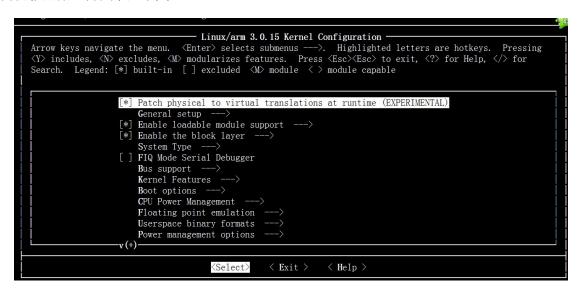
iTOP-4412 开发板 AVIN 驱动配置

在内核目录下执行命令"make menuconfig",如下图:

```
iTop4412_Kernel_3.0#
iTop4412_Kernel_3.0#
iTop4412_Kernel_3.0# make menuconfig
```

将会打开内核的配置界面,如下图:



然后选择 "Device Drivers" 选项,进入 "Device Drivers" 配置界面,如下图:

```
Arrow keys navigate the menu. <Enter> selects submenus --->. Highlighted letters are hotkeys. Pressing <Y> includes, <N> excludes, <M> modularizes features. Press <Esc> Esc> to exit, <?> for Help, </> for Search. Legend: [*] built-in [ ] excluded <M> module <> module capable
                                  Generic Driver Options
                                  Generic Driver Options --->
Connector - unified userspace <-> kernelspace linker --->
                                  Memory Technology Device (MTD) support
Parallel port support --->
                              *] Block devices
                             [*] Misc devices
                                  ATA/ATAPI/MFM/RLL support (DEPRECATED) --->
                                  SCSI device support
                               > Serial ATA and Parallel ATA drivers
                            [*] Multiple devices driver support (RAID and LVM) --->
<> Generic Target Core Mod (TCM) and ConfigFS Infrastructure --->
                                  Network device support
                                 ISDN support
                             v (+)
                                                         <Select>
                                                                            < Exit >
                                                                                              < Help >
```

然后选择 "Multimedia support"选项,进入 "Multimedia support"配置界面,如下图:

```
Arrow keys navigate the menu. 〈Enter〉 selects submenus ——>. Highlighted letters are hotkeys. Pressing 〈Y〉 includes, 〈N〉 excludes, 〈M〉 modularizes features. Press 〈Esc〉〈Esc〉 to exit, 〈?〉 for Help, 〈/〉 for Search. Legend: [*] built—in [ ] excluded 〈M〉 module 〈 > module capable

——Multimedia support

*** Multimedia core support ***

[*] Media Controller API (EXPERIMENTAL)

{** Video For Linux

[*] V4L2 sub—device userspace API (EXPERIMENTAL)

{ > DVB for Linux

*** Multimedia drivers ***

{ ** Remote Controller adapters ——>

[ ] Load and attach frontend and tuner driver modules as needed

[*] Customize analog and hybrid tuner modules to build

Customize TV tuners ——>

Select Videobuf2 allocator (CMA_PHYS) ——>

[*] Video capture adapters ——>

v(+)

**Select〉 〈 Exit 〉 〈 Help 〉
```

然后选择 "Video capture adapters"选项,进入 "Video capture adapters"配置界面,如下图:

```
Video capture adapters
Arrow keys navigate the menu. 〈Enter〉 selects submenus --->. Highlighted letters are hotkeys. Pressing 〈Y〉 includes, 〈N〉 excludes, 〈M〉 modularizes features. Press 〈Esc〉〈Esc〉 to exit, 〈?〉 for Help, 〈/〉 for Search. Legend: [*] built-in [ ] excluded 〈M〉 module 〈 > module capable
                                - Video capture adapters
                                     Enable advanced debug functionality
Enable old-style fixed minor ranges for video devices
Autoselect pertinent encoders/decoders and other helper chips
                                      I2C module for IR
Encoders, decoders, sensors and other helper chips --->
                                      CPiA2 Video For Linux
                                      SR030PC30 VGA camera sensor support
                                      NOON010PC30 CIF camera sensor support
                                      SoC camera support
                                         imx074 support
                                         mt9m001 support
                                         mt9m111, mt9m112 and mt9m131 support
                            v (+)
                                                                                               < Help >
                                                          <Select>
                                                                             < Exit >
```

然后选择 "Encoders, decoders, sensors and other helper chips", 进入 "Encoders, decoders, sensors and other helper chips" 配置界面,如下图:

```
Arrow keys navigate the menu. 〈Enter〉 selects submenus --->. Highlighted letters are hotkeys. Pressing 〈Y〉 includes, 〈M〉 excludes, 〈M〉 modularizes features. Press 〈Esc〉 to exit, 〈?〉 for Help, 〈/〉 for Search. Legend: [*] built-in [ ] excluded 〈M〉 module 〈〉 module capable

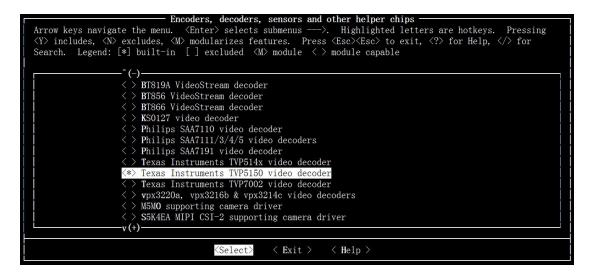
*** Audio decoders, processors and mixers ***

〈 > Simple audio decoder chips
〈 > Philips TDA7432 audio processor
〈 > Philips TDA9840 audio processor
〈 > Philips TEA6415C audio processor
〈 > Philips TEA6415C audio processor
〈 > Philips TEA6420 audio processor
〈 > Micronas MSP34xx audio decoders
〈 > Cirrus Logic CS5345 audio ADC
〈 > Texas Instruments TLV320AIC23B audio codec
〈 > Wolfson Microelectronics WM8775 audio ADC
〈 > Panasonic VP27s internal MPX

v(+)

**Select> 〈 Exit 〉 〈 Help 〉
```

然后选择 "Texas Instruments TVP5150 video decoder"选项,如下图:



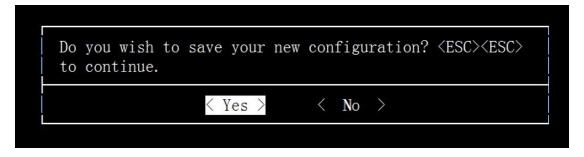
然后返回到 "Video capture adapters"配置界面,如下图:

然后找到 "OmniVision OV5640 sensor support" 选项,取消掉 "OmniVision OV5640 sensor support"

的配置,如下图:



然后依次选择 "Exit" 退出配置界面,如下图:



然后在上图选择"Yes",并按回车,退出配置界面。

最后在串口输入" make "开始编译内核,如下图:

/iTop4412_Kernel_3.0# /iTop4412_Kernel_3.0# make

编译完成后,把生成的 zImage 烧写到 iTOP-4412 开发板就可以支持 AVIN 的摄像头了。