

iTOP-4412 开发板提供的内核默认使用的 500W 摄像头，如果大家使用迅为提供的 200W 摄像头，需要做如下的修改：

在 Ubuntu 的终端里面进入到内核的源码目录，然后执行 “make menuconfig” 命令，如下图所示：

```
root@ubuntu:/home/brosver/iTop4412_Kernel_3.0#  
root@ubuntu:/home/brosver/iTop4412_Kernel_3.0#  
root@ubuntu:/home/brosver/iTop4412_Kernel_3.0#  
root@ubuntu:/home/brosver/iTop4412_Kernel_3.0# make menuconfig
```

打开内核配置界面，然后选择 “Device Drivers”，如下图所示：

```
----- Linux/arm 3.0.15 Kernel Configuration -----  
Use arrow keys to navigate the menu. <Enter> selects submenus --->. Highlighted letters are hotkeys.  
<I> includes, <N> excludes, <M> modularizes features. Press <Esc><Esc> to exit, <?> for Help, <B> for  
Back. Legend: [*] built-in [ ] excluded <M> module < > module capable  
  
^(-)  
[*] Enable the block layer --->  
    System Type --->  
[ ] FIQ Mode Serial Debugger  
    Bus support --->  
    Kernel Features --->  
    Boot options --->  
    CPU Power Management --->  
    Floating point emulation --->  
    Userspace binary formats --->  
    Power management options --->  
[*] Networking support --->  
    Device Drivers --->  
    File systems --->  
v(+)  
  
      <Select>    < Exit >    < Help >
```

进入到 “Device Drivers” 界面然后选择 “Multimedia support”，如下图所示：

```

----- Device Drivers -----
Keys navigate the menu. <Enter> selects submenus --->. Highlighted letters are hotkeys.
<N> excludes, <M> modularizes features. Press <Esc><Esc> to exit, <?> for Help.
Legend: [*] built-in [ ] excluded <M> module < > module capable

^(-)
  PTP clock support --->
  -* GPIO Support --->
  < > Dallas's 1-wire support --->
  <*> Power supply class support --->
  < > Hardware Monitoring support --->
  < > Generic Thermal sysfs driver --->
  [*] Watchdog Timer Support --->
      Sonics Silicon Backplane --->
      Broadcom specific AMBA --->
  [*] Multifunction device drivers --->
  [*] Voltage and Current Regulator Support --->
  <*> Multimedia support --->
      Graphics support --->
v(+)

      <Select>      < Exit >      < Help >

```

进入到“Multimedia support”界面，然后选择“Video capture adapters”，如下图所示：

```

----- Multimedia support -----
Keys navigate the menu. <Enter> selects submenus --->. Highlighted letters are hotkeys.
<N> excludes, <M> modularizes features. Press <Esc><Esc> to exit, <?> for Help.
Legend: [*] built-in [ ] excluded <M> module < > module capable

^(-)
  *** 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 --->
  [*] Memory-to-memory multimedia devices --->
v(+)

      <Select>      < Exit >      < Help >

```

进入到“Video capture adapters”界面，修改如下的三个地方，如下图所示：

```
----- Video capture adapters -----
row keys navigate the menu. <Enter> selects submenus --->. Highlighted letters are hotkeys. P
> includes, <N> excludes, <M> modularizes features. Press <Esc><Esc> to exit, <?> for Help, </>
arch. Legend: [*] built-in [ ] excluded <M> module < > module capable

^(-)
<*> SoC camera support
< >   imx074 support
< >   mt9m001 support
< >   mt9m111, mt9m112 and mt9m131 support
< >   mt9t031 support
< >   mt9t112 support
< >   mt9d115 support
<*> SR200PC20 supporting camera driver
<*>   SR200PC20 supporting camera driver P2
< >   SR200PC20 supporting camera driver P4W (NEW)
< > OmniVision OV5640 sensor support
< > S5K4ECGX Camera Sensor
< > mt9v022 support
v(+)

<Select>    < Exit >    < Help >
```

按照上图高亮的三个地方修改，然后保存并退出内核配置界面，然后执行“make”命令编译内核，生成的 zImage 就支持迅为的 200W 摄像头了。