

Magewell Pro Capture 開箱說明

開箱說明 for Linux

適用 2011-2016 年版本 [Magewell Pro Capture](#) 開箱說明

適用日期 2016-04-19

1 簡介

Magewell ProCapture 支援 PCI-E 2.0 介面。

Magewell ProCapture 提供 SDK 開發環境。

Magewell ProCapture 提供 Mini PCI-E 版本。

2 硬體規格

- 支援 PCI-E 2.0;
- Pro Capture 支援 PCI Express (Pro Capture 支援 PCI-E 2.0 x1/x4, x1/x4/x8/x16, x4/x8/x16 PCI Express x1, x4, x8/x16, Pro Capture Mini PCI-E);
- 支援 Mini PCI-E;

3 安裝說明

3.1 安裝環境

安裝環境 linux 安裝 Pro Capture 說明書。

3.2 安裝步驟

- 下載 ProCaptureForLinux_XXXX.tar.gz XXXX 說明書
- 執行 tar -zxvf ProCaptureForLinux_XXXX.tar.gz 安裝
- 安裝目錄
 - bin/bin 安裝目錄
 - scripts/scripts 安裝目錄
 - src/src 安裝目錄
 - install.sh 安裝目錄 scripts 安裝目錄

```

magewell@magewell-MSB85TN-00: ~/Downloads/ProCaptureForLinux_2140
magewell@magewell-MSB85TN-00:~/Downloads/ProCaptureForLinux_2140$
magewell@magewell-MSB85TN-00:~/Downloads/ProCaptureForLinux_2140$
magewell@magewell-MSB85TN-00:~/Downloads/ProCaptureForLinux_2140$
magewell@magewell-MSB85TN-00:~/Downloads/ProCaptureForLinux_2140$
magewell@magewell-MSB85TN-00:~/Downloads/ProCaptureForLinux_2140$
magewell@magewell-MSB85TN-00:~/Downloads/ProCaptureForLinux_2140$
magewell@magewell-MSB85TN-00:~/Downloads/ProCaptureForLinux_2140$
magewell@magewell-MSB85TN-00:~/Downloads/ProCaptureForLinux_2140$
magewell@magewell-MSB85TN-00:~/Downloads/ProCaptureForLinux_2140$ ll
total 68
drwxrwxr-x  5 magewell magewell  4096 11月 27 17:37 ./
drwxr-xr-x 15 magewell magewell  4096 11月 26 09:28 ../
drwxrwxr-x  2 magewell magewell  4096 11月 26 09:28 bin/
-rwxrwxr-x  1 magewell magewell   38 11月 23 14:18 install.sh*
-rw-r--r--  1 root     root    37567 11月 27 17:37 mwcap_install.log
-rw-rw-r--  1 magewell magewell   888 11月 23 14:18 quick_start.txt
drwxrwxr-x  2 magewell magewell  4096 11月 26 09:28 scripts/
drwxrwxr-x  5 magewell magewell  4096 11月 26 09:28 src/
magewell@magewell-MSB85TN-00:~/Downloads/ProCaptureForLinux_2140$
magewell@magewell-MSB85TN-00:~/Downloads/ProCaptureForLinux_2140$
magewell@magewell-MSB85TN-00:~/Downloads/ProCaptureForLinux_2140$
magewell@magewell-MSB85TN-00:~/Downloads/ProCaptureForLinux_2140$

```

- 安装依赖
 - Ubuntu: sudo apt-get install linux-headers-`uname -r`
 - Fedora/CentOS/RHEL: sudo yum install kernel-devel

- 运行 install.sh 安装

```

=====
Install Successfully!
For more information please check the docs directory or
contact support@magewell.net.

!!!Previous installed module already loaded, reboot is needed!
Do you wish to reboot now (Y/N) [N]: n
Reboot canceled! You should reboot your system manually later.
=====

```

- 查看安装结果
 - mwcap-info 查看安装结果

```
mwcap-info
```

- 查看帮助: mwcap-info -h

- 运行 Pro Capture

- mwcap-info -l 查看 Pro Capture 设备

```
mwcap-info
```

- gst-launch-1.0 v4l2src device=/dev/video0 ! video/x-raw,width=720,height=576,

```
format=RGBx,framerate=30/1 ! videoconvert ! autovideosink
```

```
mwcap-info
```



```

magewell@magewell-MSB85TN-00:~$ mwcaps-info --info-device 5:0
Device
Family name ..... Pro Capture
Product name ..... Pro Capture HDMI
Firmware name ..... High Performance Firmware
Serial number ..... A104150202001
Hardware version ..... A
Firmware version ..... 1.20
Driver version ..... 1.2.2140
Board ID ..... 5
Channel ID ..... 0
Bus address ..... bus 1, device 0
PCIe speed ..... gen 2
PCIe width ..... x1
Max payload size ..... 128 Byte
Max read request size ..... 256 Byte
Total memory size ..... 268435456 Byte
Free memory size ..... 74715136 Byte
Max input resolution ..... 2048x2048
Max output resolution ..... 2048x2048
Chipset temperature ..... 72.1

```

- `hwinfo --input-video`

```
$ mwcaps-info --info-input-all /dev/video0
```

-- or --

```
$ mwcaps-info --info-input-all 0:0
```

- `hwinfo --input-audio`

```
$ mwcaps-info --info-input-video /dev/video0
```

-- or --

```
$ mwcaps-info --info-input-video 0:0
```

```

magewell@magewell-MSB85TN-00:~$
magewell@magewell-MSB85TN-00:~$ mwcaps-info --info-input-video 5:0
Input common
Video input ..... HDMI
Audio input ..... HDMI
Auto scan ..... Yes
AV Link ..... Yes

Input video
Signal state ..... Locked
Resolution ..... 1280x720p 50.03 Hz
Aspect ..... 16:9
Total size ..... 1980x750
X offset ..... 260
Y offset ..... 25
Color space ..... YUV BT.709
Quantization ..... Limited
Saturation ..... Limited

```

- `hwinfo --input-audio`

```
$ mwcaps-info --info-input-audio /dev/video0
```

-- or --

```
$ mwcaps-info --info-input-audio 0:0
```

```

magewell@magewell-MSB85TN-00:~$ mwcapi-info --info-input-audio 5:0
Input common
  Video input ..... HDMI
  Audio input ..... HDMI
  Auto scan ..... Yes
  AV Link ..... Yes

Input audio
  Audio format ..... 44100 Hz, 24 bit, LPCM
  Channel 1 & 2 ..... Valid
  Channel 3 & 4 ..... Invalid
  Channel 5 & 6 ..... Invalid
  Channel 7 & 8 ..... Invalid
  Status data ..... 00 00 20 00 0b 00 00 00
                          00 00 00 00 00 00 00 00
                          00 00 00 00 00 00 00 00

```

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```
$ mwcapi-info --info-input-specific /dev/video0
```

-- or --

```
$ mwcapi-info --info-input-specific 0:0
```

```

magewell@magewell-MSB85TN-00:~$ mwcapi-info --info-input-specific 5:0
Input common
  Video input ..... HDMI
  Audio input ..... HDMI
  Auto scan ..... Yes
  AV Link ..... Yes

Input specific
  Signal status ..... Valid
  Mode ..... HDMI
  HDCP ..... No
  Color depth ..... 8 bits
  Pixel encoding ..... Y/U/V 4:4:4
  VIC ..... 19
  IT content ..... False
  Timing - Scanning format ..... Progressive
  Timing - Frame rate ..... 50.03
  Timing - H Total ..... 1980
  Timing - H Active ..... 1280
  Timing - H Front porch ..... 440
  Timing - H Sync width ..... 40
  Timing - H back porch ..... 220
  Timing - H field 0 V total ..... 750
  Timing - H field 0 V active ..... 720
  Timing - H field 0 V front porch ..... 5
  Timing - H field 0 V sync width ..... 5
  Timing - H field 0 V back porch ..... 20
  Timing - H field 1 V total ..... 0
  Timing - H field 1 V active ..... 720
  Timing - H field 1 V front porch ..... 5
  Timing - H field 1 V sync width ..... 5
  Timing - H field 1 V back porch ..... 20

```

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```
$ mwcapi-info -v 0:0
```

```
$ gst-launch-1.0 v4l2src device=`mwcapi-info -v 0:0` ! video/x-raw,width=720,height=576,
```

```
format=RGBx,framerate=30/1 ! videoconvert ! autovideosink
```

```
magewell@magewell-MSB85TN-00:~$  
magewell@magewell-MSB85TN-00:~$ mwcapi-info -v 5:0  
/dev/video0  
magewell@magewell-MSB85TN-00:~$
```

- 如何配置 ALSA 设备, 如何配置设备

```
$ mwcapi-info -a /dev/video0
```

-- or --

```
$ mwcapi-info --alsa-name 0:0
```

```
$ gst-launch-1.0 alsasrc device=`mwcapi-info --alsa-name 0:0` ! 'audio/x-raw,format=S16LE,rate=44100,channels=2' ! autoaudiosink
```

```
magewell@magewell-MSB85TN-00:~$ mwcapi-info --alsa-name 5:0  
hw:2,0  
magewell@magewell-MSB85TN-00:~$
```

- 如何配置 Mplayer 设备 ALSA 设备, 如何配置设备

```
$ mwcapi-info --alsa-name-mplayer /dev/video0
```

-- or --

```
$ mwcapi-info --alsa-name-mplayer 0:0
```

```
$ mplayer tv:// -tv
```

```
driver=v4l2:device=/dev/video0:width=1280:height=720:outfmt=yuy2:
```

```
alsa:adevice=`mwcapi-info --alsa-name-mplayer /dev/video0`:forceaudio
```

```
magewell@magewell-MSB85TN-00:~/Desktop/trunk1/trunk/sdk/bin$ ./mwcapi-info --alsa-name-mplayer 5:0  
hw.2,0  
magewell@magewell-MSB85TN-00:~/Desktop/trunk1/trunk/sdk/bin$
```

- 如何配置 Pulse Audio 设备

```
$ mwcapi-info --alsa-name-pa /dev/video0
```

-- or --

```
$ mwcapi-info --alsa-name-pa 0:0
```

```
magewell@magewell-MSB85TN-00:~$ mwcapi-info --alsa-name-pa 5:0  
alsa_input.2.analog-stereo  
magewell@magewell-MSB85TN-00:~$
```

- 如何配置 ID 设备

```
$ mwcapi-info -c 0:0
```