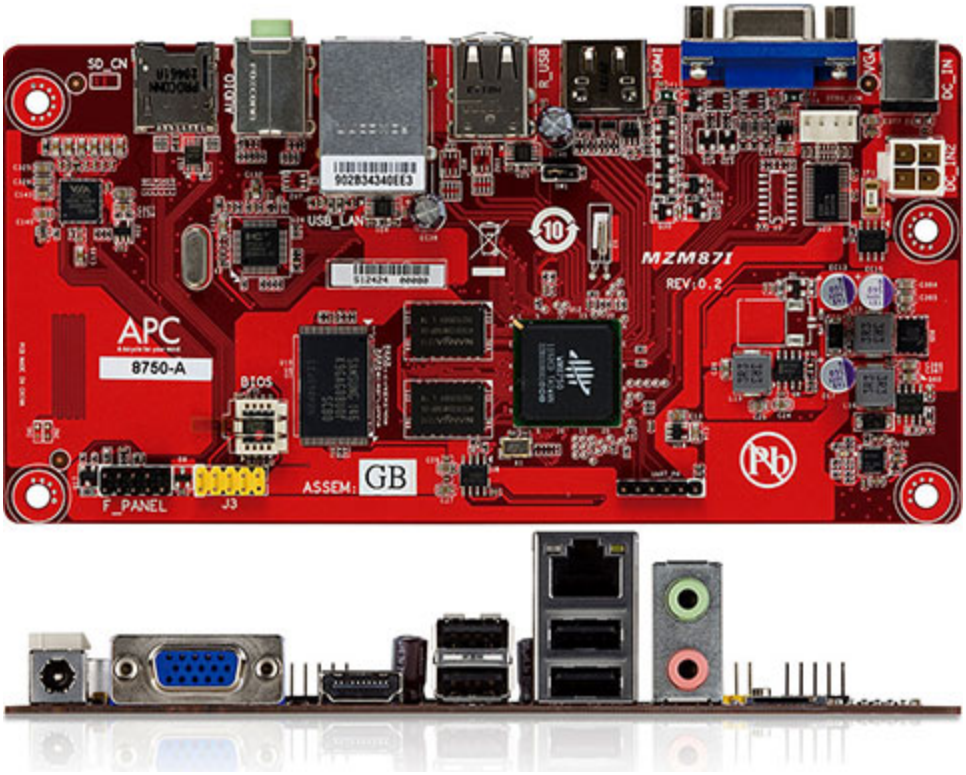

VIA APC Debian Linux
Download Image
http://www.raspbian.org/ApricotImages

? APC Debian image ?????????
??OSSLab ?????????

Install Image
1.sudo fdisk -l
  you will see the your sd card disk, like /dev/sdb

2.sudo dd if=your_image_file.img of=/dev/sdb bs=64k

used "gparted" to change the rootfs partition size (? ApricotImages?image ?2GB ????)

== arduino IDE ==

sudo apt-get install arduino arduino-core

????????arduino?avr-g++?avr-gcc?avrdude??????/usr/bin??
avrdude??????/etc/avrdude.conf?
??????API????????/usr/share/doc/arduino-core????examples?reference??
Arduino???????/usr/share/arduino/hardware/arduino/cores/arduino??
???????/usr/share/arduino/libraries?????????????

Download latest Arduino IDE, for example "arduino-1.0.3" now

http://arduino.cc/en/main/software

If you use the embedded Linux like "Linaro" etc....
Please do below actions

1.cd arduino-1.0.3
 cp /usr/lib/jni/librxtxSerial.so lib/librxtxSerial.so
 cp /usr/share/java/RXTXcomm.jar lib/RXTXcomm.jar

2.cp /usr/bin/avrdude arduino-1.0.3/hardware/tools/avrdude
 cp /etc/avrdude.conf arduino-1.0.3/hardware/tools/avrdude.conf

3.cd arduino-1.0.3/hardware/tools/avr/bin
 cp /usr/bin/avr* .

4.cd arduino-1.0.3/hardware/tools/avr/bin.gcc
 cp /usr/bin/avr-cpp .
 cp /usr/bin/avr-g++ .
 cp /usr/bin/avr-gcc .

5.cd arduino-1.0.3/hardware/tools/avr/lib/gcc/avr
 rm -rf *
 cp -r /usr/lib/gcc/avr/4.x.x .

6. cd arduino-1.0.3/
  ./arduino &

== ser2net

1.sudo apt-get install ser2net
2.sudo vim /etc/ser2net.conf
 Add below, "3001" is port number.....
 3001:raw:600:/dev/ttyUSB0:9600 NONE 1STOPBIT 8DATABITS XONXOFF LOCAL -RTSCTS

every time you reboot your board, you need to do
sudo chmod 666 /dev/ttyACM0 or
sudo chmod 666 /dev/ttyUSB0

===== mjpg-streamer =======???USB mjpeg webcam ??IP CAM ???

1.sudo apt-get install libjpeg-dev libjpeg62-dev
2.svn co https://mjpg-streamer.svn.sourceforg.../mjpg-streamer mjpg-streamer
3.cd mjpg-streamer/mjpg-streamer

4. ./start.sh
5. If you want to change the http port:
  vim plugins/output_http/output_http.c:86
  port = htons(8080); <<== change the port number

===luci==
http://luci.subsignal.org/trac/wiki/Download

sudo apt-get install lua5.1
sudo apt-get install liblua5.1-0-dev
sudo apt-get install libssl-dev
sudo apt-get install libncurses5 libncurses5-dev
sudo apt-get install bridge-utils

== lighttpd ===
Reference: http://phorum.study-area.org/index.php?topic=67673.0

1. sudo apt-get install lighttpd
2. sudo vim /etc/lighttpd/lighttpd.conf
index-file.names = ("index.php"? "index.html",
"index.lua", "index.cgi", <== ????
"index.htm", "default.htm",
" index.lighttpd.html")

?"indlsex-file.names"???????????, ???????

3. sudo vim /etc/lighttpd/conf-available/10-cgi.conf
==> ???? alias.url = ("/cgi-bin/" => "/var/www/cgi-bin/")

4. sudo lighty-enable-mod cgi
5. sudo /etc/init.d/lighttpd restart

== kernel ==

Install CROSS_COMPILE
1.wget http://www.codesourcery.com/sgpp/lit...ux-gnu.tar.bz2
2. sudo cp arm-2009q1-203-arm-none-linux-gnueabi-i686-pc-linux-gnu.tar.bz2 /usr/local
3. sudo tar -jxvf arm-2009q1-203-arm-none-linux-gnueabi-i686-pc-linux-gnu.tar.bz2
4. vi ~/.bashrc
  export PATH=$PATH:/usr/local/arm-2009q1/bin

Build Kernel

1.git clone https://github.com/apc-io/apc-8750.git
2.wget http://www.raspbian.org/ApricotImage...3_kernel.patch
3.cd apc-8750
 patch -p1 < apc_apricot_r3_kernel.patch
4.cd kernel
 a. make ARCH=arm CROSS_COMPILE=arm-none-linux-gnueabi- ubin
 b. make ARCH=arm CROSS_COMPILE=arm-none-linux-gnueabi- modules
 c. mkdir /some/where/your/folder/modules
 d. make ARCH=arm CROSS_COMPILE=arm-none-linux-gnueabi- INSTALL_MOD_PATH=/some/where/your/folder/modules modules_install

5. insert your sd card
 a. cp uzImage.bin /media/BOOT
 b. sudo cp -r /some/where/your/folder/modules/lib/modules /media/APC/lib

- VIA APC Serial/UART Access
- Building an ARM Tool chain for the VIA APC
- Exploring and Building the VIA APC U-Boot
- Building the Stock VIA APC Kernel
- Redsleeve Linux on the VIA APC