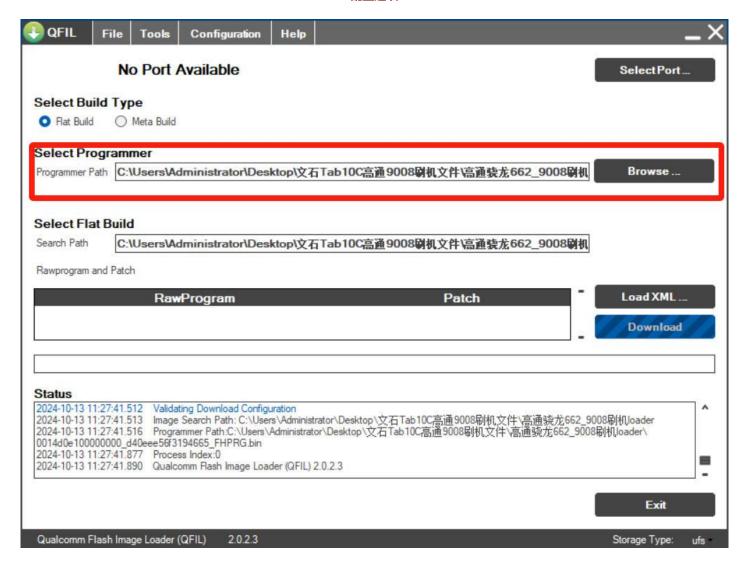
安装9008 工具及驱动, 打开QFIL软件



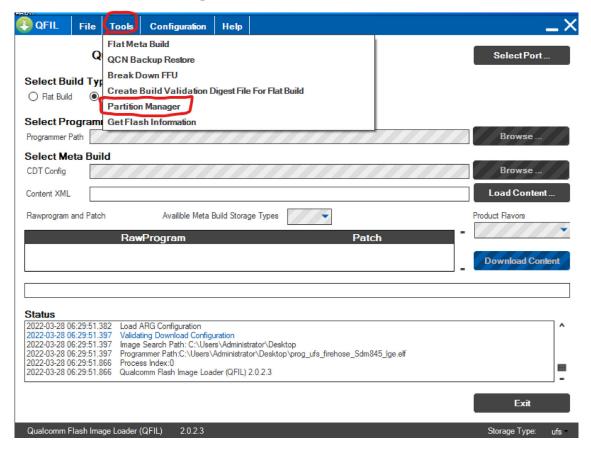
配置选项



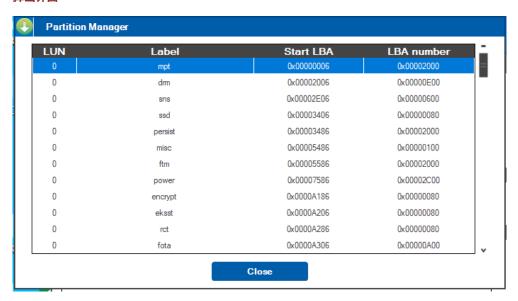
配置选项



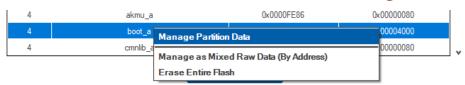
Tools - Partition Manager 打开分区管理



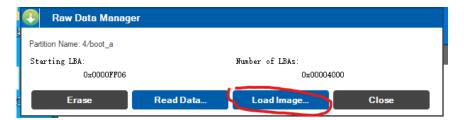
弹出界面



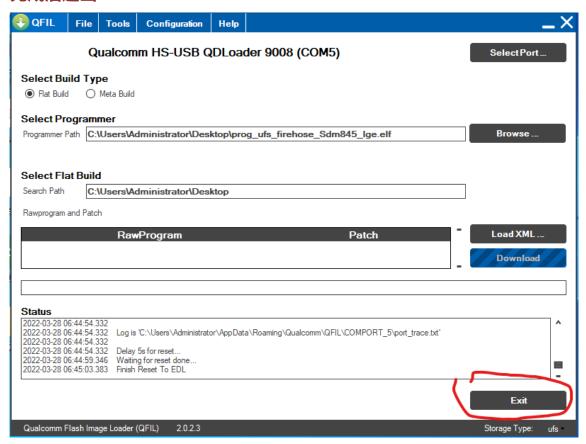
右键打开需要操作的分区,如boot_a,选择Manager Partition Data



Load Image 即刷入镜像,Read Data 即备份分区bin格式文件到本地(储存路径看status对应日志)



完成后退出



Linux/MacOS

配置EDL工具: https://github.com/bkerler/edl.git

Linux(Debian12测试)

```
git clone https://github.com/bkerler/edl.git
cd edl
git submodule update --init --recursive
chmod +x ./install-linux-edl-drivers.sh
bash ./install-linux-edl-drivers.sh
python3 setup.py build
sudo python3 setup.py install
```

MacOS

```
brew install libusb git

git clone https://github.com/bkerler/edl.git
cd edl
git submodule update --init --recursive
python3 setup.py build
sudo python3 setup.py install
```

EDL工具使用

查看分区情况并生成rawprogram[lun].xml分区表文件

```
$ edl --memory=ufs --loader=tab10c662.bin printgpt --genxml
```

```
$ edl --memory=ufs --loader=tab10c662.bin rl dumps --genxml --skip=userdata
Qualcomm Sahara / Firehose Client V3.62 (c) B.Kerler 2018-2024.
main - Using loader tab10c662.bin ...
main - Waiting for the device
main - Device detected :)
sahara - Protocol version: 2, Version supported: 1
main - Mode detected: sahara
sahara -
Version 0x2
                                 0x0014d0e100000000 (MSM_ID:0x0014d0e1,OEM_ID:0x0000,MODEL_ID:0x00000)
                                "SDM662"
PK HASH:
                                 0 \times d40 e e e 56 f 3194665574109 a 39267724 a e 7944134 c d53 c b 767 e 293 d3 c 40497955 b c 8 a 4519 f f 992 b 0 31 f a d c 6355 0 15 a c 876 b c 8 a 4519 f 692 b 0 31 f a d c 6355 0 15 a c 876 b c 8 a 4519 f 692 b 0 31 f a d c 6355 0 15 a c 876 b c 8 a 4519 f 692 b 0 31 f a d c 6355 0 15 a c 876 b c 8 a 4519 f 692 b 0 31 f a d c 6355 0 15 a c 876 b c 8 a 4519 f 692 b 0 31 f a d c 6355 0 15 a c 876 b c 8 a 4519 f 692 b 0 31 f a d c 6355 0 15 a c 876 b c 8 a 4519 f 692 b 0 31 f a d c 6355 0 15 a c 876 b c 8 a 4519 f 692 b 0 31 f a d c 6355 0 15 a c 876 b c 8 a 4519 f 692 b 0 31 f a d c 6355 0 15 a c 876 b c 8 a 4519 f 692 b 0 31 f a d c 6355 0 15 a c 876 b c 8 a 4519 f 692 b 0 31 f a d c 6355 0 15 a c 876 b c 8 a 4519 f 692 b 0 31 f a d c 6355 0 15 a c 876 b c 8 a 4519 f 692 b 0 31 f a d c 6355 0 15 a c 876 b c 8 a 4519 f 692 b 0 31 f a d c 6355 0 15 a c 876 b c 8 a 4519 f 692 b 0 31 f a d c 6355 0 15 a c 876 b c 8 a 4519 f 692 b c 8 a 4519 f 692
Serial:
                                 0xd688aefb
sahara - Protocol version: 2, Version supported: 1
sahara - Uploading loader tab10c662.bin ...
sahara - 64-Bit mode detected.
sahara - Firehose mode detected, uploading...
sahara - Loader successfully uploaded.
\mbox{{\it main}} - Trying to connect to firehose loader \dots
firehose - INFO: ufs: SAMSUNG
firehose - INFO: Binary build date: Dec 18 2022 @ 21:52:52
firehose - INFO: Binary build date: Dec 18 2022 @ 21:52:52
firehose - INFO: Chip serial num: 3599281915 (0xd688aefb)
firehose - INFO: Supported Functions (15):
firehose - INFO: program
firehose - INFO: read
firehose - INFO: nop
firehose - INFO: patch
firehose - INFO: configure
firehose - INFO: setbootablestoragedrive
firehose - INFO: erase
firehose - INFO: power
firehose - INFO: firmwarewrite
firehose - INFO: getstorageinfo
firehose - INFO: benchmark
firehose - INFO: emmc
firehose - INFO: ufs
firehose - INFO: fixgpt
firehose - INFO: getsha256digest
firehose - INFO: End of supported functions 15
firehose
firehose - [LIB]: Couldn't detect MaxPayloadSizeFromTargetinBytes
firehose
firehose - [LIB]: Couldn't detect TargetName
firehose - TargetName=Unknown
firehose - MemoryName=UFS
firehose - Version=1
firehose - Trying to read first storage sector...
firehose - Running configure...
firehose - Storage report:
firehose - total_blocks:30119936
firehose - block_size:4096
firehose - page_size:4096
firehose - num_physical:6
firehose - manufacturer_id:462
firehose - serial_num:1297306958
firehose - fw_version:700
firehose - mem_type:UFS
firehose - prod_name:KM5L9001DM-B424
firehose client - Supported functions:
program, read, nop, patch, configure, setbootablestoragedrive, erase, power, firmwarewrite, getstorageinfo, benchmark, emmc, ufs, fixgpt, gets
ha256digest
Wrote partition xml as rawprogram0.xml
firehose_client - Dumping partition ssd with sector count 2 as dumps/lun0/ssd.bin.
firehose -
Reading from physical partition 0, sector 6, sectors 2
Progress: | 100.0% Read (Sector 0x2 of 0x2, ) 5.23 MB/s
firehose_client - Dumped partition ssd with sector count 2 as dumps/lun0/ssd.bin.
```

```
firehose_client - Dumping partition persist with sector count 8192 as dumps/lun0/persist.bin.
firehose -
Reading from physical partition 0, sector 8, sectors 8192
Progress:
                | 100.0% Read (Sector 0x2000 of 0x2000, ) 33.85 MB/s
firehose_client - Dumped partition persist with sector count 8192 as dumps/lun0/persist.bin.
firehose_client - Dumping partition misc with sector count 256 as dumps/lun0/misc.bin.
firehose -
Reading from physical partition 0, sector 8200, sectors 256
               | 100.0% Read (Sector 0x100 of 0x100, ) 32.04 MB/s
firehose_client - Dumped partition misc with sector count 256 as dumps/lun0/misc.bin.
firehose_client - Dumping partition keystore with sector count 128 as dumps/lun0/keystore.bin.
Reading from physical partition 0, sector 8456, sectors 128
Progress: | 100.0% Read (Sector 0x80 of 0x80, ) 33.48 MB/s
firehose_client - Dumped partition keystore with sector count 128 as dumps/lun0/keystore.bin.
firehose_client - Dumping partition frp with sector count 128 as dumps/lun0/frp.bin.
firehose -
Reading from physical partition 0, sector 8584, sectors 128
Progress: | 100.0% Read (Sector 0x80 of 0x80, ) 39.28 MB/s
firehose_client - Dumped partition frp with sector count 128 as dumps/lun0/frp.bin.
firehose_client - Dumping partition super with sector count 1048576 as dumps/lun0/super.bin.
firehose -
Reading from physical partition 0, sector 8712, sectors 1048576
Progress: | 100.0% Read (Sector 0xFFE00 of 0x100000, ) 35.44 MB/s
Progress: | 100.0% Read (Sector 0xFFF00 of 0x100000, ) 38.68 MB/s
Progress: | 100.0% Read (Sector 0x100000 of 0x100000, ) 33.09 MB/s
firehose\_client - Dumped \ partition \ super \ with \ sector \ count \ 1048576 \ as \ dumps/lun0/super.bin.
firehose\_client - Dumping \ partition \ recovery\_a \ with \ sector \ count \ 24576 \ as \ dumps/lun0/recovery\_a.bin.
firehose -
Reading from physical partition 0, sector 1057288, sectors 24576
Progress: | 100.0% Read (Sector 0x6000 of 0x6000, ) 33.64 MB/s
firehose_client - Dumped partition recovery_a with sector count 24576 as dumps/lun0/recovery_a.bin.
firehose_client - Dumping partition recovery_b with sector count 24576 as dumps/lun0/recovery_b.bin.
firehose -
Reading from physical partition 0, sector 1081864, sectors 24576
Progress: | 100.0% Read (Sector 0x6000 of 0x6000, ) 33.32 MB/s
firehose_client - Dumped partition recovery_b with sector count 24576 as dumps/lun0/recovery_b.bin.
firehose_client - Dumping partition vbmeta_system_a with sector count 16 as dumps/lun0/vbmeta_system_a.bin.
firehose -
Reading from physical partition 0, sector 1106440, sectors 16
Progress: | 100.0% Read (Sector 0x10 of 0x10, ) 26.96 MB/s
firehose_client - Dumped partition vbmeta_system_a with sector count 16 as dumps/lun0/vbmeta_system_a.bin.
firehose_client - Dumping partition vbmeta_system_b with sector count 16 as dumps/lun0/vbmeta_system_b.bin.
Reading from physical partition 0, sector 1106456, sectors 16
Progress: |
                 | 100.0% Read (Sector 0x10 of 0x10, ) 27.93 MB/s
firehose\_client - Dumped \ partition \ vbmeta\_system\_b \ with \ sector \ count \ 16 \ as \ dumps/lun0/vbmeta\_system\_b.bin.
firehose_client - Dumping partition metadata with sector count 4096 as dumps/lun0/metadata.bin.
firehose
Reading from physical partition 0, sector 1106472, sectors 4096
                | 100.0% Read (Sector 0x1000 of 0x1000, ) 33.35 MB/s
firehose_client - Dumped partition metadata with sector count 4096 as dumps/lun0/metadata.bin.
firehose\_client - Dumping \ partition \ onyxconfig \ with \ sector \ count \ 6144 \ as \ dumps/lun0/onyxconfig.bin.
firehose -
Reading from physical partition 0, sector 1110568, sectors 6144
                 | 100.0% Read (Sector 0x1800 of 0x1800, ) 32.86 MB/s
firehose\_client - Dumped partition on yxconfig with sector count 6144 as dumps/lun0/on yxconfig.bin.
Wrote partition xml as rawprogram1.xml
firehose_client - Dumping partition xbl_a with sector count 896 as dumps/lun1/xbl_a.bin.
firehose -
Reading from physical partition 1, sector 6, sectors 896
                | 100.0% Read (Sector 0x380 of 0x380, ) 35.29 MB/s
Progress:
firehose\_client - Dumped \ partition \ xbl\_a \ with \ sector \ count \ 896 \ as \ dumps/lun1/xbl\_a.bin.
firehose_client - Dumping partition xbl_config_a with sector count 32 as dumps/lun1/xbl_config_a.bin.
firehose -
Reading from physical partition 1, sector 902, sectors 32
                | 100.0% Read (Sector 0x20 of 0x20, ) 32.57 MB/s
Progress: |
firehose\_client - Dumped \ partition \ xbl\_config\_a \ with \ sector \ count \ 32 \ as \ dumps/lun1/xbl\_config\_a.bin.
Wrote partition xml as rawprogram2.xml
firehose_client - Dumping partition xbl_b with sector count 896 as dumps/lun2/xbl_b.bin.
firehose -
```

```
Reading from physical partition 2, sector 6, sectors 896
                 | 100.0% Read (Sector 0x380 of 0x380, ) 35.33 MB/s
firehose\_client - Dumped \ partition \ xbl\_b \ with \ sector \ count \ 896 \ as \ dumps/lun2/xbl\_b.bin.
firehose_client - Dumping partition xbl_config_b with sector count 32 as dumps/lun2/xbl_config_b.bin.
firehose -
Reading from physical partition 2, sector 902, sectors 32
Progress:
                 | 100.0% Read (Sector 0x20 of 0x20, ) 32.82 MB/s
firehose_client - Dumped partition xbl_config_b with sector count 32 as dumps/lun2/xbl_config_b.bin.
Wrote partition xml as rawprogram3.xml
firehose_client - Dumping partition ALIGN_TO_128K_1 with sector count 26 as dumps/lun3/ALIGN_TO_128K_1.bin.
Reading from physical partition 3, sector 6, sectors 26
Progress: | 100.0% Read (Sector 0x1A of 0x1A, ) 30.41 MB/s
firehose_client - Dumped partition ALIGN_TO_128K_1 with sector count 26 as dumps/lun3/ALIGN_TO_128K_1.bin.
firehose_client - Dumping partition cdt with sector count 32 as dumps/lun3/cdt.bin.
firehose -
Reading from physical partition 3, sector 32, sectors 32
Progress: | 100.0% Read (Sector 0x20 of 0x20, ) 32.04 MB/s
firehose_client - Dumped partition cdt with sector count 32 as dumps/lun3/cdt.bin.
firehose_client - Dumping partition ddr with sector count 256 as dumps/lun3/ddr.bin.
firehose -
Reading from physical partition 3, sector 64, sectors 256
Progress: | 100.0% Read (Sector 0x100 of 0x100, ) 36.35 MB/s
firehose_client - Dumped partition ddr with sector count 256 as dumps/lun3/ddr.bin.
Wrote partition xml as rawprogram4.xml
firehose_client - Dumping partition rpm_a with sector count 128 as dumps/lun4/rpm_a.bin.
firehose -
Reading from physical partition 4, sector 6, sectors 128
Progress: | 100.0% Read (Sector 0x80 of 0x80, ) 34.99 MB/s
firehose_client - Dumped partition rpm_a with sector count 128 as dumps/lun4/rpm_a.bin.
 firehose\_client - Dumping \ partition \ tz\_a \ with \ sector \ count \ 1024 \ as \ dumps/lun4/tz\_a.bin. 
firehose -
Reading from physical partition 4, sector 134, sectors 1024
                | 100.0% Read (Sector 0x400 of 0x400, ) 33.39 MB/s
Progress:
firehose_client - Dumped partition tz_a with sector count 1024 as dumps/lun4/tz a.bin.
firehose_client - Dumping partition hyp_a with sector count 128 as dumps/lun4/hyp_a.bin.
firehose -
Reading from physical partition 4, sector 1158, sectors 128
Progress: | 100.0% Read (Sector 0x80 of 0x80, ) 35.69 MB/s
firehose_client - Dumped partition hyp_a with sector count 128 as dumps/lun4/hyp_a.bin.
firehose_client - Dumping partition modem_a with sector count 46080 as dumps/lun4/modem_a.bin.
firehose -
Reading from physical partition 4, sector 1286, sectors 46080
Progress:
                 | 100.0% Read (Sector 0xB400 of 0xB400, ) 33.73 MB/s
firehose_client - Dumped partition modem_a with sector count 46080 as dumps/lun4/modem_a.bin.
firehose_client - Dumping partition bluetooth_a with sector count 256 as dumps/lun4/bluetooth_a.bin.
firehose ·
Reading from physical partition 4, sector 47366, sectors 256
Progress:
                 | 100.0% Read (Sector 0x100 of 0x100, ) 33.70 MB/s
firehose_client - Dumped partition bluetooth_a with sector count 256 as dumps/lun4/bluetooth_a.bin.
firehose_client - Dumping partition mdtpsecapp_a with sector count 1024 as dumps/lun4/mdtpsecapp_a.bin.
firehose ·
Reading from physical partition 4, sector 47622, sectors 1024
                 | 100.0% Read (Sector 0x400 of 0x400, ) 33.90 MB/s
firehose_client - Dumped partition mdtpsecapp_a with sector count 1024 as dumps/lun4/mdtpsecapp_a.bin.
firehose_client - Dumping partition mdtp_a with sector count 8192 as dumps/lun4/mdtp_a.bin.
firehose -
Reading from physical partition 4, sector 48646, sectors 8192
                | 100.0% Read (Sector 0x2000 of 0x2000, ) 33.32 MB/s
firehose\_client - Dumped partition \ mdtp\_a \ with sector \ count \ 8192 \ as \ dumps/lun4/mdtp\_a.bin.
firehose_client - Dumping partition abl_a with sector count 256 as dumps/lun4/abl_a.bin.
firehose -
Reading from physical partition 4, sector 56838, sectors 256
                  | 100.0% Read (Sector 0x100 of 0x100, ) 34.20 MB/s
firehose_client - Dumped partition abl_a with sector count 256 as dumps/lun4/abl_a.bin.
firehose_client - Dumping partition dsp_a with sector count 8192 as dumps/lun4/dsp_a.bin.
firehose -
Reading from physical partition 4, sector 57094, sectors 8192
               | 100.0% Read (Sector 0x2000 of 0x2000, ) 33.37 MB/s
Progress:
firehose client - Dumped partition dsp a with sector count 8192 as dumps/lun4/dsp a.bin.
firehose_client - Dumping partition keymaster_a with sector count 128 as dumps/lun4/keymaster_a.bin.
```

```
firehose -
Reading from physical partition 4, sector 65286, sectors 128
Progress:
               | 100.0% Read (Sector 0x80 of 0x80, ) 35.75 MB/s
firehose_client - Dumped partition keymaster_a.bin.
firehose_client - Dumping partition boot_a with sector count 24576 as dumps/lun4/boot_a.bin.
firehose -
Reading from physical partition 4, sector 65414, sectors 24576
Progress:
                 | 100.0% Read (Sector 0x6000 of 0x6000, ) 33.21 MB/s
firehose_client - Dumped partition boot_a with sector count 24576 as dumps/lun4/boot_a.bin.
firehose_client - Dumping partition cmnlib_a with sector count 128 as dumps/lun4/cmnlib_a.bin.
Reading from physical partition 4, sector 89990, sectors 128
Progress: | 100.0% Read (Sector 0x80 of 0x80, ) 35.79 MB/s
firehose_client - Dumped partition cmnlib_a with sector count 128 as dumps/lun4/cmnlib_a.bin.
firehose_client - Dumping partition cmnlib64_a with sector count 128 as dumps/lun4/cmnlib64_a.bin.
firehose -
Reading from physical partition 4, sector 90118, sectors 128
Progress: | 100.0% Read (Sector 0x80 of 0x80, ) 40.35 MB/s
firehose_client - Dumped partition cmnlib64_a with sector count 128 as dumps/lun4/cmnlib64_a.bin.
firehose_client - Dumping partition devcfg_a with sector count 32 as dumps/lun4/devcfg_a.bin.
firehose -
Reading from physical partition 4, sector 90246, sectors 32
Progress: | 100.0% Read (Sector 0x20 of 0x20, ) 31.63 MB/s
firehose_client - Dumped partition devcfg_a with sector count 32 as dumps/lun4/devcfg_a.bin.
firehose_client - Dumping partition qupfw_a with sector count 16 as dumps/lun4/qupfw_a.bin.
firehose -
Reading from physical partition 4, sector 90278, sectors 16
Progress: | 100.0% Read (Sector 0x10 of 0x10, ) 25.26 MB/s
firehose_client - Dumped partition qupfw_a with sector count 16 as dumps/lun4/qupfw_a.bin.
firehose_client - Dumping partition vbmeta_a with sector count 16 as dumps/lun4/vbmeta_a.bin.
firehose -
Reading from physical partition 4, sector 90294, sectors 16
Progress: | 100.0% Read (Sector 0x10 of 0x10, ) 26.45 MB/s
firehose_client - Dumped partition vbmeta_a with sector count 16 as dumps/lun4/vbmeta a.bin.
firehose_client - Dumping partition dtbo_a with sector count 6144 as dumps/lun4/dtbo_a.bin.
firehose -
Reading from physical partition 4, sector 90310, sectors 6144
Progress: | 100.0% Read (Sector 0x1800 of 0x1800, ) 33.78 MB/s
firehose client - Dumped partition dtbo a with sector count 6144 as dumps/lun4/dtbo a.bin.
firehose_client - Dumping partition imagefv_a with sector count 512 as dumps/lun4/imagefv_a.bin.
firehose -
Reading from physical partition 4, sector 96454, sectors 512
Progress:
                | 100.0% Read (Sector 0x200 of 0x200, ) 35.15 MB/s
firehose_client - Dumped partition imagefv_a with sector count 512 as dumps/lun4/imagefv_a.bin.
firehose_client - Dumping partition uefisecapp_a with sector count 512 as dumps/lun4/uefisecapp_a.bin.
firehose -
Reading from physical partition 4, sector 96966, sectors 512
Progress:
                 | 100.0% Read (Sector 0x200 of 0x200, ) 35.42 MB/s
firehose_client - Dumped partition uefisecapp_a with sector count 512 as dumps/lun4/uefisecapp_a.bin.
firehose_client - Dumping partition featenabler_a with sector count 32 as dumps/lun4/featenabler_a.bin.
firehose -
Reading from physical partition 4, sector 97478, sectors 32
                | 100.0% Read (Sector 0x20 of 0x20, ) 32.24 MB/s
firehose_client - Dumped partition featenabler_a with sector count 32 as dumps/lun4/featenabler_a.bin.
firehose_client - Dumping partition rpm_b with sector count 128 as dumps/lun4/rpm_b.bin.
firehose -
Reading from physical partition 4, sector 97510, sectors 128
                | 100.0% Read (Sector 0x80 of 0x80, ) 35.64 MB/s
Progress:
\label{lem:continuous} \mbox{firehose\_client - Dumped partition rpm\_b with sector count 128 as $\mbox{dumps/lun4/rpm\_b.bin.}$}
\label{eq:client-def} \mbox{firehose\_client - Dumping partition } \mbox{tz\_b with sector count 1024 as dumps/lun4/tz\_b.bin.}
firehose -
Reading from physical partition 4, sector 97638, sectors 1024
                 | 100.0% Read (Sector 0x400 of 0x400, ) 33.43 MB/s
firehose\_client - Dumped \ partition \ tz\_b \ with \ sector \ count \ 1024 \ as \ dumps/lun4/tz\_b.bin.
firehose_client - Dumping partition hyp_b with sector count 128 as dumps/lun4/hyp_b.bin.
firehose -
Reading from physical partition 4, sector 98662, sectors 128
               | 100.0% Read (Sector 0x80 of 0x80, ) 35.54 MB/s
Progress:
firehose_client - Dumped partition hyp_b with sector count 128 as dumps/lun4/hyp_b.bin.
firehose_client - Dumping partition modem_b with sector count 46080 as dumps/lun4/modem_b.bin.
firehose -
```

```
Reading from physical partition 4, sector 98790, sectors 46080
                  100.0% Read (Sector 0xB400 of 0xB400, ) 33.33 MB/s
firehose client - Dumped partition modem b with sector count 46080 as dumps/lun4/modem b.bin.
firehose_client - Dumping partition bluetooth_b with sector count 256 as dumps/lun4/bluetooth_b.bin.
firehose -
Reading from physical partition 4, sector 144870, sectors 256
Progress:
                 | 100.0% Read (Sector 0x100 of 0x100, ) 33.22 MB/s
firehose_client - Dumped partition bluetooth_b with sector count 256 as dumps/lun4/bluetooth_b.bin.
firehose_client - Dumping partition mdtpsecapp_b with sector count 1024 as dumps/lun4/mdtpsecapp_b.bin.
Reading from physical partition 4, sector 145126, sectors 1024
Progress: | 100.0% Read (Sector 0x400 of 0x400, ) 33.46 MB/s
firehose_client - Dumped partition mdtpsecapp_b with sector count 1024 as dumps/lun4/mdtpsecapp_b.bin.
firehose_client - Dumping partition mdtp_b with sector count 8192 as dumps/lun4/mdtp_b.bin.
firehose -
Reading from physical partition 4, sector 146150, sectors 8192
Progress: | 100.0% Read (Sector 0x2000 of 0x2000, ) 32.06 MB/s
firehose client - Dumped partition mdtp b with sector count 8192 as dumps/lun4/mdtp b.bin.
firehose_client - Dumping partition abl_b with sector count 256 as dumps/lun4/abl_b.bin.
firehose -
Reading from physical partition 4, sector 154342, sectors 256
Progress: | 100.0% Read (Sector 0x100 of 0x100, ) 33.94 MB/s
firehose_client - Dumped partition abl_b with sector count 256 as dumps/lun4/abl_b.bin.
firehose_client - Dumping partition dsp_b with sector count 8192 as dumps/lun4/dsp_b.bin.
firehose -
Reading from physical partition 4, sector 154598, sectors 8192
Progress: | 100.0% Read (Sector 0x2000 of 0x2000, ) 33.43 MB/s
firehose\_client - Dumped \ partition \ dsp\_b \ with \ sector \ count \ 8192 \ as \ dumps/lun4/dsp\_b.bin.
firehose_client - Dumping partition keymaster_b with sector count 128 as dumps/lun4/keymaster_b.bin.
firehose -
Reading from physical partition 4, sector 162790, sectors 128
                | 100.0% Read (Sector 0x80 of 0x80, ) 35.73 MB/s
Progress:
firehose\_client - Dumped \ partition \ keymaster\_b \ with \ sector \ count \ 128 \ as \ dumps/lun4/keymaster\_b.bin.
firehose_client - Dumping partition boot_b with sector count 24576 as dumps/lun4/boot_b.bin.
firehose -
Reading from physical partition 4, sector 162918, sectors 24576
Progress: | 100.0% Read (Sector 0x6000 of 0x6000, ) 33.14 MB/s
firehose client - Dumped partition boot b with sector count 24576 as dumps/lun4/boot b.bin.
firehose_client - Dumping partition cmnlib_b with sector count 128 as dumps/lun4/cmnlib_b.bin.
firehose -
Reading from physical partition 4, sector 187494, sectors 128
                 100.0% Read (Sector 0x80 of 0x80, ) 35.61 MB/s
Progress:
firehose_client - Dumped partition cmnlib_b with sector count 128 as dumps/lun4/cmnlib_b.bin.
firehose_client - Dumping partition cmnlib64_b with sector count 128 as dumps/lun4/cmnlib64_b.bin.
firehose -
Reading from physical partition 4, sector 187622, sectors 128
Progress: | 100.0% Read (Sector 0x80 of 0x80, ) 39.89 MB/s
firehose_client - Dumped partition cmnlib64_b with sector count 128 as dumps/lun4/cmnlib64_b.bin.
firehose_client - Dumping partition devcfg_b with sector count 32 as dumps/lun4/devcfg_b.bin.
firehose
Reading from physical partition 4, sector 187750, sectors 32
                 | 100.0% Read (Sector 0x20 of 0x20, ) 32.26 MB/s
firehose\_client - Dumped partition \ devcfg\_b \ with \ sector \ count \ 32 \ as \ dumps/lun4/devcfg\_b.bin.
firehose\_client - Dumping \ partition \ qupfw\_b \ with \ sector \ count \ 16 \ as \ dumps/lun4/qupfw\_b.bin.
firehose -
Reading from physical partition 4, sector 187782, sectors 16
                | 100.0% Read (Sector 0x10 of 0x10, ) 25.35 MB/s
firehose\_client - Dumped partition \ qupfw\_b \ with \ sector \ count \ 16 \ as \ dumps/lun4/qupfw\_b.bin.
firehose_client - Dumping partition vbmeta_b with sector count 16 as dumps/lun4/vbmeta_b.bin.
firehose -
Reading from physical partition 4, sector 187798, sectors 16
                 | 100.0% Read (Sector 0x10 of 0x10, ) 25.25 MB/s
Progress:
firehose\_client - Dumped \ partition \ vbmeta\_b \ with \ sector \ count \ 16 \ as \ dumps/lun4/vbmeta\_b.bin.
firehose\_client - Dumping \ partition \ dtbo\_b \ with \ sector \ count \ 6144 \ as \ dumps/lun4/dtbo\_b.bin.
firehose -
Reading from physical partition 4, sector 187814, sectors 6144
                | 100.0% Read (Sector 0x1800 of 0x1800, ) 33.66 MB/s
firehose\_client - Dumped \ partition \ dtbo\_b \ with \ sector \ count \ 6144 \ as \ dumps/lun4/dtbo\_b.bin.
firehose_client - Dumping partition featenabler_b with sector count 32 as dumps/lun4/featenabler_b.bin.
firehose -
Reading from physical partition 4, sector 193958, sectors 32
```

```
Progress: | 100.0% Read (Sector 0x20 of 0x20, ) 32.10 MB/s
firehose\_client - Dumped \ partition \ featenabler\_b \ with \ sector \ count \ 32 \ as \ dumps/lun4/featenabler\_b.bin.
firehose_client - Dumping partition imagefv_b with sector count 512 as dumps/lun4/imagefv_b.bin.
firehose -
Reading from physical partition 4, sector 193990, sectors 512
Progress:
                 | 100.0% Read (Sector 0x200 of 0x200, ) 37.44 MB/s
firehose_client - Dumped partition imagefv_b with sector count 512 as dumps/lun4/imagefv_b.bin.
firehose_client - Dumping partition uefisecapp_b with sector count 512 as dumps/lun4/uefisecapp_b.bin.
Reading from physical partition 4, sector 194502, sectors 512
Progress: | 100.0% Read (Sector 0x200 of 0x200, ) 37.97 MB/s
firehose_client - Dumped partition uefisecapp_b with sector count 512 as dumps/lun4/uefisecapp_b.bin.
firehose_client - Dumping partition devinfo with sector count 1 as dumps/lun4/devinfo.bin.
firehose -
Reading from physical partition 4, sector 195014, sectors 1
Progress: | 100.0% Read (Sector 0x1 of 0x1, ) 3.36 MB/s
firehose client - Dumped partition devinfo with sector count 1 as dumps/lun4/devinfo.bin.
firehose_client - Dumping partition dip with sector count 256 as dumps/lun4/dip.bin.
firehose -
Reading from physical partition 4, sector 195015, sectors 256
Progress: | 100.0% Read (Sector 0x100 of 0x100, ) 33.95 MB/s
firehose_client - Dumped partition dip with sector count 256 as dumps/lun4/dip.bin.
firehose_client - Dumping partition apdp with sector count 64 as dumps/lun4/apdp.bin.
firehose -
Reading from physical partition 4, sector 195271, sectors 64
Progress: | 100.0% Read (Sector 0x40 of 0x40, ) 35.74 MB/s
firehose_client - Dumped partition apdp with sector count 64 as dumps/lun4/apdp.bin.
firehose\_client - Dumping \ partition \ spunvm \ with \ sector \ count \ 2048 \ as \ dumps/lun4/spunvm.bin.
firehose -
Reading from physical partition 4, sector 195335, sectors 2048
Progress: | 100.0% Read (Sector 0x800 of 0x800, ) 32.89 MB/s
firehose_client - Dumped partition spunvm with sector count 2048 as dumps/lun4/spunvm.bin.
firehose_client - Dumping partition splash with sector count 8356 as dumps/lun4/splash.bin.
firehose -
Reading from physical partition 4, sector 197383, sectors 8356
Progress: | 100.0% Read (Sector 0x20A4 of 0x20A4, ) 38.09 MB/s
firehose_client - Dumped partition splash with sector count 8356 as dumps/lun4/splash.bin.
firehose_client - Dumping partition limits with sector count 1 as dumps/lun4/limits.bin.
firehose -
Reading from physical partition 4, sector 205739, sectors 1
Progress: | 100.0% Read (Sector 0x1 of 0x1, ) 4.11 MB/s
firehose_client - Dumped partition limits with sector count 1 as dumps/lun4/limits.bin.
firehose_client - Dumping partition toolsfv with sector count 256 as dumps/lun4/toolsfv.bin.
firehose -
Reading from physical partition 4, sector 205740, sectors 256
Progress:
                 | 100.0% Read (Sector 0x100 of 0x100, ) 38.11 MB/s
firehose_client - Dumped partition toolsfv with sector count 256 as dumps/lun4/toolsfv.bin.
firehose_client - Dumping partition logfs with sector count 2048 as dumps/lun4/logfs.bin.
firehose
Reading from physical partition 4, sector 205996, sectors 2048
                | 100.0% Read (Sector 0x800 of 0x800, ) 33.35 MB/s
firehose_client - Dumped partition logfs with sector count 2048 as dumps/lun4/logfs.bin.
firehose_client - Dumping partition cateloader with sector count 512 as dumps/lun4/cateloader.bin.
firehose -
Reading from physical partition 4, sector 208044, sectors 512
                 | 100.0% Read (Sector 0x200 of 0x200, ) 35.56 MB/s
firehose_client - Dumped partition cateloader with sector count 512 as dumps/lun4/cateloader.bin.
firehose_client - Dumping partition rawdump with sector count 32768 as dumps/lun4/rawdump.bin.
firehose -
Reading from physical partition 4, sector 208556, sectors 32768
               | 100.0% Read (Sector 0x8000 of 0x8000, ) 33.74 MB/s
firehose_client - Dumped partition rawdump with sector count 32768 as dumps/lun4/rawdump.bin.
firehose_client - Dumping partition logdump with sector count 16384 as dumps/lun4/logdump.bin.
firehose -
Reading from physical partition 4, sector 241324, sectors 16384
                | 100.0% Read (Sector 0x4000 of 0x4000, ) 33.42 MB/s
firehose\_client - Dumped \ partition \ logdump \ with \ sector \ count \ 16384 \ as \ dumps/lun4/logdump.bin.
firehose_client - Dumping partition storsec with sector count 32 as dumps/lun4/storsec.bin.
firehose -
Reading from physical partition 4, sector 257708, sectors 32
               | 100.0% Read (Sector 0x20 of 0x20, ) 31.34 MB/s
Progress:
```

```
firehose client - Dumped partition storsec with sector count 32 as dumps/lun4/storsec.bin.
firehose_client - Dumping partition multiimgoem with sector count 8 as dumps/lun4/multiimgoem.bin.
firehose -
Reading from physical partition 4, sector 257740, sectors 8
Progress:
               100.0% Read (Sector 0x8 of 0x8, ) 18.36 MB/s
firehose_client - Dumped partition multiimgoem with sector count 8 as dumps/lun4/multiimgoem.bin.
firehose_client - Dumping partition multiimgqti with sector count 8 as dumps/lun4/multiimgqti.bin.
Reading from physical partition 4, sector 257748, sectors 8
Progress:
              | 100.0% Read (Sector 0x8 of 0x8, ) 17.84 MB/s
firehose_client - Dumped partition multiimgqti with sector count 8 as dumps/lun4/multiimgqti.bin.
firehose_client - Dumping partition uefivarstore with sector count 128 as dumps/lun4/uefivarstore.bin.
Reading from physical partition 4, sector 257756, sectors 128
Progress: | 100.0% Read (Sector 0x80 of 0x80, ) 35.67 MB/s
firehose client - Dumped partition uefivarstore with sector count 128 as dumps/lun4/uefivarstore.bin.
firehose_client - Dumping partition secdata with sector count 7 as dumps/lun4/secdata.bin.
firehose -
Reading from physical partition 4, sector 257884, sectors 7
Progress: | 100.0% Read (Sector 0x7 of 0x7, ) 16.60 MB/s
firehose_client - Dumped partition secdata with sector count 7 as dumps/lun4/secdata.bin.
firehose_client - Dumping partition catefv with sector count 128 as dumps/lun4/catefv.bin.
firehose -
Reading from physical partition 4, sector 257891, sectors 128
Progress: | 100.0% Read (Sector 0x80 of 0x80, ) 40.31 MB/s
firehose_client - Dumped partition catefv with sector count 128 as dumps/lun4/catefv.bin.
firehose\_client - Dumping \ partition \ catecontent fv. bin.
firehose -
Reading from physical partition 4, sector 258019, sectors 256
Progress: | 100.0% Read (Sector 0x100 of 0x100, ) 35.95 MB/s
firehose_client - Dumped partition catecontentfv with sector count 256 as dumps/lun4/catecontentfv.bin.
Wrote partition xml as rawprogram5.xml
firehose_client - Dumping partition ALIGN_TO_128K_2 with sector count 26 as dumps/lun5/ALIGN_TO_128K_2.bin.
firehose -
Reading from physical partition 5, sector 6, sectors 26
Progress:
                | 100.0% Read (Sector 0x1A of 0x1A, ) 31.16 MB/s
firehose_client - Dumped partition ALIGN_TO_128K_2 with sector count 26 as dumps/lun5/ALIGN_TO_128K_2.bin.
firehose_client - Dumping partition modemst1 with sector count 512 as dumps/lun5/modemst1.bin.
firehose -
Reading from physical partition 5, sector 32, sectors 512
Progress: | 100.0% Read (Sector 0x200 of 0x200, ) 35.71 MB/s
firehose_client - Dumped partition modemst1 with sector count 512 as dumps/lun5/modemst1.bin.
firehose_client - Dumping partition modemst2 with sector count 512 as dumps/lun5/modemst2.bin.
firehose -
Reading from physical partition 5, sector 544, sectors 512
Progress:
                | 100.0% Read (Sector 0x200 of 0x200, ) 36.28 MB/s
firehose_client - Dumped partition modemst2 with sector count 512 as dumps/lun5/modemst2.bin.
firehose_client - Dumping partition fsg with sector count 512 as dumps/lun5/fsg.bin.
firehose
Reading from physical partition 5, sector 1056, sectors 512
                | 100.0% Read (Sector 0x200 of 0x200, ) 36.54 MB/s
firehose_client - Dumped partition fsg with sector count 512 as dumps/lun5/fsg.bin.
firehose_client - Dumping partition fsc with sector count 32 as dumps/lun5/fsc.bin.
firehose -
Reading from physical partition 5, sector 1568, sectors 32
                | 100.0% Read (Sector 0x20 of 0x20, ) 32.97 MB/s
Progress:
firehose_client - Dumped partition fsc with sector count 32 as dumps/lun5/fsc.bin.
wenzhi@Debian:~/Desktop/edl$
```

参考链接

- 1. https://pppp.ink/blogs/11-wen-shi-boox-leaf-root-xiu-gai-zi-ti.html
- 2. https://qiedd.com/1614.html
- 3. https://developer.android.com/tools/releases/platform-tools?hl=zh-cn
- 4. https://github.com/bkerler/edl.git
- 5. https://forum.gsmnigeria.com/threads/guides-how-to-make-gualcomm-edl-cable-9008-in-com-9008-xiaomi-lg-etc.1955/
- 6. https://romprovider.com/make-qualcomm-9008-edl-cable-type-c-devices/
- 7. https://www.mobileread.com/forums/showthread.php?t=361279
- 8. https://www.mobileread.com/forums/showthread.php?t=355147&highlight=edl