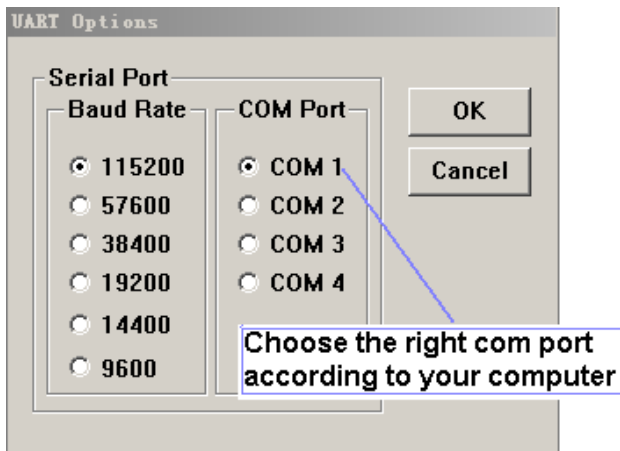


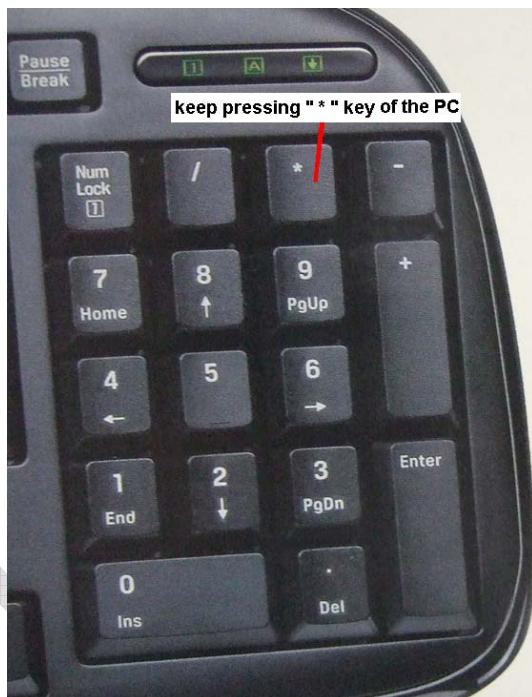
## 2、RS232 operation

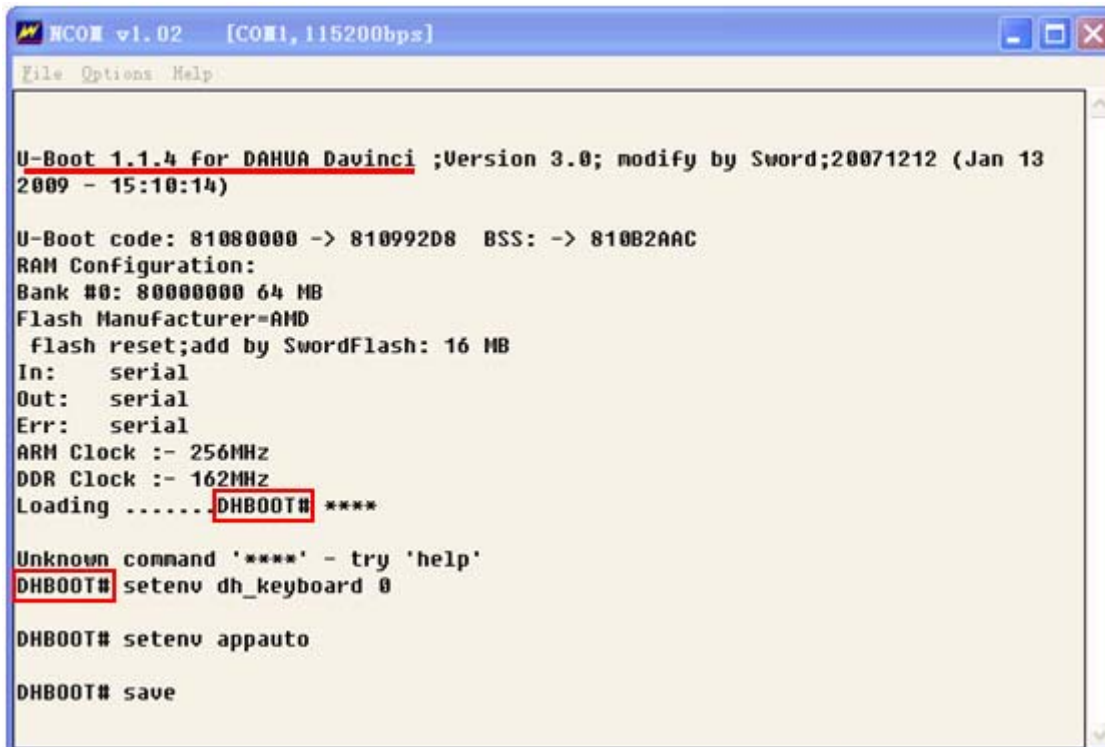
1) Run *NOCM* in your computer, the com set is as follows:



2) Enter RS232 operation

A、Power on the IP Camera and Click 3 \* (upper right on number pad) when the words **U-Boot** are on screen. (please keeping press \* to ensure the input, until you see **DHBOOT#**)





```
WCOM v1.02 [COM1, 115200bps]
File Options Help
U-Boot 1.1.4 for DAHUA Davinci ;Version 3.0; modify by Sword;20071212 (Jan 13
2009 - 15:10:14)

U-Boot code: 81080000 -> 810992D8 BSS: -> 810B2AAC
RAM Configuration:
Bank #0: 80000000 64 MB
Flash Manufacturer=AMD
Flash reset;add by SwordFlash: 16 MB
In: serial
Out: serial
Err: serial
ARM Clock :- 256MHz
DDR Clock :- 162MHz
Loading .....DHBOOT# ****

Unknown command '****' - try 'help'
DHBOOT# setenv dh_keyboard 0

DHBOOT# setenv appauto

DHBOOT# save
```

B、 Now you can enter setup interface, and will see **DHBOOT #** in the screen

### 3、 Debug state

- 1) Enter **DHBOOT #** menu by input **\*\*\***
- 2) Set the IP Camera to Debug state

When we want to check the RS232 information, you can set the IP Camera to debug state and check the problems

- A、 Type **appauto 0**  
**dh\_keyboard 0**  
**save**

then you will enter debug state and can get the RS232 information from the IP Camera

```
HCNM v1.02 [COM1,115200bps]
File Options Help

U-Boot 1.1.4 for DAHUA Davinci ;Version 3.0; modify by Sword;20071212 (Jan 13
2009 - 15:10:14) Print *** quickly after power on the IP Camera
U-Boot code: 81080000 -> 810992D8 BSS: -> 810B2AAC
RAM Configuration:
Bank #0: 80000000 64 MB
Flash Manufacturer=AMD
Flash reset;add by SwordFlash: 16 MB
In: serial
Out: serial
Err: serial
ARM Clock :- 256MHz
DDR Clock :- 162MHz
Loading .....DHBOOT# ****

Unknown command '****' - try 'help'
DHBOOT# setenv dh_keyboard 0

DHBOOT# setenv appauto

DHBOOT# save
```

B. Restart the IP Camera or type `bootd` to startup the IP Camera

```
HCNM v1.02 [COM1,115200bps]
File Options Help

In: serial
Out: serial
Err: serial
ARM Clock :- 256MHz
DDR Clock :- 162MHz
Loading .....DHBOOT# ****

Unknown command '****' - try 'help'
DHBOOT# setenv dh_keyboard 0

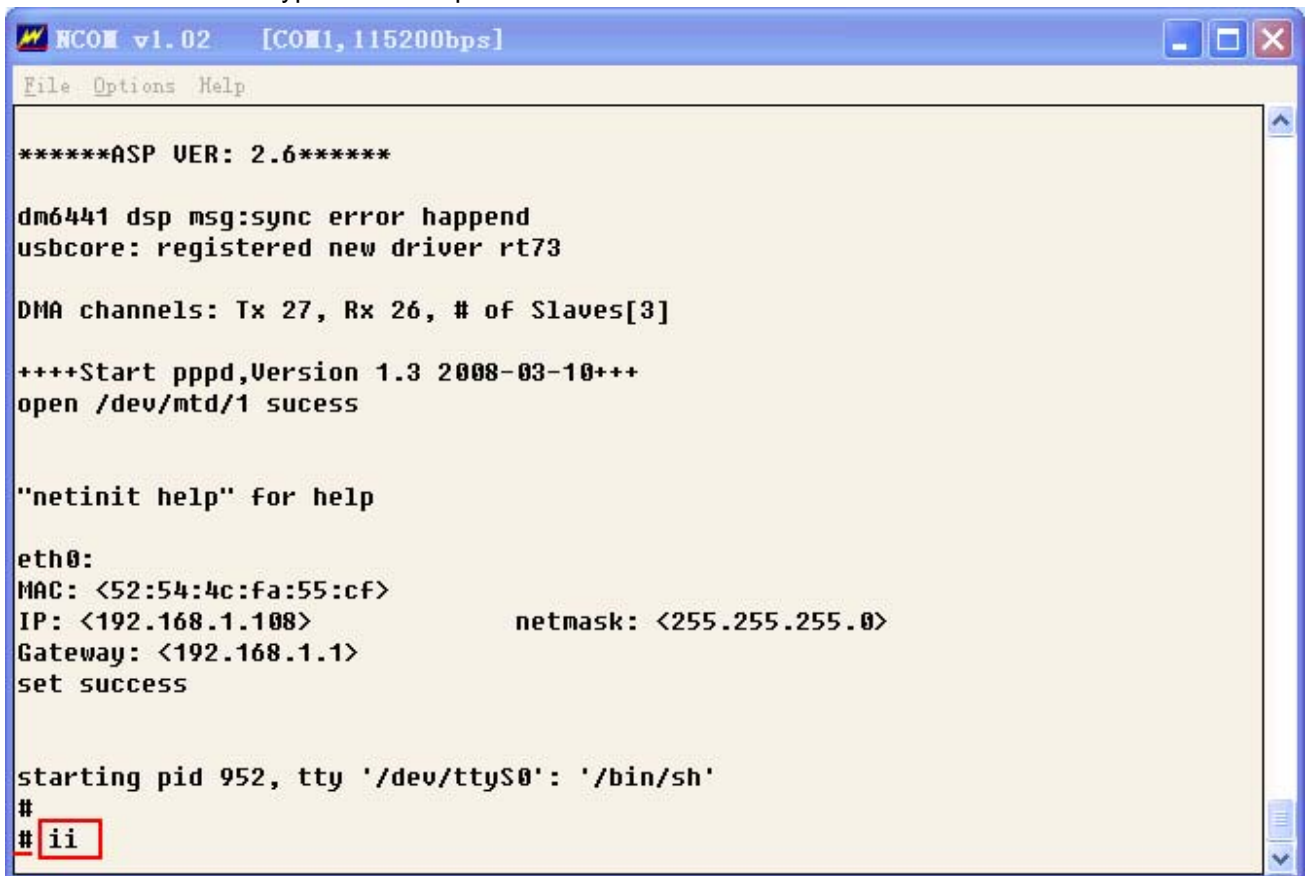
DHBOOT# setenv appauto

DHBOOT# save

Saving Environment to Flash...
Un-Protected 1 sectors
Erasing Flash...flash erase,Device=S29GL128N

Erasing sector 1 ... done.
Flash reset;add by Sword Erase Operation Completed.
Erased 1 sectors
Writing to Flash...done
Protected 1 sectors
DHBOOT# bootd
```

- C、 With debug state, the IP Camera will not auto start, and will stop at #  
You need to type ii to startup the IP Camera



```
NCOM v1.02 [COM1, 115200bps]
File Options Help

*****ASP VER: 2.6*****

dm6441 dsp msg:sync error happend
usbcore: registered new driver rt73

DMA channels: Tx 27, Rx 26, # of Slaves[3]

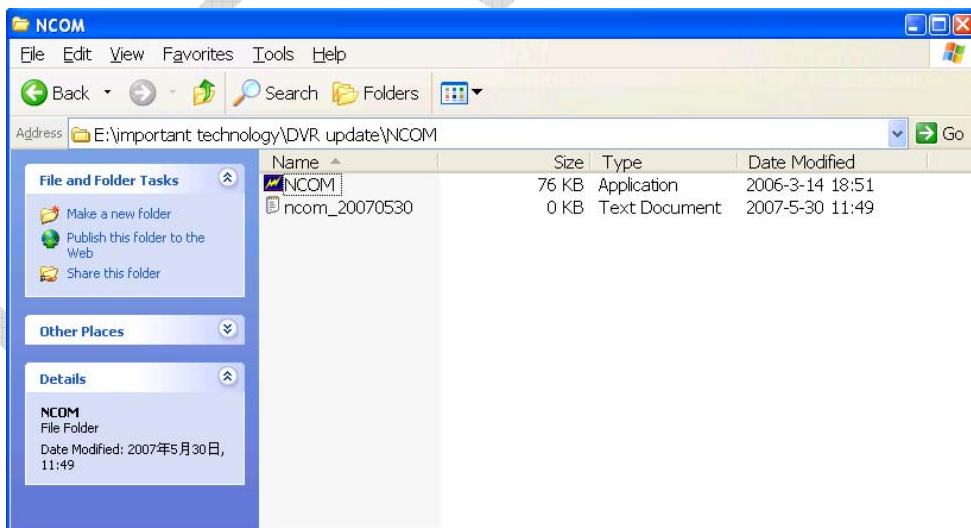
+++Start pppd,Version 1.3 2008-03-10+++
open /dev/mtd/1 success

"netinit help" for help

eth0:
MAC: <52:54:4c:fa:55:cf>
IP: <192.168.1.108> netmask: <255.255.255.0>
Gateway: <192.168.1.1>
set success

starting pid 952, tty '/dev/ttyS0': '/bin/sh'
#
# ii
```

- D、 All the information can be found in the ncom log file



### 3) Working state

**We need to set the IP Camera to this state before it is sent to customer**

For most users they do not need to enter debug mode and need the IP Camera auto start to work, so we must exit debug mode before the IP Camera is sent to the users

The operation is the same

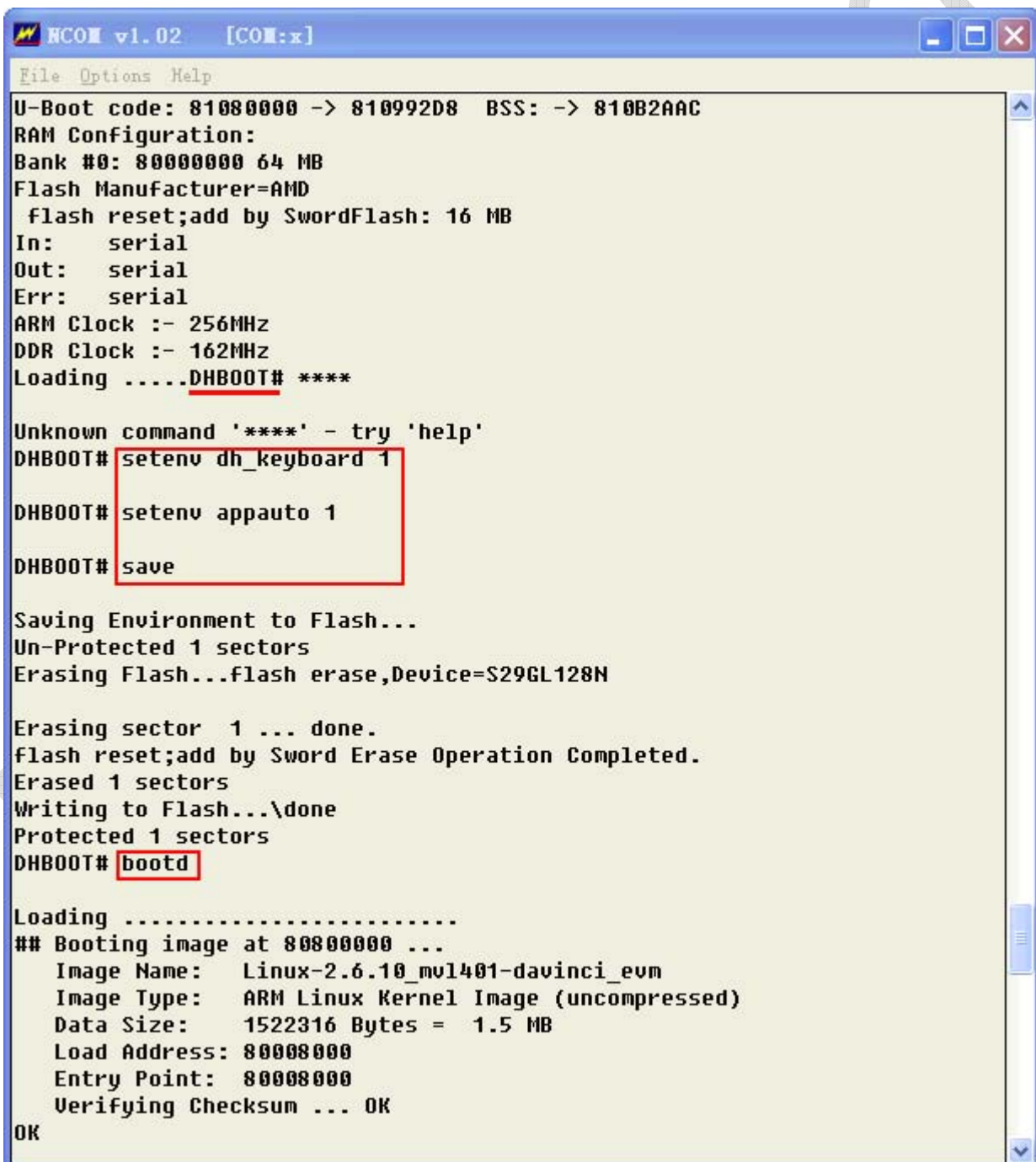
A、Restart the IP Camera, Click 3 “\*” to enter setup interface, and will see **DHBOOT #** in the screen

C、Type `appauto 1`

`dh_keyboard 1`

`save`

D、Restart the IP Camera or type `booted` to startup the IP Camera



```
NCOS v1.02 [COM:x]
File Options Help
U-Boot code: 81080000 -> 810992D8 BSS: -> 810B2AAC
RAM Configuration:
Bank #0: 80000000 64 MB
Flash Manufacturer=AMD
flash reset;add by SwordFlash: 16 MB
In: serial
Out: serial
Err: serial
ARM Clock :- 256MHz
DDR Clock :- 162MHz
Loading .....DHBOOT# ****

Unknown command '****' - try 'help'
DHBOOT# setenv dh_keyboard 1
DHBOOT# setenv appauto 1
DHBOOT# save

Saving Environment to Flash...
Un-Protected 1 sectors
Erasing Flash...flash erase,Device=S29GL128N

Erasing sector 1 ... done.
flash reset;add by Sword Erase Operation Completed.
Erased 1 sectors
Writing to Flash...\done
Protected 1 sectors
DHBOOT# booted

Loading .....
## Booting image at 80800000 ...
Image Name: Linux-2.6.10_mv1401-davinci_evm
Image Type: ARM Linux Kernel Image (uncompressed)
Data Size: 1522316 Bytes = 1.5 MB
Load Address: 80008000
Entry Point: 80008000
Verifying Checksum ... OK
OK
```