TFTP upgrade instructor

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1、Hardware Environment & Connections

- For RS232 operation, the devices are as follows: PC, RS232 Cable, DVR, network cable
 If there is only laptop computer, USB to RS232 cable is required.
- 2) Connection Mode is as follows:
 PC --- RS232 cable --- DVR
 PC--- through network --- DVR
 DVR to laptop computer

DVR to pc



2、TFTP Upgrade

1) Unzip the upgrade software to you PC

make sure there is this file

update.img

apaatoning				
🗧 software				
<u>File Edit V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp				
🚱 Back 🝷 🕥 🛛 🏂 🔎 Search 📂 Folders 🛛 📰 🔻				
Address C: \Documents and Settings\Administrator \desktop\softawre	>			🖌 🛃 Go
Name	Size	Туре	Date Modified	
File and Folder Tasks 🔹 🗟 📾 custom=x. cramfs. ing	5 KB	IMG File	2007-5-18 10:01	
Make a new folder	6,957 KB	BIN File	2007-5-18 10:01	
Dublich this folder to the	7 KB	IMG File	2007-5-18 10:01	
Web	5 KB	IMG File	2007-5-18 10:01	
🖉 🖾 u-boot. bin. img	5,765 KB	IMG File	2007-5-18 10:01	
log update. 1mg	6,949 KB	IMG File	2007-5-18 10:01	
Uther Places	95 KB	IMG File	2007-5-18 10:01	
Details V. crants ting				

2) Run TFTP server

- A、Run TFTP server: *TFTPServer_En.exe*
- B、Set the upgrade route in the TFTP server, please see the picture below



C:\Documents and Settings\Administrator\desktop\software

where the upgrade software located

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

VART Options					
Serial Port					
-Baud Rate-	-CUM Port-	<u> </u>			
• 115200	© СОМ 1	Cancel			
C 57600	🔿 СОМ 2 🔪				
C 38400	C COM 3	\mathbf{N}			
C 19200	C COM 4				
O 14400					
C 9600	Choose the right com por according to your compu				
		J			

4) See RS232 parameter

A、Restart the DVR , press " * " key of your PC keyboard 3 times (upper right on number pad) when the words Hit any key to stop autoboot are on screen.



B、Now you can enter TFTP menu, and will see DVR> in the screen

```
₩ MCOM v1.02 [COM1,115200bps]
                                                                   <u>F</u>ile <u>Options</u> Help
                                                                        *
U-Boot 1.3.1 (Sep 1 2009 - 17:24:57) - [32-bit mode]
DRAM: 256 MiB
NOR :
       16 MiB
In:
       serial
Out:
       serial
Err:
       serial
Serial: YA9FA0220010
HWADDR0: 52:54:4C:FA:75:56
Frontboard use uart 2
Product type : LE_A
STM-GMAC: MICREL found
Hit any key to stop autoboot: 0
DVR> ***
```

keep input ****** as soon as you power on the DVR

5) TFTP upgrade

For DVR with New version software

A、 Type "sip ip address of the PC" to set the TFTP server ip Type "lip ip address of the DVR" to set the DVR ip Type "save" to save



B、Restart the DVR , press * to Enter the TFTP menu again

Type "run up" to begin upgrade

```
_ 🗆 ×
₩ NCON v1.02 [CON:x]
File Options Help
Err: serial
Serial: YA9FA0220010
HWADDR0: 52:54:4C:FA:75:56
Frontboard use uart 2
Product type : LE_A
STM-GMAC: MICREL found
Hit any key to stop autoboot: 0
DUR> **
Unknown command '**' - tru 'help'
DUR><u>run up</u> Type "run up" to begin upgrade
Using MAC Address 52:54:4C:FA:75:56
STM-GMAC: MICREL found
STM-GMAC: 100Mbs full duplex link detected
TFTP from server 10.10.2.144; our IP address is 10.10.5.83
Filename 'update.img'.
Load address: 0x8000000
Loading:
```

C. The upgrade process

```
₩CON v1.02 [CON:x]
                                                                File Options Help
write : 83
                                                                      •
write : 87
write : 91
write : 94
write : 98
write : 100
done
## Checking Image at 0x803730c0 ...
   Header CRC Checking ... OK
   Image Name: linux
                 Blackfin Linux Kernel Image (gzip compressed)
   Image Type:
   Data Size: 4448256 Bytes = 4.2 MiB
   Load Address: a0460000
   Entry Point: a0a60000
   Data CRC Checking ... OK
Programing start at: 0xa0460000
write : 2
write : 5
write : 8
write : 11
write : 14
write : 17
write : 20
write : 23
write : 26
write : 29
write : 32
write : 35
write : 38
write : 41
write : 44
write : 47
write : 50
write : 53
write : 55
write : 58
write : 61
write : 64
write : 67
write : 70
write : 73
write : 76
write : 79
write : 82
write : 85
write : 88
write : 91
write : 94
write : 97
write : 100
done
## Checking Image at 0x807b1100 ...
   Header CRC Checking ... OK
   Image Name: linux
   Image Type:
                 Blackfin Linux Standalone Program (gzip compressed)
   Data Size: 1859584 Bytes = 1.8 MiB
```

D、 Wait until you see DVR> in the screen again, the whole process took about 5 to 7 minutes

```
₩ MCOM +1.02 [COM:x]
                                                                 - 🗆 ×
File Options Help
write : 91
write : 98
write : 100
done
## Checking Image at 0x80977140 ...
   Header CRC Checking ... OK
   Image Name:
                 linux
                 Blackfin Linux Standalone Program (gzip compressed)
   Image Type:
   Data Size:
                 1765376 Bytes = 1.7 MiB
   Load Address: a0c60000
   Entry Point: a0e60000
   Data CRC Checking ... OK
Programing start at: 0xa0c60000
write : 7contine!
write : 14contine!
write : 22contine!
write : 29contine!
write : 37contine!
write : 44contine!
write : 51contine!
write : 59contine!
write : 66contine!
write : 74contine!
write : 81contine!
write : 89contine!
write : 96contine!
write : 100contine!
done
DUR>
```

E、Restart the DVR (or wait the DVR will auto restart), and that's all

6) Upgrade Failure

- $1 \sqrt{1}$ To check if the RS232 serial port and serial cable is OK
- 2 To check if the network connection is OK
- 3、 To check if the mac address of the DVR is right
- 4. To check if the upgrade software is in the right folder and with right name
- 5. To check if the NCOM and TFTP software is running
- 6、 Upgrade by TFTP upgrade again

7. After several times attempt, if there is still have problems, please contact with our technical engineers.

More Details

If you still have any problems about these functions, please contact with our engineers.