

回复: 回复: (李闽楠、15291107994--root@myir-yg2lx) 1.cam概率上电异常, 无法识别chip id; 2. 识别到之后, 无法使用cam。已返厂一次, 问题依旧, 望与我联系

李 闽楠 <Lmn2960287269@outlook.com>

周日 2024/4/7 22:41

收件人: mark.hong <mark.hong@myirtech.com>

22: 12 分

重刷full系统完成, 测试结果如下:

```
# Available resolution of OV5645.
# Please choose one of a following resolution then comment out the rest.
#ov5645_res=1280x960
ov5645_res=640x480
#ov5645_res=2592x1944

if [ -z "$cru" ]
then
    echo "No CRU video device founds"
else
    media-ctl -d /dev/media0 -r
    if [ -z "$csi2" ]
    then
        echo "No MIPI CSI2 sub video device founds"
    else
        media-ctl -d /dev/media0 -l "'rzg2l_csi2 10830400.csi2':1 -> 'CRU output':0 [1]"
        media-ctl -d /dev/media0 -v "'rzg2l_csi2 10830400.csi2':1 [fmt:UYVY8_2X8/$ov5645_res field:none]"
        media-ctl -d /dev/media0 -v "'ov5645 0-003c':0 [fmt:UYVY8_2X8/$ov5645_res field:none]"
        echo "Link CRU/CSI2 to ov5645 0-003c with format UYVY8_2X8 and resolution $ov5645_res"
    fi
fi

root@myir-yg2lx:~# weston-start
root@myir-yg2lx:~# gst-launch-1.0 v4l2src device=/dev/video0 ! video/x-raw,format=YUY2,width=640,height=480 ! waylandsink
[ 224.468414] ov5640 0-003c: ov5640 write_reg: error: reg=3632, val=e2
[ 224.475262] ov5640 0-003c: ov5640 write_reg: error: reg=3808, val=2
[ 225.164275] ov5640 0-003c: ov5640 write_reg: error: reg=3103, val=3
[ 225.173271] ov5640 0-003c: ov5640 write_reg: error: reg=380b, val=e0
Setting pipeline to PAUSED ...
[ 225.245043] ov5640 0-003c: ov5640 write_reg: error: reg=3008, val=82
[ 226.280055] ov5640 0-003c: ov5640 write_reg: error: reg=3808, val=2
ERROR: Pipeline doesn't want to pause.
ERROR: from element /GstPipeline:pipeline0/GstV4l2Src:v4l2src0: Could not open device '/dev/video0' for reading and writing.
Additional debug info:
./git/sys/v4l2/v4l2_calls.c(623): gst_v4l2_open (): /GstPipeline:pipeline0/GstV4l2Src:v4l2src0:
system error: Connection timed out
Setting pipeline to NULL ...
Total time: 0.000000 seconds
Freeing pipeline ...
root@myir-yg2lx:~#
```

可以看出, cam和开发板的i2c驱动层绝对有问题。我上次返厂维修的检测数据在哪、结果是什么?

22: 35

重启开发板 甚至都无法读取到cam芯片id,和刷系统前情况一样!!

```
3.350417] renesas_usbhs 11c60000.usb: gadget probed
3.355729] renesas_usbhs 11c60000.usb: probed
3.362809] ptn5150 0-003d: NXP PTN5150: Version ID:0x1, Vendor ID:0x3
3.371294] ov5640 0-003c: supply DOVDD not found, using dummy regulator
3.378211] ov5640 0-003c: supply AVDD not found, using dummy regulator
3.384884] ov5640 0-003c: supply DVDD not found, using dummy regulator
3.439331] ov5640 0-003c: ov5640_read_reg: error: reg=300b
3.444908] ov5640 0-003c: ov5640_check_chip_id: failed to read chip identifier
```

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反复重启多次, 识别到cam之后按照

./v4l2-init.sh

weston-start

gst-launch-1.0 v4l2src device=/dev/video0 ! video/x-raw,format=YUY2,width=640,height=480 ! waylandsink

终于进入预览模式:



但是，在抓拍时

```
[ 39.089119] ov5640 0-003c: ov5640_write_reg: error: reg=3008, val=82
[ 39.095717] ov5640 0-003c: ov5640_write_reg: error: reg=3808, val=2
Setting pipeline to PAUSED ...
[ 39.176587] ov5640 0-003c: ov5640_write_reg: error: reg=3008, val=82
[ 39.183280] ov5640 0-003c: ov5640_write_reg: error: reg=3808, val=2
ERROR: Pipeline doesn't want to pause.
ERROR: from element /GstPipeline:pipeline0/GstV4l2Src:v4l2src0: Could not open device '/dev/video0' for reading and writing.
Additional debug info:
../git/sys/v4l2/v4l2_calls.c(623): gst_v4l2_open (): /GstPipeline:pipeline0/GstV4l2Src:v4l2src0:
system error: No such device or address
Setting pipeline to NULL ...
Total time: 0.000000 seconds
```

```
Freeing pipeline ...
root@myir-yg21x:~# v4l2-ctl -D -d /dev/video0 --list-formats-ext
[ 70.809002] ov5640 0-003c: ov5640_write_reg: error: reg=3103, val=11
[ 70.815815] ov5640 0-003c: ov5640_write_reg: error: reg=3808, val=2
Failed to open /dev/video0: No such device or address
root@myir-yg21x:~#
```

23: 00

多次重启，各种奇怪的参数：

```
[ 3.340573] renesas_usbhs 11c60000.usb: no transceiver found
[ 3.346346] renesas_usbhs 11c60000.usb: gadget probed
[ 3.351643] renesas_usbhs 11c60000.usb: probed
[ 3.358723] ptn5150 0-003d: NXP PTN5150: Version ID:0x1, Vendor ID:0x3
[ 3.366934] ov5640 0-003c: supply DOVDD not found, using dummy regulator
[ 3.373847] ov5640 0-003c: supply AVDD not found, using dummy regulator
[ 3.380514] ov5640 0-003c: supply DVDD not found, using dummy regulator
[ 3.435212] ov5640 0-003c: ov5640_check_chip_id: wrong chip identifier, expected 0x5640, got 0x564f
[ 3.444554] i2c-riic 10058000.i2c: registered with 100000Hz bus speed
[ 3.454039] rtc-rx8025t 1-0032: registered as rtc0
[ 3.459791] rtc-rx8025t 1-0032: setting system clock to 2066-01-01T00:07:54 UTC (3029530074)
[ 3.469968] sgtl5000 1-000a: sgtl5000 revision 0x11
```

这到底如何解决？？

发件人: 李 闽楠 <lmn2960287269@outlook.com>

发送时间: 2024年4月7日 14:31

收件人: mark.hong <mark.hong@myirtech.com>
主题: 回复: (李闽楠、15291107994--root@myir-yg2lx) 1.cam概率上电异常, 无法识别chip id; 2. 识别到之后, 无法使用cam。已返厂一次, 问题依旧, 望与我联系

麻烦看下v4l2为什么无法开启设备。不管是出厂程序还是我的自测程序的问题都是cam busy 或者是无法识别到cam啊。

---- 回复的原邮件 ----

发件人 mark.hong@myirtech.com
日期 2024年04月07日 13:42
收件人 李 闽楠<Lmn2960287269@outlook.com>
抄送至
主题 Re: 回复: (李闽楠、15291107994--root@myir-yg2lx) 1.cam概率上电异常, 无法识别chip id; 2. 识别到之后, 无法使用cam。已返厂一次, 问题依旧, 望与我联系

full系统一般是带有qt库和hmi应用的, 就是mxapp2文件
或者你参考软件开发指南重刷刷机也可以

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MYIR Electronics Limited



领先的嵌入式处理器模组厂商

微信公众号

发件人: 李 闽楠
发送时间: 2024-04-07 13:09
收件人: mark.hong@myirtech.com
主题: 回复: (李闽楠、15291107994--root@myir-yg2lx) 1.cam概率上电异常, 无法识别chip id; 2. 识别到之后, 无法使用cam。已返厂一次, 问题依旧, 望与我联系

```
root@myir-yg2lx:~# head -n 1 /etc/issue
Poky (Yocto Project Reference Distro) 3.1.20 \n \l
root@myir-yg2lx:~# uname -a
Linux myir-yg2lx 5.10.83-cip1-yocto-standard #1 SMP PREEMPT Tue Mar 14 11:36:34 UTC 2023 aarch64 aarch64 aarch64 GNU/Linux
root@myir-yg2lx:~#
```

如何查看当前的系统镜像是FULL还是CORE?
麻烦提供下MXAPP2的可执行文件, 测试的时候我给删掉了。
我找到"D:\SDK\04_Sources\MXAPP\MXAPP\mxapp2"这个文件在开发板上无法运行。

Home

Name	Size (KB)	Last modified
..		
...		
.config		2066-01-01 08:35
mx.cache		2066-01-01 08:01
v4l2-init.sh	1	2023-03-16 10:55
testcam	17	2066-01-01 08:10
test112.jpg	0	2066-01-01 08:33
my.jpg	0	2066-01-01 08:01
mxapp2	33 408	2066-01-01 08:25
eeeprom.txt	1	2066-01-01 08:00
camtest	17	2066-01-01 08:22
cam_test	22	2066-01-01 08:47
.bash_history	7	2066-01-01 08:33

Features

: fp asumd evtstrm crc32 atomics fphp asumdhpc cpuid asumdrdm lrcpc dcpop asumddp

CPU implementer : 0x41

CPU architecture: 8

CPU variant : 0x2

CPU part : 0xd05

CPU revision : 0

root@myir-yg2lx:~# head -n 1 /etc/issue

Poky (Yocto Project Reference Distro) 3.1.20 \n \l

root@myir-yg2lx:~# uname -a

Linux myir-yg2lx 5.10.83-cip1-yocto-standard #1 SMP PREEMPT Tue Mar 14 11:36:34 UTC 2023 aarch64 aarch64 aarch64 GNU/Linux

root@myir-yg2lx:~# cat /usr/bin/start.sh

#!/bin/sh -e

echo "Start MYIR HMI V2.0..."

export TSLIB_TSDEVICE=/dev/input/event1

export TSLIB_CONFIGFILE=/etc/ts.conf

export TSLIB_CALIBFILE=/etc/pointercal

export TSLIB_PLUGINDIR=/usr/lib/ts

export TSLIB_CONSOLEDEVICE=none

export QT_QPA_FB_TSLIB=1

export QT_QPA_GENERIC_PLUGINS=tslib:/dev/input/event1

echo 7 > /sys/class/backlight/backlight/brightness

sleep 5

/home/root/mxapp2 -platform linuxfb &

exit 0

root@myir-yg2lx:~# chmod 777 mxapp2

root@myir-yg2lx:~# ./mxapp2

qt.qpa.plugin: Could not find the Qt platform plugin "xcb" in ""

This application failed to start because no Qt platform plugin could be initialized. Reinstalling the application may fix this problem.

Available platform plugins are: linuxfb, minimal, offscreen, vnc, wayland-egl, wayland.

Aborted

root@myir-yg2lx:~#

发件人: 李 闽楠 <Lmn2960287269@outlook.com>

发送时间: 2024年4月7日 12:59

收件人: mark.hong@myirtech.com <mark.hong@myirtech.com>

主题: 回复: (李 闽楠、15291107994--root@myir-yg2lx) 1.cam概率上电异常, 无法识别chip id; 2. 识别到之后, 无法使用cam。已返厂一次, 问题依旧, 望与我联系

麻烦看下v4l2测试程序为什么无法使用? 在压缩包的opentest.c中有测试程序。

发件人: mark.hong@myirtech.com <mark.hong@myirtech.com>

发送时间: 2024年4月7日 10:44

收件人: 李 闽楠 <Lmn2960287269@outlook.com>; support.cn <support.cn@myirtech.com>

主题: Re: (李 闽楠、15291107994--root@myir-yg2lx) 1.cam概率上电异常, 无法识别chip id; 2. 识别到之后, 无法使用cam。已返厂一次, 问题依旧, 望与我联系

您好, 你先按照下面的流程试一下, 或者使用到的系统可以在百度网盘下载

链接: <https://pan.baidu.com/s/1U4QVLWMwSVyIEXdah61O3g>

提取码: du4a

uboot选择设备树之后重启

=> setenv fdt_file myb-rzg2l-disp.dtb

=> saveenv

板子正常启动会看到如下界面



摄像头识别

```
root@myir-yg2lx:~# ls /dev/video0
/dev/video0
root@myir-yg2lx:~# dmesg | grep ov5640
[ 3.371081] ov5640 0-003c: supply DOVDD not found, using dummy regulator
[ 3.377978] ov5640 0-003c: supply AVDD not found, using dummy regulator
[ 3.384650] ov5640 0-003c: supply DVDD not found, using dummy regulator
[ 3.439448] ov5640 0-003c: Consider updating driver ov5640 to match on endpoints
root@myir-yg2lx:~#
```

测试, 开启weston界面, 正常会看到weston界面如下

```
root@myir-yg2lx:~# cat v4l2-init.sh
#!/bin/sh

cru=$(cat /sys/class/video4linux/video*/name | grep "CRU")
csi2=$(cat /sys/class/video4linux/v4l-subdev*/name | grep "c")

# Available resolution of ov5645.
# Please choose one of a following resolution then comment o
#ov5645_res=1280x960
ov5645_res=640x480
#ov5645_res=2592x1944

if [ -z "$cru" ]
root@myir-yg2lx:~# ./v4l2-init.sh
Unable to setup formats: Invalid argument (22)
Link CRU/CSI2 to ov5645 0-003c with format UYVY8_2x8 and resolution 640x480
root@myir-yg2lx:~# weston-start
root@myir-yg2lx:~#
```




预览

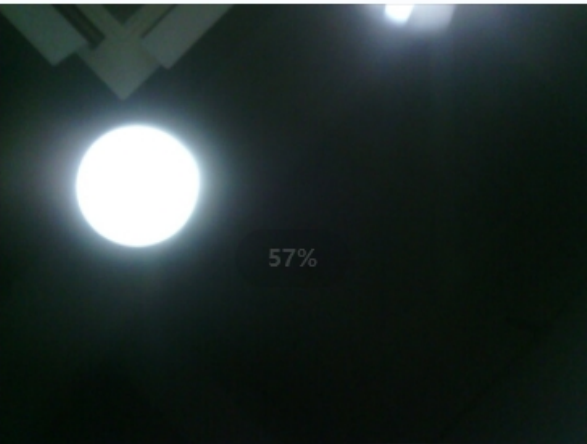
```
gst-launch-1.0 v4l2src device=/dev/video0 ! video/x-raw,format=YUY2,width=640,height=480 ! waylandsink
root@myir-ŷg2lx:~# gst-launch-1.0 v4l2src device=/dev/video0 ! video/x-raw,format=YUY2,width=640,height=480 ! waylandsink
Setting pipeline to PAUSED ...
Pipeline is live and does not need PREROLL ...
Setting pipeline to PLAYING ...
New clock: GstSystemClock
```



抓拍

```
gst-launch-1.0 v4l2src device=/dev/video0 num-buffers=3 ! jpegenc ! filesink location=/home/root/test.jpg
root@myir-ŷg2lx:~# gst-launch-1.0 v4l2src device=/dev/video0 num-buffers=3 ! jpegenc ! filesink location=/home/root/test.jpg
Setting pipeline to PAUSED ...
Pipeline is live and does not need PREROLL ...
Setting pipeline to PLAYING ...
New clock: GstSystemClock
Got EOS from element "pipeline0".
Execution ended after 0:00:00.465381917
Setting pipeline to NULL ...
Total time: 0.465386 seconds
Freeing pipeline ...
```

抓拍的图片



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发件人: [李 闽楠](#)
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主题: (李闽楠、15291107994--root@myir-yg2lx) 1.cam概率上电异常, 无法识别chip id; 2. 识别到之后, 无法使用cam。已返厂一次, 问题依旧, 望与我联系
如题: 望速与我联系。