

Test Decoder Card

Oct 2018

Introduction

When testing the MFCP decode, it is possible that the decoder card may have failed, and that the MFCP has dropped to SW decoding. In 4K this may not be obvious if you are decoding some very simple content.

There are however a couple of tests that can be made to ensure that the decoder card is working (as much as we can tell).

Is the Decoder Card detected by the Driver?

Each time the MFCP is started, the driver communicates with the decoder card, we can see if the decoder was detected by looking for the driver in CentOS.

Run the command:

```
ls /dev
```

Among the listed files/folders you should see the following:

```
decoder0
```

```
sdi0
```

```
[mfeng@env-4e-963665 ~]$ ls /dev
autofs          hpet            mqueue
block           hugepages       mtd0
bsg             hwrng           mtd0ro
btrfs-control   i2c-0           mtd1
bus             i2c-1           mtd1ro
char           i2c-2           mtd2
console         i2c-3           mtd2ro
core            i2c-4           mtd3
cpu             i2c-5           mtd3ro
cpu_dma_latency i2c-6           mtd4
crash           i2c-7           mtd4ro
decoder0        i2c-8           mtd5
dell-wmi        i2c-9           mtd5ro
disk            icap0           net
dm-0            initctl         network_latency
dm-1            input           network_throughput
dm-2            intfpgactl0     null
dmachan0        kmsg            nvram
dri             kms             oldmem
drm_dp_aux0     loop-control    port
fb0             mapper          ppp
fd              mcelog          pps0
full            mei0            pps1
fuse            mem             ptmx
[mfeng@env-4e-963665 ~]$
```

```
ptp0      tty12  tty34  tty56  vcs2      xdma0_events_11
ptp1      tty13  tty35  tty57  vcs3      xdma0_events_12
pts       tty14  tty36  tty58  vcs4      xdma0_events_13
random    tty15  tty37  tty59  vcs5      xdma0_events_14
raw       tty16  tty38  tty6    vcs6      xdma0_events_15
rtc       tty17  tty39  tty60  vcsa      xdma0_events_2
rtc0      tty18  tty4   tty61  vcsa1     xdma0_events_3
sda       tty19  tty40  tty62  vcsa2     xdma0_events_4
sda1      tty2   tty41  tty63  vcsa3     xdma0_events_5
sda2      tty20  tty42  tty7   vcsa4     xdma0_events_6
sda3      tty21  tty43  tty8   vcsa5     xdma0_events_7
sdi0      tty22  tty44  tty9   vcsa6     xdma0_events_8
sgs       tty23  tty45  ttyS0  vfio      xdma0_events_9
shm       tty24  tty46  ttyS1  vga_arbiter xdma0_h2c_0
snapshot  tty25  tty47  ttyS2  vg_main   xdma0_user
snd       tty26  tty48  ttyS3  vhci      zero
stderr    tty27  tty49  uhid   vhost-net
stdin     tty28  tty5   uinput watchdog
stdout    tty29  tty50  urandom watchdog0
tty       tty3   tty51  usbmon0 xdma0_c2h_0
tty0      tty30  tty52  usbmon1 xdma0_control
tty1      tty31  tty53  usbmon2 xdma0_events_0
tty10     tty32  tty54  vcs    xdma0_events_1
tty11     tty33  tty55  vcs1   xdma0_events_10
```

If these are missing, the card may have failed (or just failed to boot) if you restart the unit and still don't see these two entries then you may have a decoder card failure.

If these are not listed then there is a hardware or driver issue with the card. First step would be to try reinstalling.

When the Decoder is in use

From the command line, run:

```
lsmod | grep decoder
```

You should see an output similar to the following:

```
decoder 22463 1
```

decoder is the decoder module

22463 is the driver size in bytes, so this may change depending on your versions

1 is the number of decodes. So 0 means you are not decoding using the module, and 1-4 is decodes (1

UHD or up
to 4 HD)

For the SDI:

```
lsmod | grep sdi
```

```
sdi 17706 1
```

Last number is number of instances using driver. 0 means the device isn't used.

```
[mfeng@env-4e-963665 ~]$ lsmod | grep decoder  
decoder                22463  1
```

```
[mfeng@env-4e-963665 ~]$ lsmod | grep sdi  
sdi                    13612  1
```

From:

<http://cameraangle.co.uk/> - WalkerWiki - wiki.alanwalker.uk

Permanent link:

http://cameraangle.co.uk/doku.php?id=test_decoder_card&rev=1538636091

Last update: **2023/03/09 22:35**

