**安装配置minicom**  
--------------------------------------------------  
# **lsmod | grep usbserial**(如果直接使用串口线，而没有用到USB转串口设备，此步可以跳过)  
   如果有usbserial，说明系统支持USB转串口。   
  
安装minicom (Fedora自带有minicom，此步可以跳过)  
   **apt-get install minicom**  
   **apt-get install lrzsz**  
配置minicom  
   # **minicom -s**  
   **Serial port setup**[Enter]  
    +-------------------------------------------------------------+  
    | A -    Serial Device      : **/dev/ttyUSB0**                    |  
    | B - Lockfile Location     : /var/lock                       |  
    | C -   Callin Program      :                                 |  
    | D - Callout Program      -:                                 |  
    | E -    Bps/Par/Bits       : **115200 8N1**                      |  
    | F - Hardware Flow Control : No                              |  
    | G - Software Flow Control : No                              |  
    |                                                             |  
    |    Change which setting?                                    |  
    +-------------------------------------------------------------+  
注: 如果没有使用USB转接口，Serial Device要配置为**/dev/ttyS0**  
  
   **Save setup as dfl**   **Exit from Minicom**  
  
  
  
  
**使用minicom传输文件**  
--------------------------------------------------  
# minicom  
(Ctrl + a) --> s --> zmodem --> [Okay] -->   
      
    +-----------------------------------------+   
    |No file selected - enter filename:       |   
    |> /home/zxl/ssl/codes/led/lls\_led.ko     | [Enter]  
    +-----------------------------------------+   
  
  
  
  
  
  
注: download kernel by minicom in ubuntu  
--------------------------------------------------  
    When I download linux kernel by x protocol in minicom, it says "Failure executing protocol, press any key to continue".  
    The problem is the x protocol isn't installed bye ubuntu by default, so you should install it by hand:  
    **# apt-get install lrzsz**  
    After successful download and install, you can send files by x protocol in minicom.  
    **lrzsz**包括了x/y/zmodem协议  
  
  
  
  
**安装lrzsz**  
--------------------------------------------------  
1. 从下面的网站下载lrzsz-0.12.20.tar.gz  
   http://www.filewatcher.com/m/lrzsz-0.12.20.tar.gz.280938.0.0.html   
  
2. tar zxvf lrzsz-0.12.20.tar.gz  
3. 查看里面的INSTALL文档了解安装参数说明和细节  
4. # cd lrzsz-0.12.20  
5. # ./configure --prefix=/usr/local/lrzsz  
6. # make  
7. # make install  
8. 建立软链接  
   # cd /usr/bin  
   # ln -s /usr/local/lrzsz/bin/lrz rz   
   # ln -s /usr/local/lrzsz/bin/lsz sz  
   这样minicom就可以使用zmodem传输文件了  
  
  
  
  
  
**配置文件所在目录**  
--------------------------------------------------  
Ctrl + a     o  
  
         +-----[configuration]------+  
         | Filenames and paths      |  
         | File transfer protocols -|  
         | Serial port setup        |  
         | Modem and dialing        |  
         | Screen and keyboard      |  
         | Save setup as dfl        |  
         | Save setup as..          |  
         | Exit                     |  
         +--------------------------+  
  
+-----------------------------------------------------------------------+  
| A - Download directory : /home/zxl                                    |  
| B - Upload directory   : /tmp                                         |  
| C - Script directory   :                                              |  
| D - Script program     : runscript                                    |  
| E - Kermit program     :                                              |  
| F - Logging options                                                   |  
|                                                                       |  
|    Change which setting?                                              |  
+-----------------------------------------------------------------------+  
  
    A - download 下载的文件的存放位置             
    B - upload   从此处读取上传的文件  
    download     开发板 ---> PC  
    upload       PC     ---> 开发板   
  
    B - Upload directory   : /tmp   
    PC机向开发板发送文件，需要发送的文件在/tmp目录下(PC机上的目录)。做了此项配置后，每次向开发板发送文件时，只需输入文件名即可，无需输入文件所在目录的绝对路径  
  
  
**开发板 ---> PC**  
--------------------------------------------------  
    开发板上的(操作)命令  
    # sz filename  
    开发板上的文件filename将被传输到PC机上/home/zxl目录下  
  
  
  
  
**录制开发板输入信息:**  
--------------------------------------------------  
Ctrl + A + L   
  
    +-----------------------------------------+                   
    |Capture to which file?                   |                   
    |> /tmp/minicom.cap                       |                   
    +-----------------------------------------+