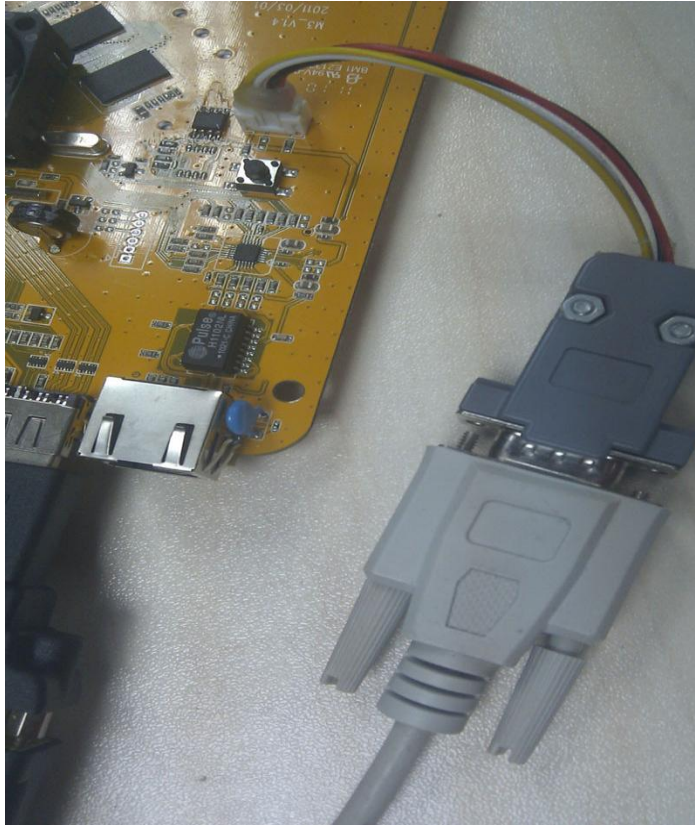
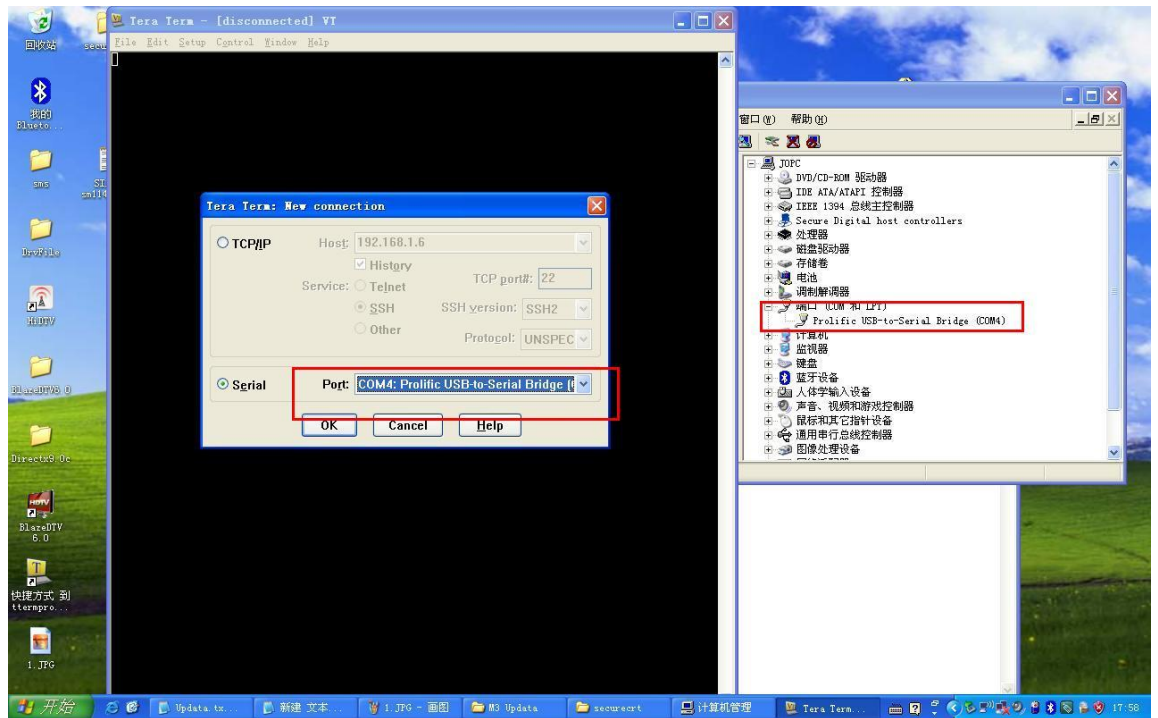


Upgrade Manual

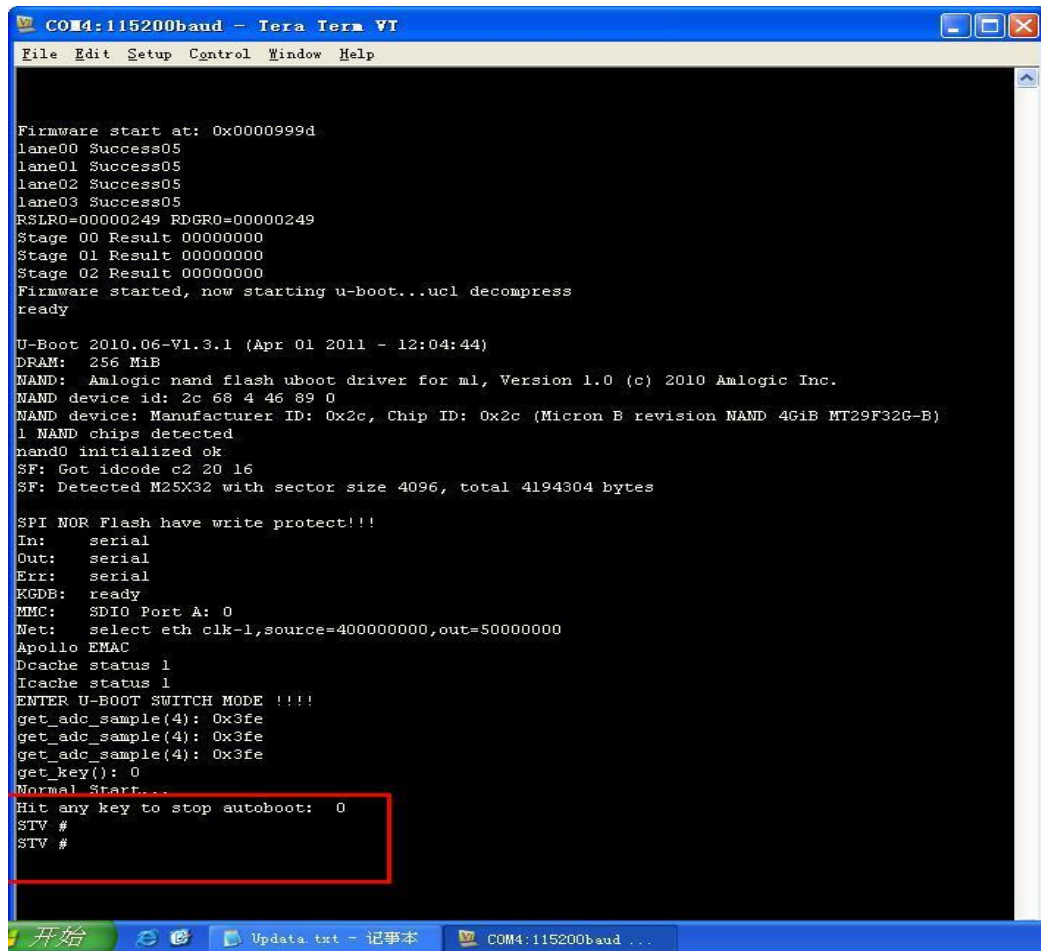
1. Connect 232 serial cable to the board



2. Run “ttermpro.exe”
Download link: <http://www.geniatech.com/down-eng/TeraTerm.rar>
3. The new connection need to be build manually, set up right COM port.



4. Please copy **“spi_M3_256.bin(for ATV300) / spi_M3_512.bin(for ATV1000 V1.5/1.51 hardware)”/ spi_M3_512F.bin(for ATV1000 V2.2 hardware)** to SD Card and plug it into SD port of the box.
5. Connect power adapter and press “Enter button of keyboard” fast on the windows of TeraTerm. U will see below information



```
COM4:115200baud - Tera Term VT
File Edit Setup Control Window Help

Firmware start at: 0x0000999d
lane00 Success05
lane01 Success05
lane02 Success05
lane03 Success05
RSLR0=00000249 RDGR0=00000249
Stage 00 Result 00000000
Stage 01 Result 00000000
Stage 02 Result 00000000
Firmware started, now starting u-boot...ucl decompress
ready

U-Boot 2010.06-V1.3.1 (Apr 01 2011 - 12:04:44)
DRAM: 256 MiB
NAND: Amlogic nand flash uboot driver for ml, Version 1.0 (c) 2010 Amlogic Inc.
NAND device id: 2c 68 4 46 89 0
NAND device: Manufacturer ID: 0x2c, Chip ID: 0x2c (Micron B revision NAND 4GiB MT29F32G-B)
1 NAND chips detected
nand0 initialized ok
SF: Got idcode c2 20 16
SF: Detected M25X32 with sector size 4096, total 4194304 bytes

SPI NOR Flash have write protect!!!
In: serial
Out: serial
Err: serial
KGDB: ready
MMC: SDIO Port A: 0
Net: select eth clk-1,source=400000000,out=500000000
Apollo EMAC
Dcache status 1
Icache status 1
ENTER U-BOOT SWITCH MODE !!!!
get_adc_sample(4): 0x3fe
get_adc_sample(4): 0x3fe
get_adc_sample(4): 0x3fe
get_key(): 0
Normal Start...
Hit any key to stop autoboot: 0
STV #
STV #
```

6. Input the first command "mmcinfo;fatload mmc 0:1 82000000 spi_M3_256.bin(for ATV300) / spi_M3_512.bin(for ATV1000 V1.5/1.51 hardware)" / spi_M3_512F.bin(for ATV1000 V2.2 hardware);", and then press [Enter](#). It will be read in memory.

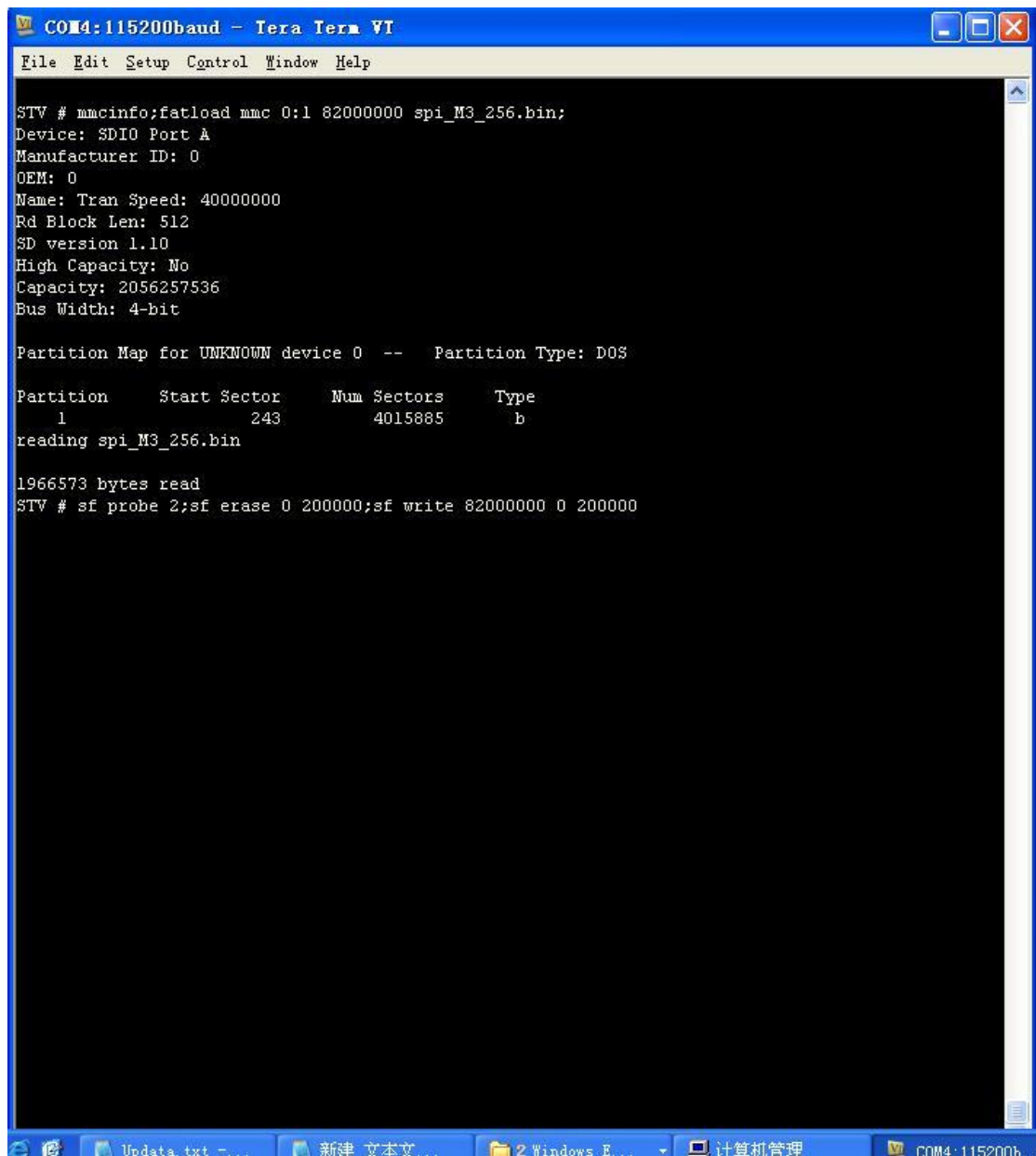
```
COM4:115200baud - Tera Term VT
File Edit Setup Control Window Help

Firmware start at: 0x0000999d
lane00 Success05
lane01 Success05
lane02 Success05
lane03 Success05
RSLR0=00000249 RDGR0=00000249
Stage 00 Result 00000000
Stage 01 Result 00000000
Stage 02 Result 00000000
Firmware started, now starting u-boot...ucl decompress
ready

U-Boot 2010.06-V1.3.1 (Apr 01 2011 - 12:04:44)
DRAM: 256 MiB
NAND: Amlogic nand flash uboot driver for ml, Version 1.0 (c) 2010 Amlogic Inc.
NAND device id: 2c 68 4 46 89 0
NAND device: Manufacturer ID: 0x2c, Chip ID: 0x2c (Micron B revision NAND 4GiB MT29F32G-B)
1 NAND chips detected
nand0 initialized ok
SF: Got idcode c2 20 16
SF: Detected M25X32 with sector size 4096, total 4194304 bytes

SPI NOR Flash have write protect!!!
In: serial
Out: serial
Err: serial
KGDB: ready
MMC: SDIO Port A: 0
Net: select eth clk-1,source=400000000,out=500000000
Apollo EMAC
Dcache status 1
Icache status 1
ENTER U-BOOT SWITCH MODE !!!!
get_adc_sample(4): 0x3fe
get_adc_sample(4): 0x3fe
get_adc_sample(4): 0x3fe
get_key(): 0
Normal Start...
Hit any key to stop autoboot: 0
STV #
STV # mmcinfo;fatload mmc 0:1 82000000 spi_M3_256.bin;
```

7. And input the second command “sf probe 2;sf erase 0 200000;sf write 82000000 0 200000”
It will write SPI Flash



The screenshot shows a Tera Term VI terminal window with a blue title bar and a menu bar (File, Edit, Setup, Control, Window, Help). The terminal output is as follows:

```
STV # mmcinfo;fatload mmc 0:1 82000000 spi_M3_256.bin;
Device: SDIO Port A
Manufacturer ID: 0
OEM: 0
Name: Tran Speed: 40000000
Rd Block Len: 512
SD version 1.10
High Capacity: No
Capacity: 2056257536
Bus Width: 4-bit

Partition Map for UNKNOWN device 0 -- Partition Type: DOS

Partition      Start Sector      Num Sectors      Type
    1              243           4015885          b
reading spi_M3_256.bin

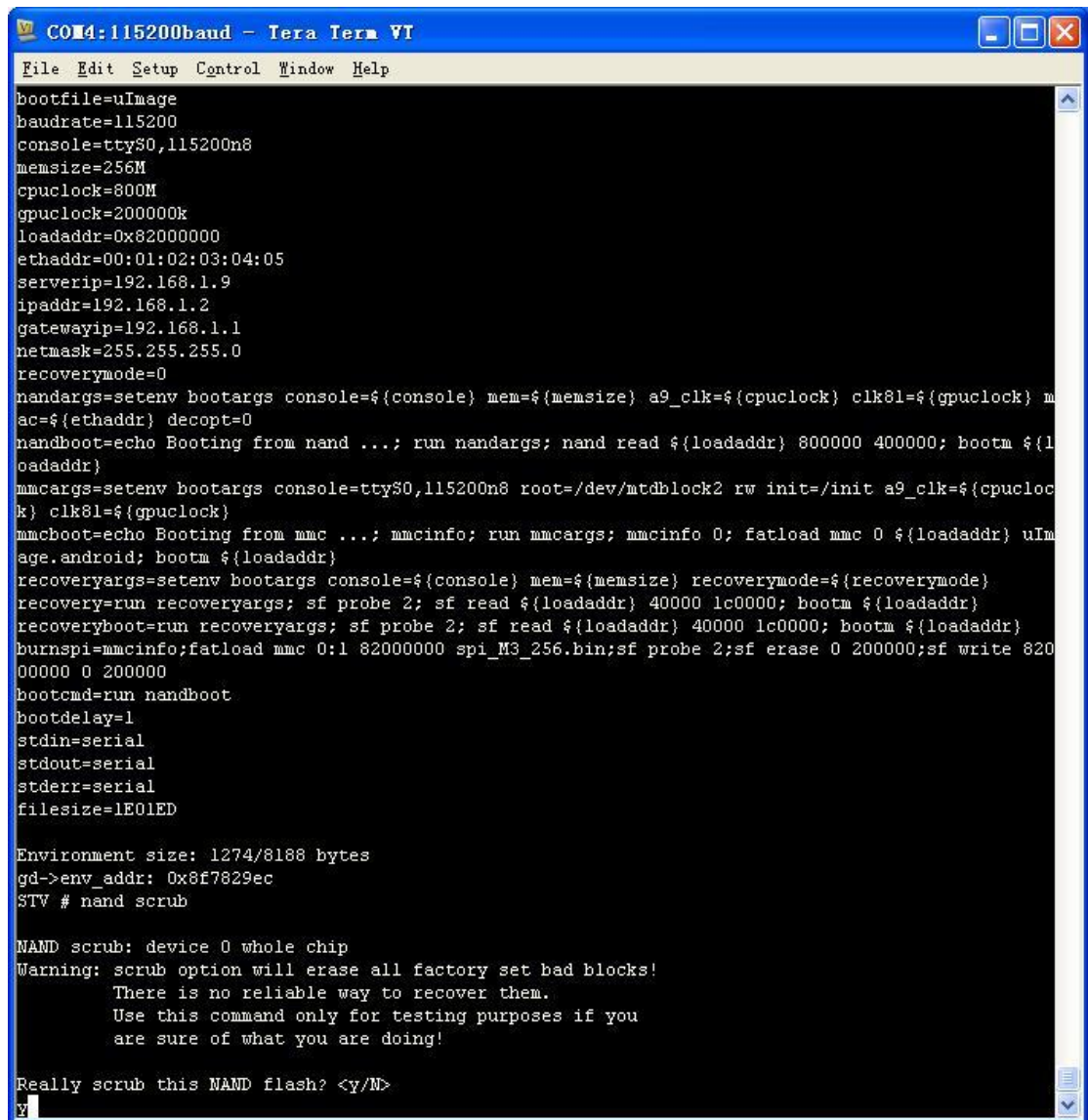
1966573 bytes read
STV # sf probe 2;sf erase 0 200000;sf write 82000000 0 200000
```

The Windows taskbar at the bottom shows several open applications: 'Update.txt', '新建 文本文...', '2 Windows E...', '计算机管理', and the active terminal window 'COM4:115200b...'.

8. Input the third command “**nand scrub**”, It will erase contents of NAND FLASH

```
COM4:115200baud - Tera Term VT
File Edit Setup Control Window Help
Erase:1fe000
Erase:1ff000
SF: MXIC: Successfully erased 2097152 bytes @ 0x0
STV # printenv
hostname=arm_m1
chipname=8726m
machid=2957
boardname=m1_m3
ethact=Apollo EMAC
bootfile=uImage
baudrate=115200
console=ttyS0,115200n8
memsize=256M
cpuclock=800M
gpuclock=200000k
loadaddr=0x82000000
ethaddr=00:01:02:03:04:05
serverip=192.168.1.9
ipaddr=192.168.1.2
gatewayip=192.168.1.1
netmask=255.255.255.0
recoverymode=0
mandargs=setenv bootargs console=${console} mem=${memsize} a9_clk=${cpuclock} clk81=${gpuclock} m
ac=${ethaddr} decopt=0
mandboot=echo Booting from nand ...; run mandargs; nand read ${loadaddr} 800000 400000; bootm ${l
oadaddr}
mmcargs=setenv bootargs console=ttyS0,115200n8 root=/dev/mtdblock2 rw init=/init a9_clk=${cpucloc
k} clk81=${gpuclock}
mmcboot=echo Booting from mmc ...; mmcinfo; run mmcargs; mmcinfo 0; fatload mmc 0 ${loadaddr} uIm
age.android; bootm ${loadaddr}
recoveryargs=setenv bootargs console=${console} mem=${memsize} recoverymode=${recoverymode}
recovery=run recoveryargs; sf probe 2; sf read ${loadaddr} 40000 1c0000; bootm ${loadaddr}
recoveryboot=run recoveryargs; sf probe 2; sf read ${loadaddr} 40000 1c0000; bootm ${loadaddr}
burnspi=mmcinfo;fatload mmc 0:1 82000000 spi_M3_256.bin;sf probe 2;sf erase 0 200000;sf write 820
00000 0 200000
bootcmd=run nandboot
bootdelay=1
stdin=serial
stdout=serial
stderr=serial
filesize=1E01ED

Environment size: 1274/8188 bytes
gd->env_addr: 0x8f7829ec
STV # nand scrub
```



```
COM4:115200baud - Tera Term VT
File Edit Setup Control Window Help
bootfile=uImage
baudrate=115200
console=ttyS0,115200n8
memsize=256M
cpuclock=800M
gpuclock=200000k
loadaddr=0x82000000
ethaddr=00:01:02:03:04:05
serverip=192.168.1.9
ipaddr=192.168.1.2
gatewayip=192.168.1.1
netmask=255.255.255.0
recoverymode=0
nandargs=setenv bootargs console=${console} mem=${memsize} a9_clk=${cpuclock} clk81=${gpuclock} m
ac=${ethaddr} deopt=0
nandboot=echo Booting from nand ...; run nandargs; nand read ${loadaddr} 800000 400000; bootm ${l
oadaddr}
mmcargs=setenv bootargs console=ttyS0,115200n8 root=/dev/mtdblock2 rw init=/init a9_clk=${cpucloc
k} clk81=${gpuclock}
mmcboot=echo Booting from mmc ...; mmcinfo; run mmcargs; mmcinfo 0; fatload mmc 0 ${loadaddr} uIm
age.android; bootm ${loadaddr}
recoveryargs=setenv bootargs console=${console} mem=${memsize} recoverymode=${recoverymode}
recovery=run recoveryargs; sf probe 2; sf read ${loadaddr} 40000 1c0000; bootm ${loadaddr}
recoveryboot=run recoveryargs; sf probe 2; sf read ${loadaddr} 40000 1c0000; bootm ${loadaddr}
burnspi=mmcinfo;fatload mmc 0:1 82000000 spi_M3_256.bin;sf probe 2;sf erase 0 200000;sf write 820
00000 0 200000
bootcmd=run nandboot
bootdelay=1
stdin=serial
stdout=serial
stderr=serial
filesize=1E01ED

Environment size: 1274/8188 bytes
gd->env_addr: 0x8f7829ec
STV # nand scrub

NAND scrub: device 0 whole chip
Warning: scrub option will erase all factory set bad blocks!
        There is no reliable way to recover them.
        Use this command only for testing purposes if you
        are sure of what you are doing!

Really scrub this NAND flash? <y/N>
y
```

9. Un-plug power adapter and SD Card
10. Copy “[update.img](#)” you downloaded to SD card, then connect SD card to the box
11. Reconnect the power adapter, you will see upgraded screen.
12. It will restart automatically after finished.