UP-CUP IOT-4412-II 型出厂程序烧写手册 (LINUX)V2.0

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(LINUX)V2.0

出厂程序烧写内容如下：

- 更新 BOOTLOADER 文件(普通用户无需更改)；
- 使用 fastboot 软件烧写内核映象；
- 使用 fastboot 软件烧写文件系统；

注：出厂烧写文件镜像及工具存放在光盘的 IMG 文件夹下！且 u-boot 一般用户无需更改，该烧写步骤可以略过。

烧写出厂程序的软硬件环境

- 软件：超级终端、fastboot.exe、fastboot.bat、WinImage.exe
- 驱动：USB 驱动
- 硬件：IOT-4412-II 型平台、12V 电源线、串口线、USB 数据线

1、 制作 TF 卡启动盘

UP-CUP IOT-4412-II 型平台支持从 TF 卡启动。而制作可用于启动的 TF 卡，即烧写 u-boot 到 TF 卡中。出厂默认已烧写 u-boot 到 iNAND 中，若无需从 TF 卡启动开发板，则可跳过此步骤。

备注：在制作 TF 卡启动盘之前先将 TF 卡数据进行备份，否则将导致 TF 卡数据丢失。

☆ 制作 TF 卡启动盘

在 Windows XP/Win7 系统下，使用磁盘工具 winimage.exe 制作 TF 启动盘,具体步骤如下：

1) 把 TF 卡读卡器插在 PC 机的 USB 口中。

2) 打开光盘 TOOLS 目录下的磁盘工具 winimage.exe，选择 OK，如图 1 所示：

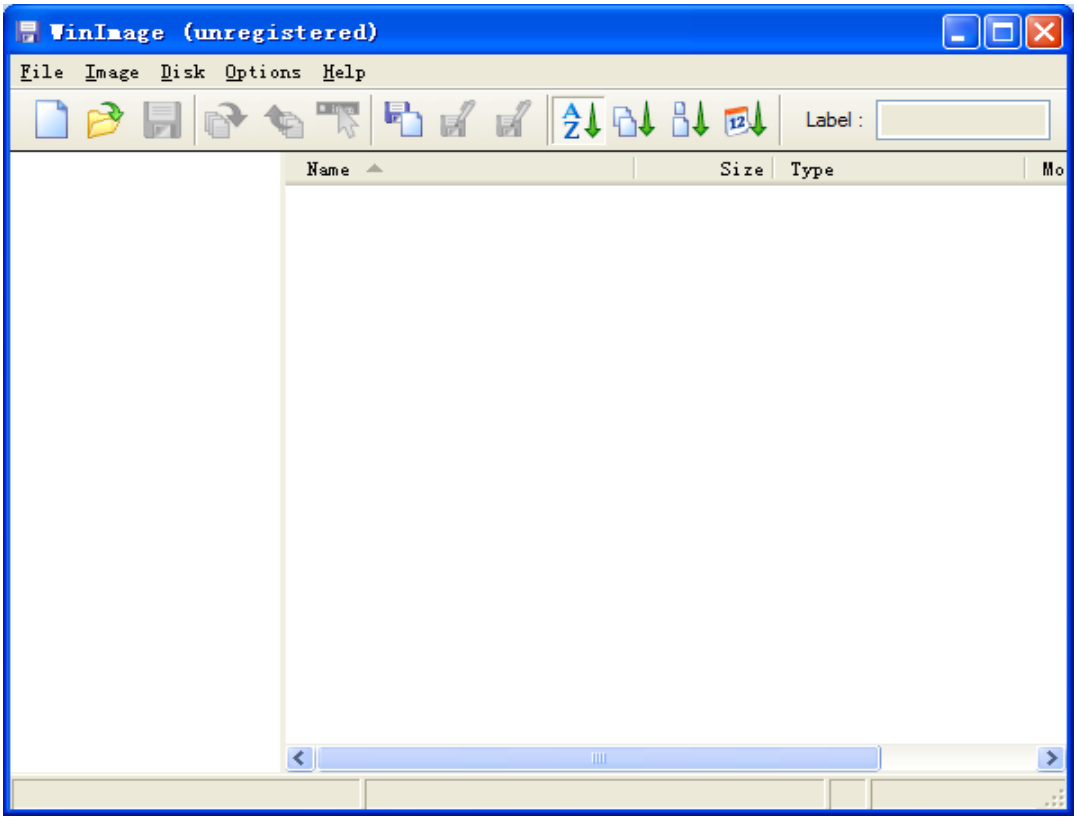

图 1

3） 选择 Disk -->Restore Virtual Hard Disk image on physical drive...，如图 2 所示：

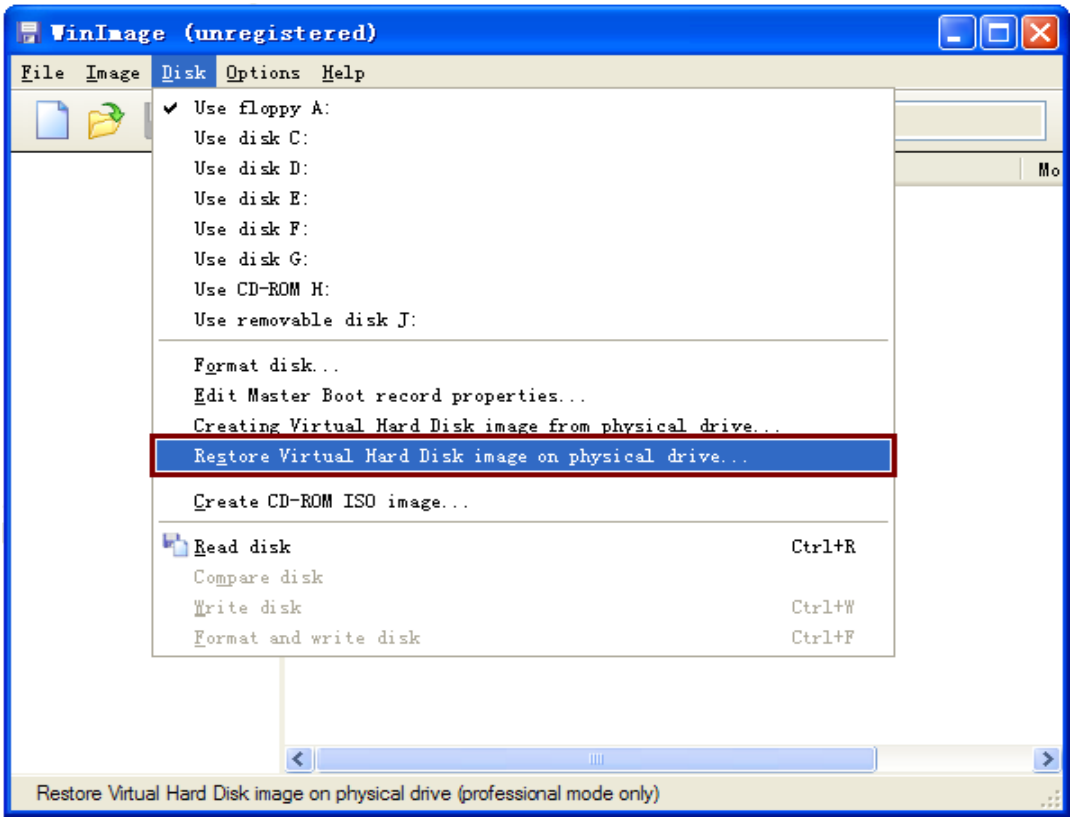

图 2

4) 在弹出的对话框，选择接入的 TF 卡，点击“OK”，如图 3 所示：

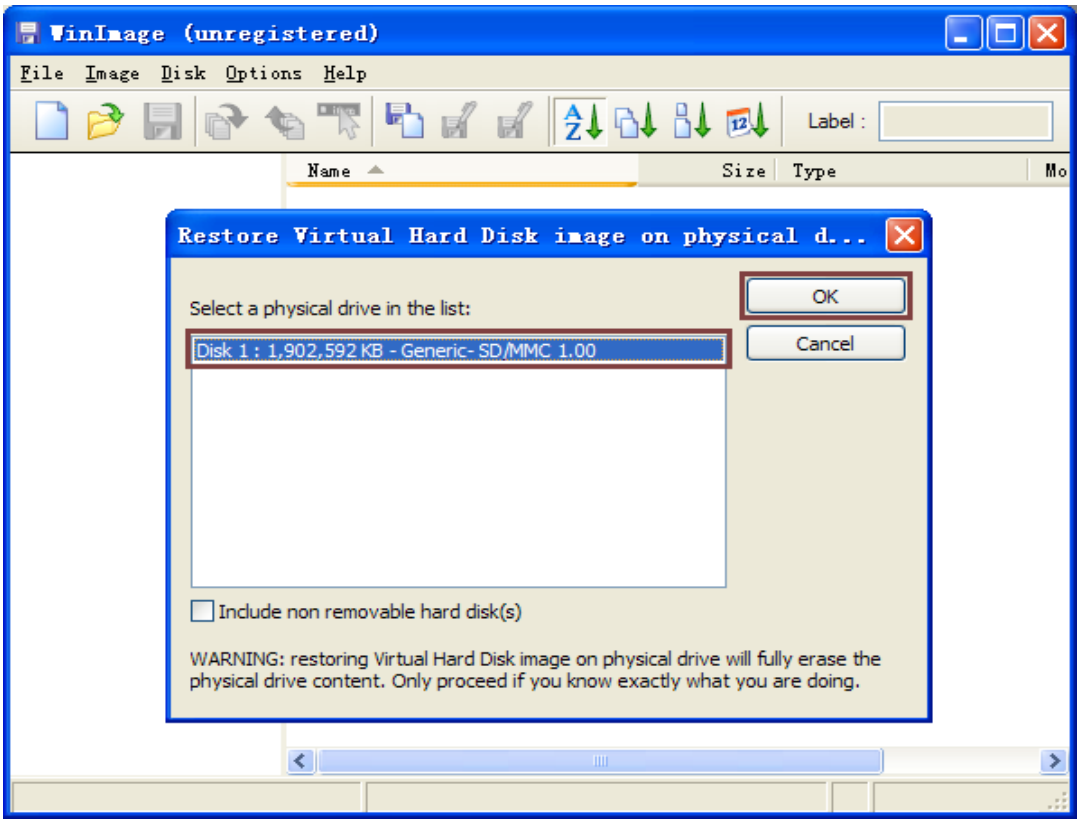

图 3

5) 浏览、选择光盘 IMG 目录下的 u-boot-sd.vhd 文件，点击“打开”按钮，如图 4 所示：

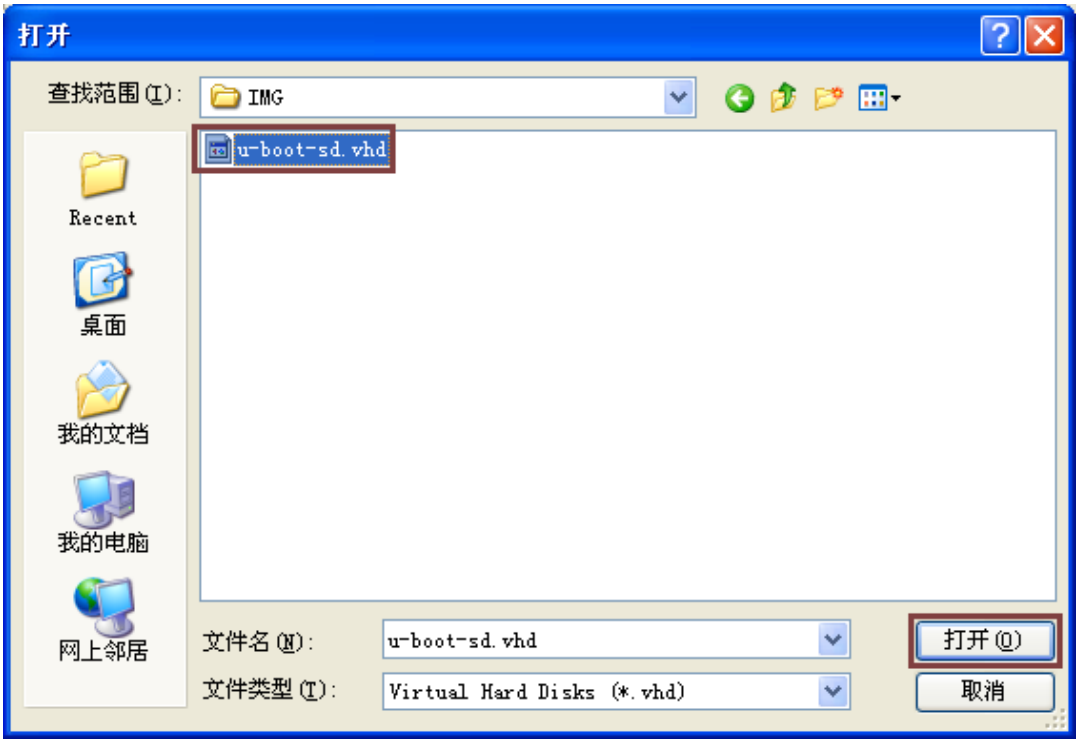

图 4

6) 在弹出的对话框，选择“是”，将 u-boot-sd.vhd 文件烧写至 TF 卡，如图 5、图 6 所示：

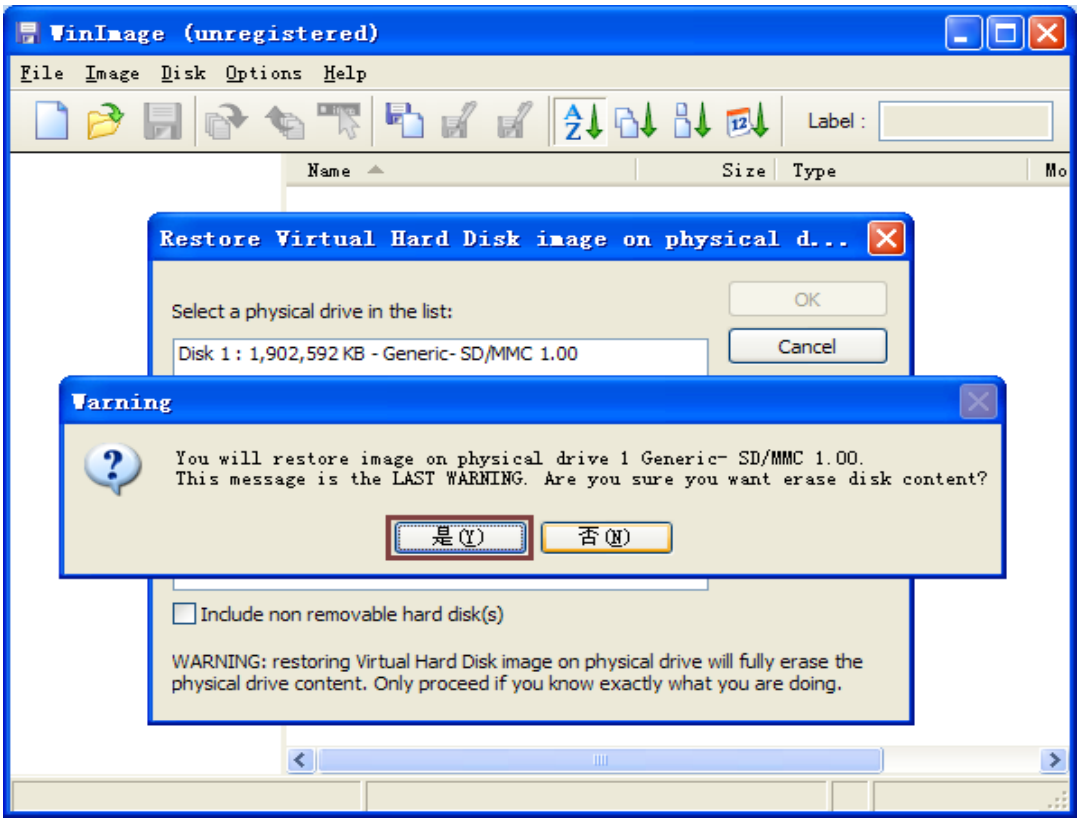

图 5

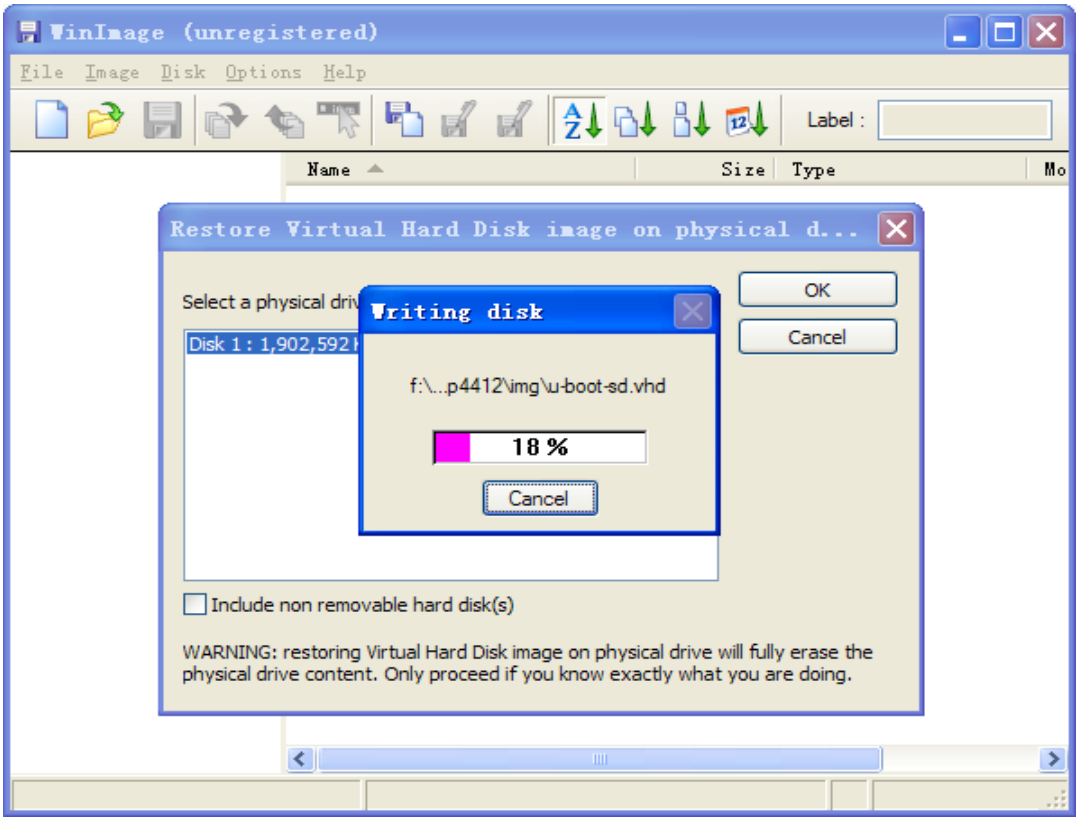

图 6

这样就制做好可以启动的 TF 卡，出厂默认未将 TF 制作为启动盘。注：此种方法适合在开发板为裸机情况下初次烧写 BOOTLOADER 文件内容到 iNAND。

2、 烧写 BOOTLOADER(TF 卡启动)

☆ iNAND 磁盘分区

1) 连线：

将产品附带串口线一端连接到 PC 机端串口,另一端连接到 UP-CUP IOT-4412-II 型平台串口 0(RS232-0 即开发板左侧起靠近网口的串口)上。

将产品附带 USB 数据线连接 PC 机 USB 口与 UP-CUP IOT-4412-II 型平台 OTG 接口。

2) 跳线：

将 UP-CUP IOT-4412-II 网关核心板上跳线设置成 TF 卡启动模式，如下：

OM5 OM4 OM3 OM2 OM1:0 1 0 1 0

备注：核心板内侧为 1，外侧为 0，跳线模式出厂已经默认跳到 iNAND 模式，根据需要更改。

3) 将 TF 卡插入开发板 SD0 上

利用 WindowsXP 系统自带串口程序“超级终端”连接串口，监视控制开发板信息，或使用光盘 TOOLS 目录下附带的 Xmanager 软件连接串口皆可。

以下以使用超级终端工具为例，通过该软件登陆 UP-CUP IOT-4412-II 型系统串口终端。开始—>程序—>附件—>通信—>超级终端，新建串口终端，在属性设置中配置串口波特率为 115200，数据流控制为无，等如图 7 所示：

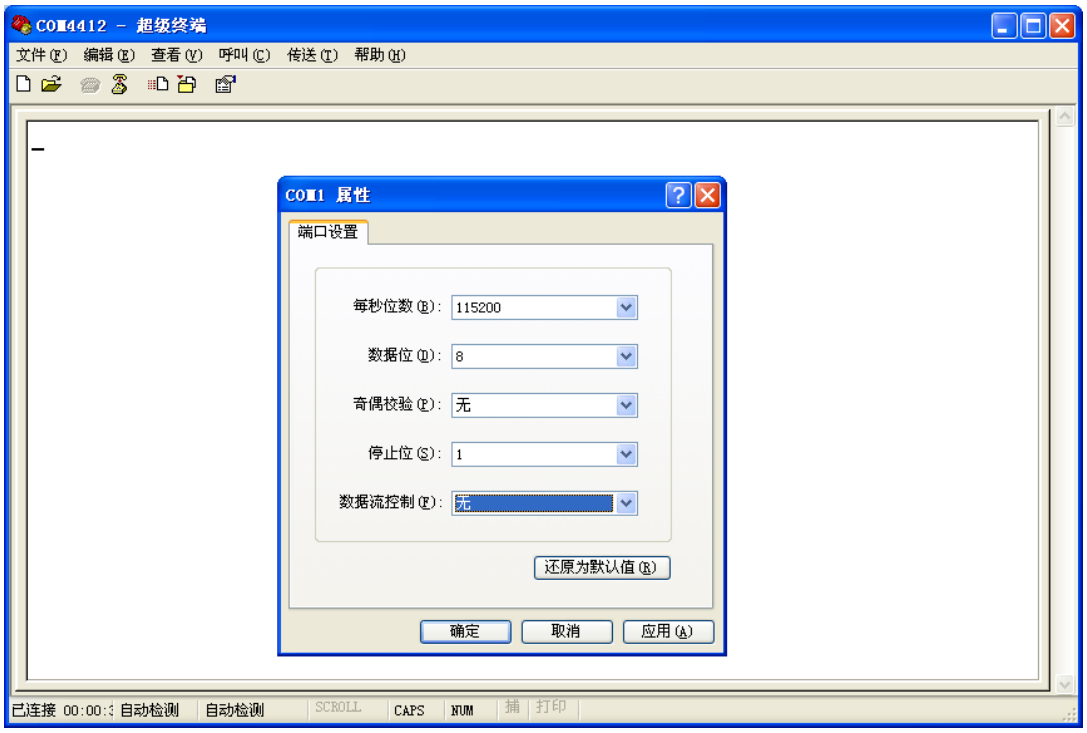

图 7

确定连接后，连接电源。按下 UP-CUP IOT-4412-II 型平台左上角 POWER 电源键，系统上电。超级终端进入开发板的 U-BOOT 功能界面，按下回车，进入 U-BOOT 界面如图 8 所示：

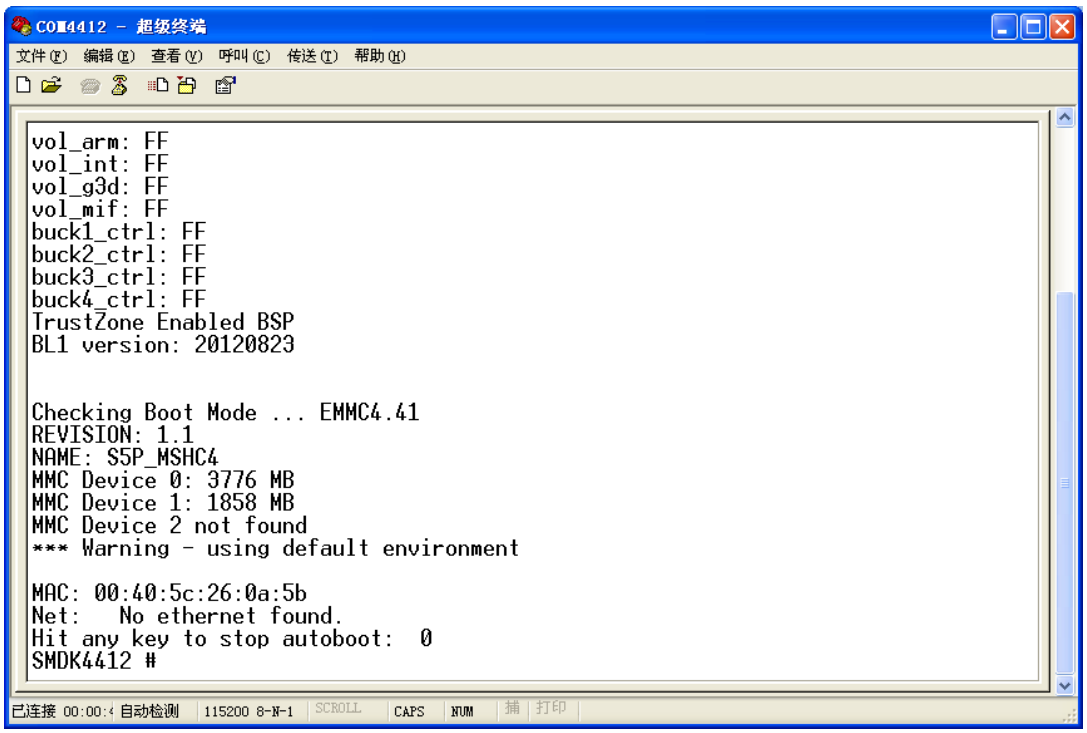

图 8

4) 擦除 iNAND

执行以下命令，擦除 iNAND 引导区、用户数据区数据。

```
mmc erase boot 1 0 0;mmc erase user 1 0 0
```

5) iNAND 磁盘分区

执行以下命令，将 iNAND 磁盘分区。

```
fdisk -c 1 300 3000 300;
```

300 3000 300 分别表示：系统分区、用户分区、缓存分区的大小。

☆ 安装 USB 驱动

1) 连线：

将产品附带串口线一端连接到 PC 机端串口,另一端连接到 UP-CUP IOT-4412-II 型平台串口 0(RS232-0 即开发板左侧起靠近网口的串口)上。

将产品附带 USB 数据线连接 PC 机 USB 口与 UP-CUP IOT-4412-II 型平台 OTG 接口。

2) 跳线：

将 UP-CUP IOT-4412-II 网关核心板上跳线设置成 TF 卡启动模式，如下：

OM5 OM4 OM3 OM2 OM1: 1 1 1 0 0

备注：核心板内侧为 1，外侧为 0，跳线模式出厂已经默认跳到 iNAND 模式，根据需要更改。

3) 将 TF 卡插入开发板 SD0 上

4) 安装 USB 驱动：

利用 WindowsXP 系统自带串口程序“超级终端”连接串口，监视控制开发板信息，或使用光盘 TOOLS 目录下附带的 Xmanager 软件连接串口皆可。

以下以使用超级终端工具为例，通过该软件登陆 UP-CUP IOT-4412-II 型系统串口终端。开始—>程序—>附件—>通信—>超级终端，新建串口终端，在属性设置中配置串口波特率为 115200，数据流控制为无，等如图 9 所示：

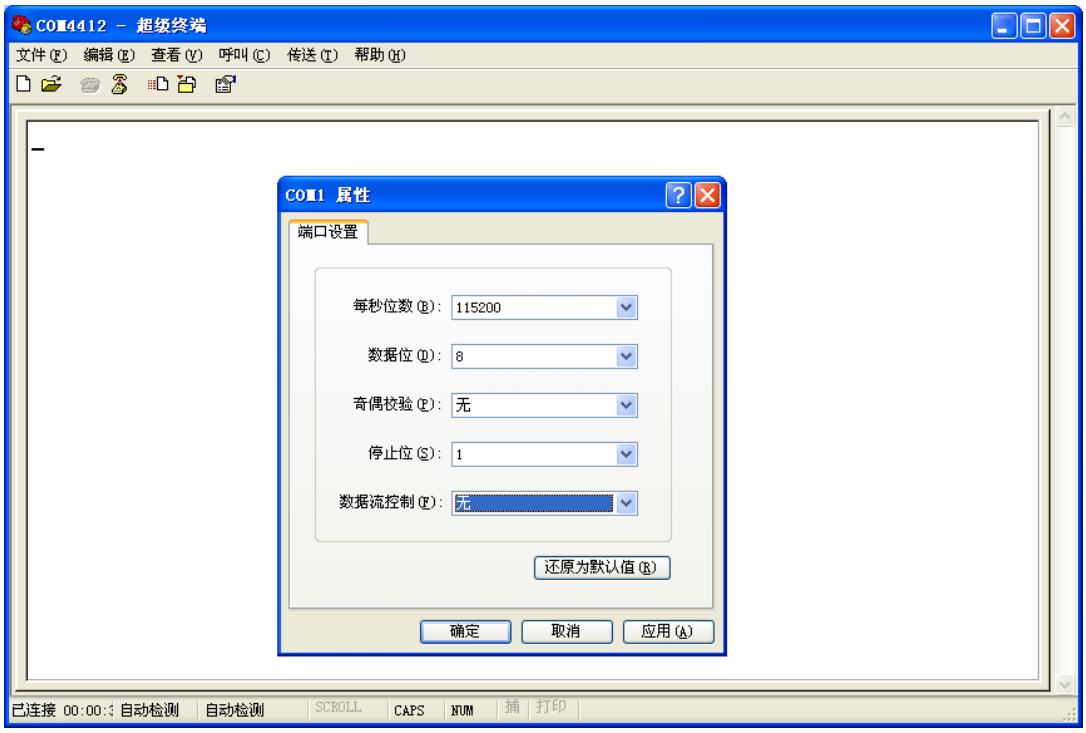

图 9

确定连接后，连接电源。按下 UP-CUP IOT-4412-II 型平台左上角 POWER 电源键，系统上电。超级终端进入开发板的 U-BOOT 功能界面，按下回车，进入 U-BOOT 界面如图 10 所示：

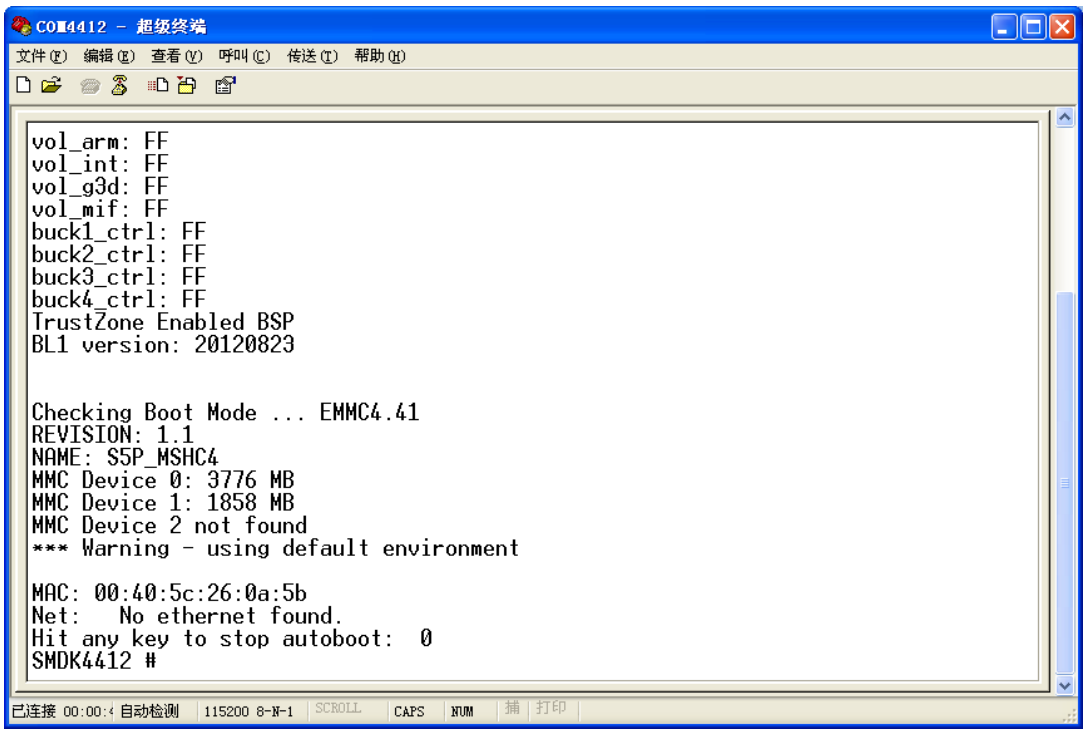

图 10

在 u-boot 界面下，输入 fastboot 命令，弹出“新硬件向导”界而如图 11 所示：

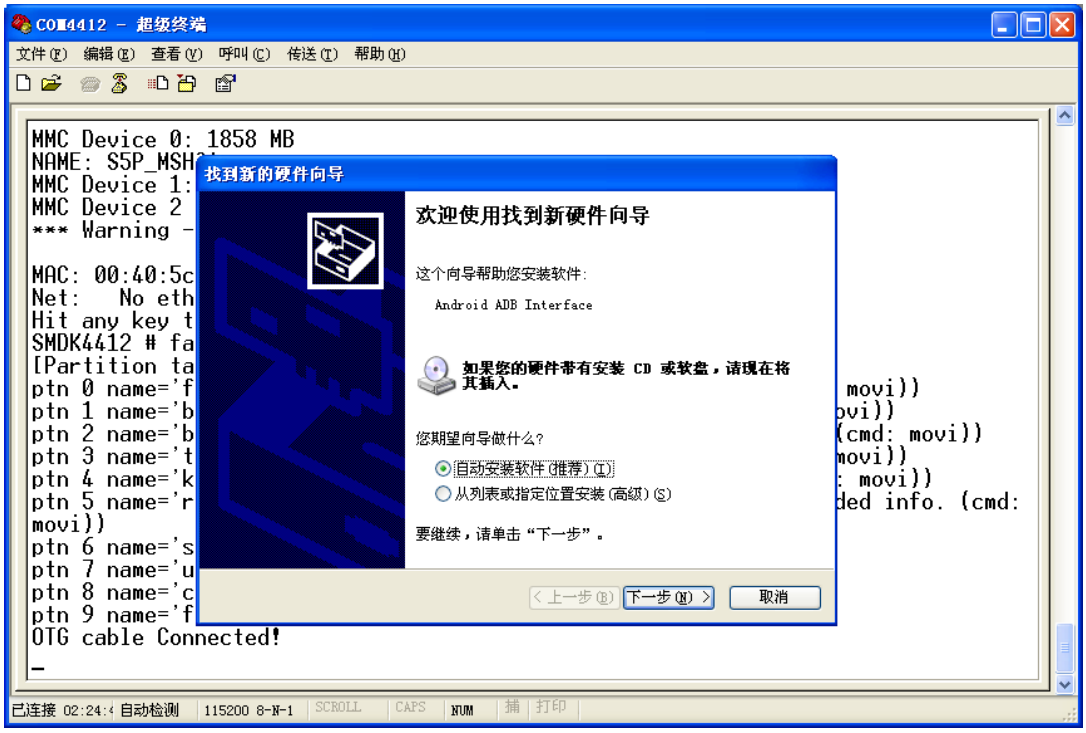

图 11

浏览、选择光盘/TOOLS/usb_driver 如图 12 所示：

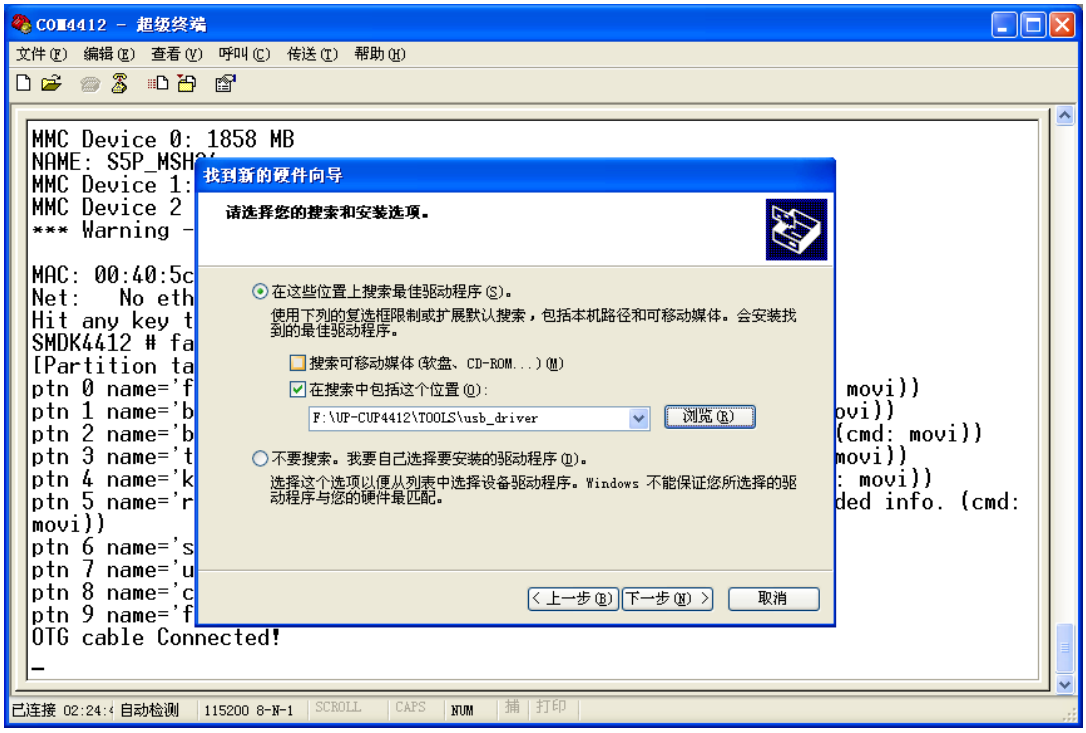

图 12

安装完驱动后，在设备管理器中，可查看到设备。

5) 烧写 u-boot.bin：

双击光盘/IMG/fastboot.bat 文件，如图 13 所示：

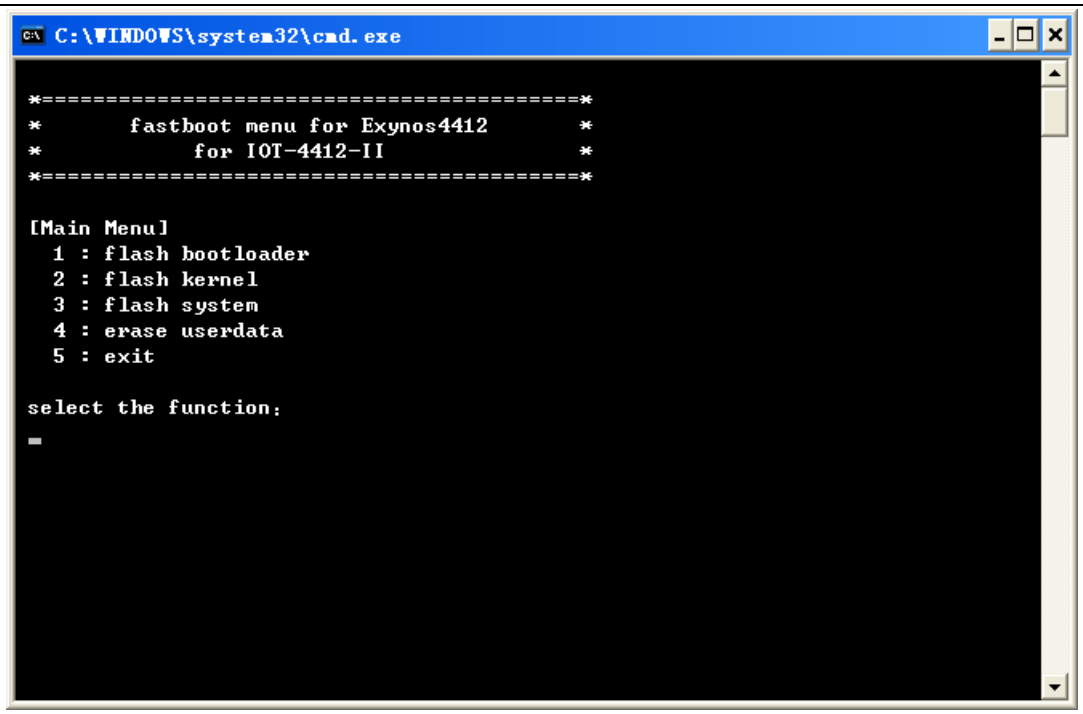

图 13

选择‘1’bootloader 烧写 u-boot，如图 14、图 15 所示:

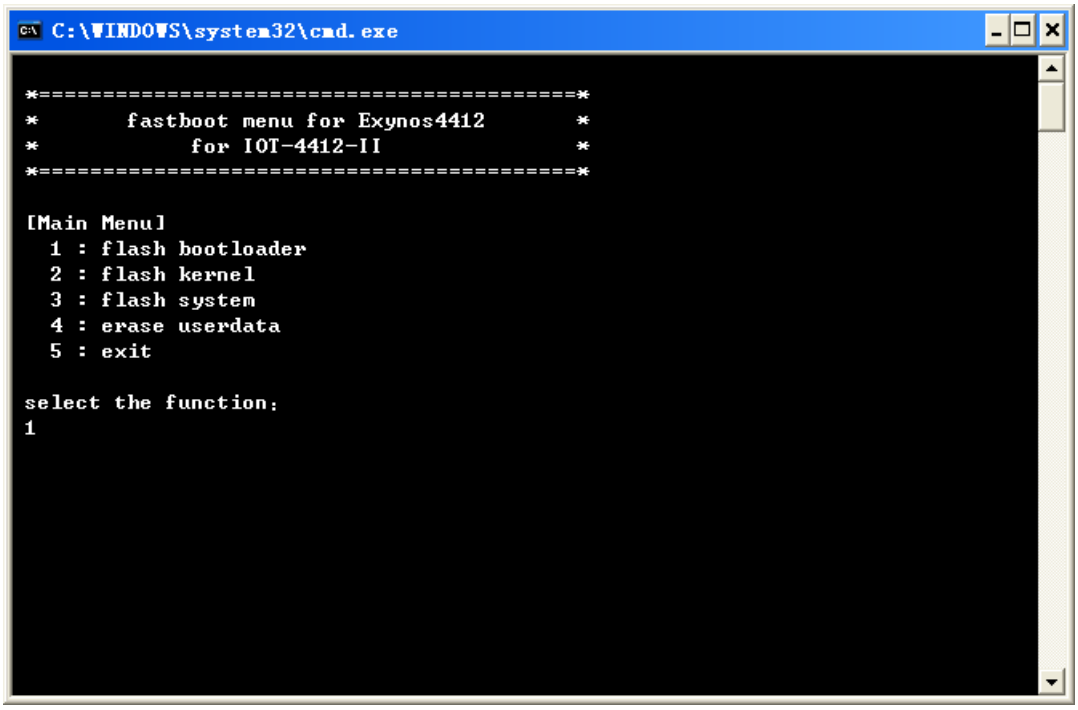

图 14

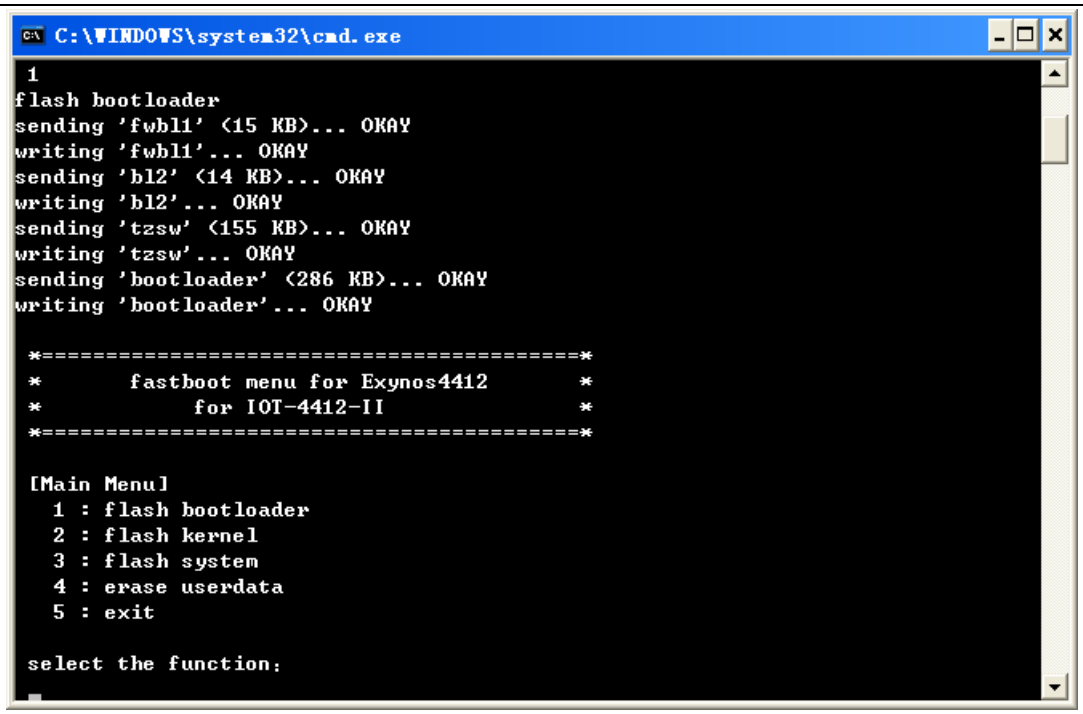

图 15

注：在烧写 u-boot.bin 之前，确保 fastboot.exe、fastboot.bat、bl1.bin、bl2.bin、u-boot.bin、tzsw.bin 在同一目录。 此外需要通过步骤 3 烧写系统。

3、 烧写系统(USB 数据线烧写)

☆ 连线：

将产品附带串口线一端连接到 PC 机端串口，另一端连接到 UP-CUP IOT-4412-II 型系统串口 0(RS232-0 即开发板左侧起靠近网口的串口)上。

将产品附带 USB 数据线连接 PC 机 USB 口与 UP-CUP IOT-4412-II 型平台 OTG 接口。

☆ 跳线：

将 UP-CUP IOT-4412-II 核心板上跳线设置成 iNAND 烧写模式，如下：

OM5 OM4 OM3 OM2 OM1: 1 1 1 0 0

备注：核心板内侧为 1，外侧为 0，跳线模式出厂已经默认跳到 iNAND 启动模式。

(1) 利用 WindowsXP 系统自带串口程序“超级终端”连接串口，监视控制开发板信息，或使用光盘 TOOLS 目录下附带的 Xmanager 软件连接串口皆可。

以下以使用超级终端工具为例，通过该软件登陆 UP-CUP IOT-4412-II 型系统串口终端。开始—>程序—>附件—>通信—>超级终端，新建串口终端，在属性设置中配置串口波特率为 115200，数据流控制为无，等如图 16 所示：

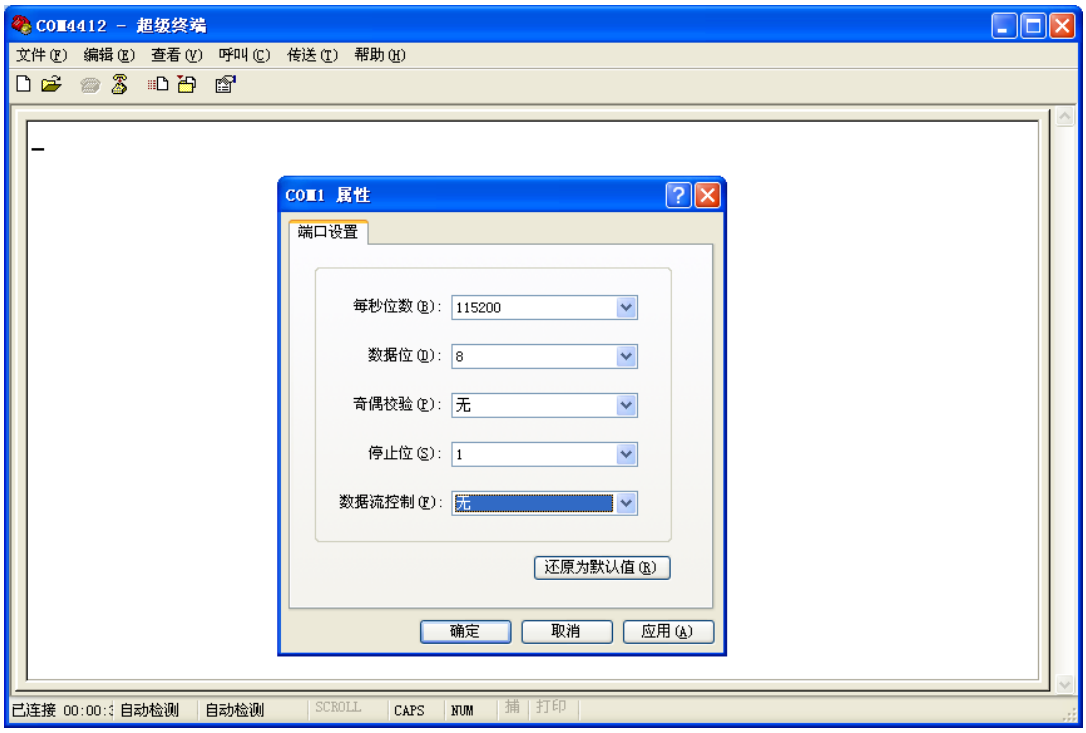

图 16

(2)确定连接后，连接电源。按下 UP-CUP IOT-4412-II 型平台左上角 POWER 电源键，系统上电。超级终端进入开发板的 U-BOOT 功能界面，按下回车，进入 U-BOOT 界面如图 17 所示：

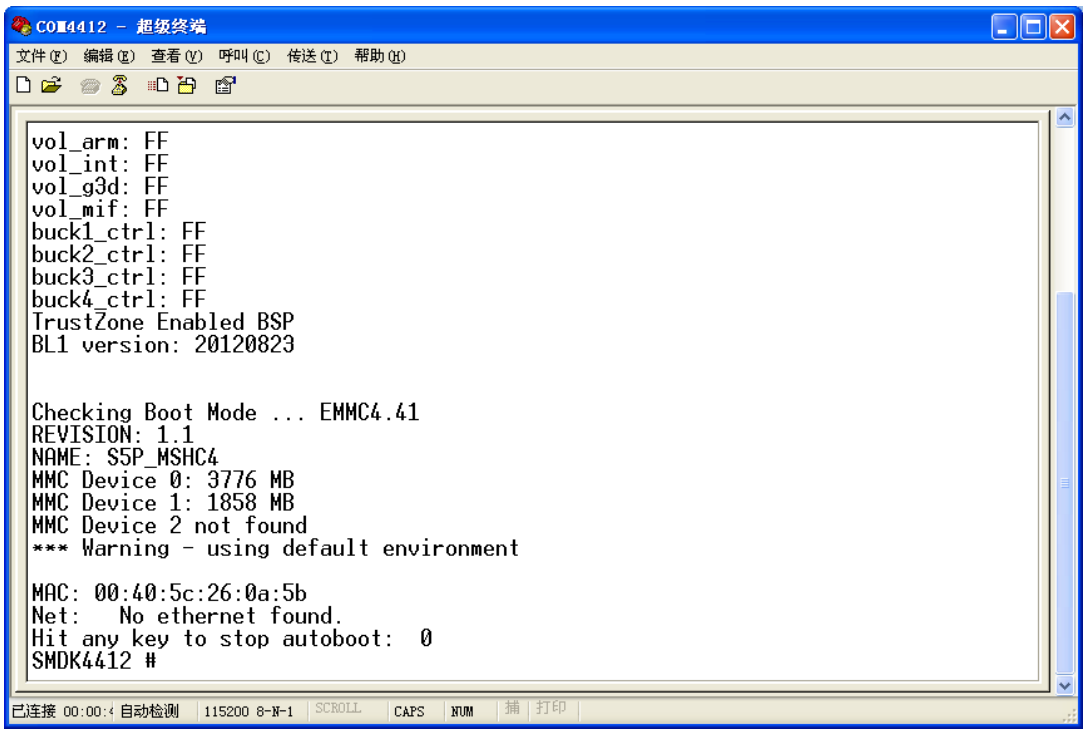

图 17

(3)在 u-boot 界面下，输入 fastboot 命令，如图 18 所示：

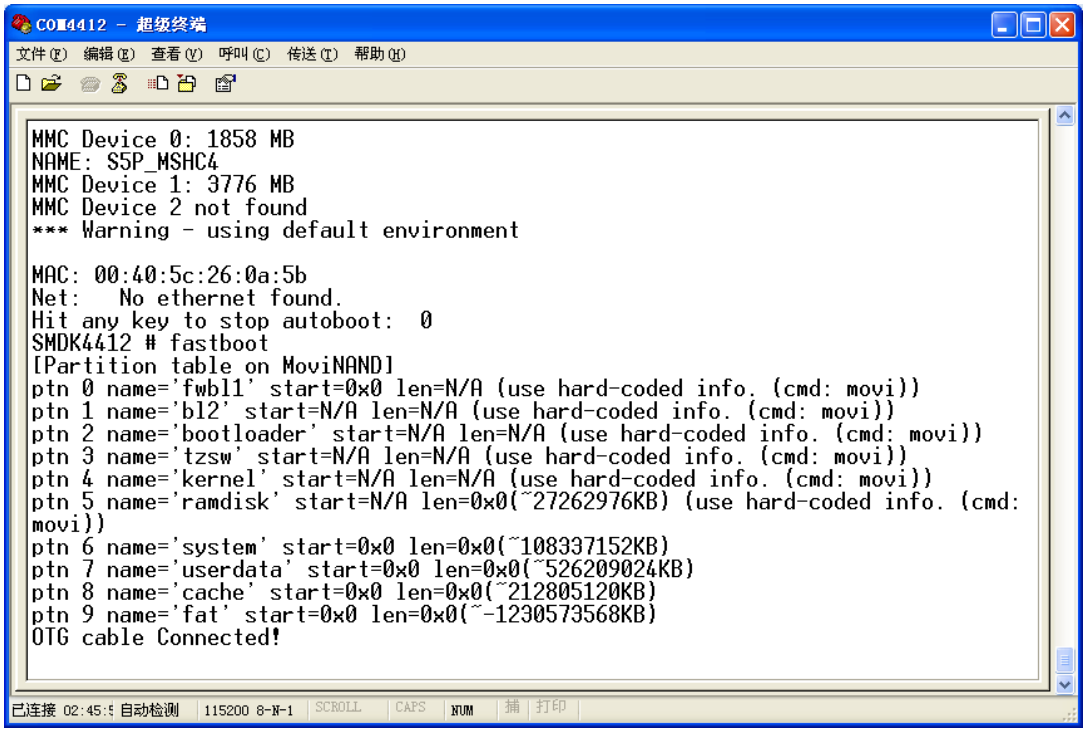

图 18

若弹出“新硬件向导”，则按照步骤 2 安装驱动即可。

(4)烧写系统镜像 zImage、rootfs_up4412.cramfs:

双击光盘/IMG/fastboot.bat 文件，如图 19 所示：

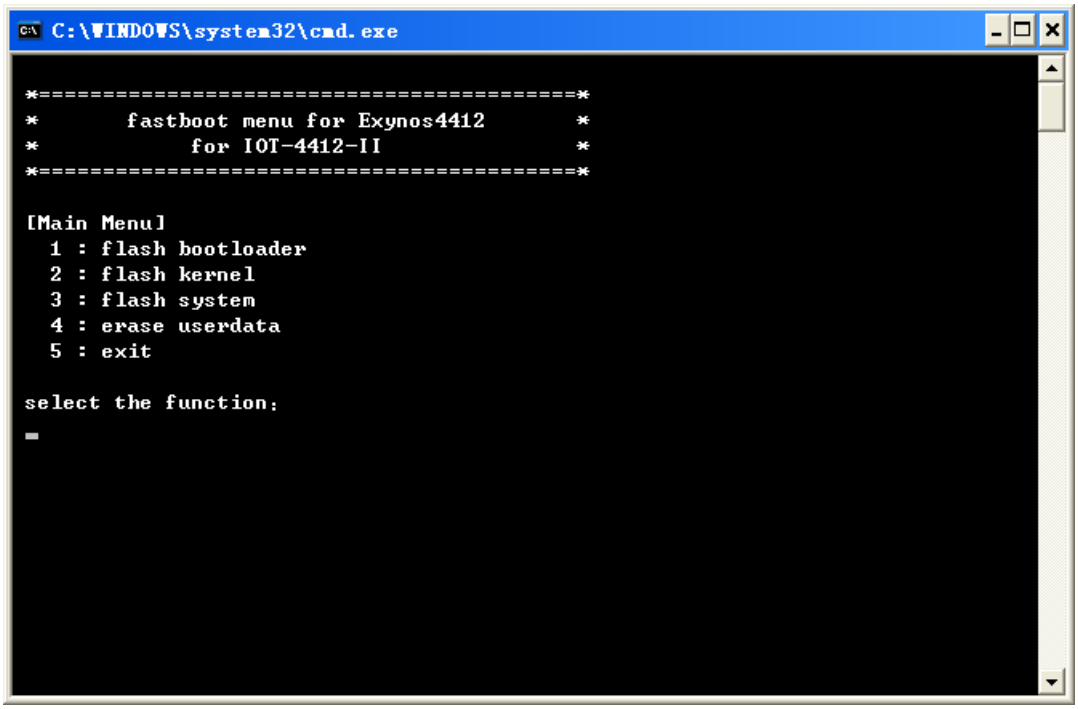

图 19

选择‘2’kernel 烧写 zImage，如图 20 所示：

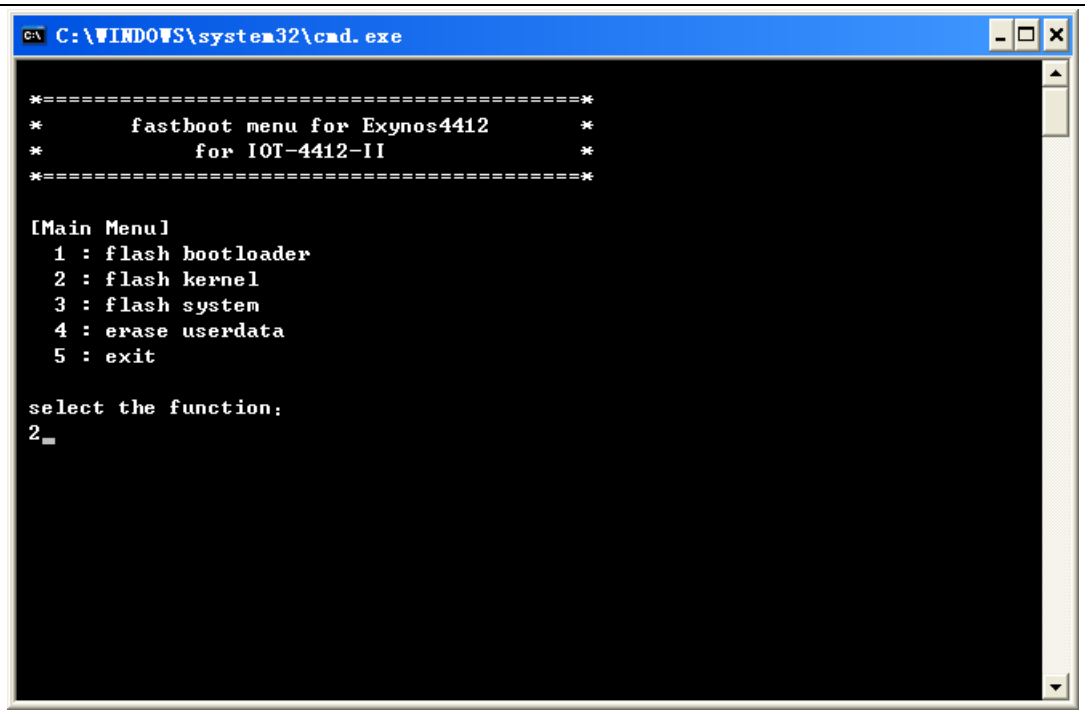

图 20

选择‘3’system 烧写 rootfs_up4412.cramfs，如图 21 所示：

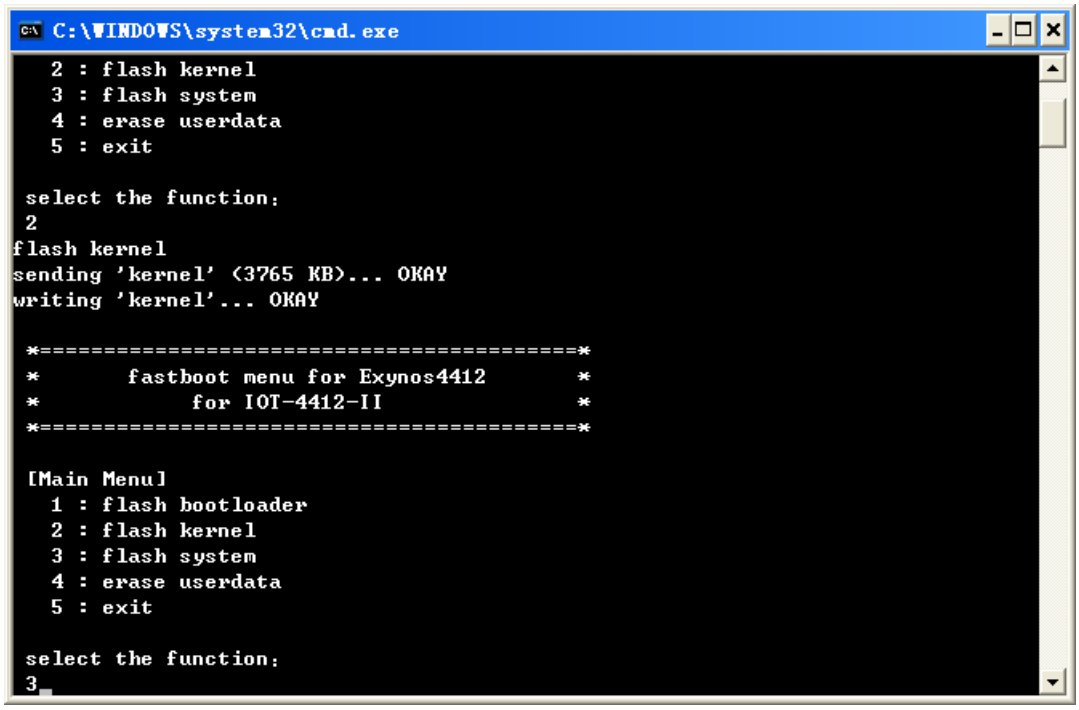

图 21

注：bootloader、kernel、system 并不是每次都需要全部烧写，用户根据自己的需要进行先择性烧写。

4、 启动信息

系统烧写成功之后，重启实验平台，会出现以下启动信息：

```
Starting kernel ...

Uncompressing Linux... done, booting the kernel.
[    0.000000] Initializing cgroup subsys cpu
[    0.000000] Linux version 3.0.15 (root@uptech) (gcc version 4.4.1 (Sourcery G++ Lite 2009q3-67) ) #459 SMP PREEMPT Mon Aug 11 14:42:09 CST 2014
[    0.000000] CPU: ARMv7 Processor [413fc090] revision 0 (ARMv7), cr=10c5387d
[    0.000000] CPU: VIPT nonaliasing data cache, VIPT aliasing instruction cache
[    0.000000] Machine: SMDK4X12
[    0.000000] NR_BANKS too low, ignoring high memory
[    0.000000] Memory policy: ECC disabled, Data cache writealloc
[    0.000000] CPU EXYNOS4412 (id 0xe4412011)
[    0.000000] S3C24XX Clocks, Copyright 2004 Simtec Electronics
[    0.000000] s3c_register_clksrc: clock audiocdclk has no registers set
[    0.000000] audiocdclk: no parent clock specified
[    0.000000] s3c_register_clksrc: clock armclk has no registers set
[    0.000000] EXYNOS4: PLL settings, A=1000000000, M=800000000, E=96000000 V=350000000
[    0.000000] EXYNOS4: ARMCLK=1000000000, DMC=400000000, ACLK200=24000000
[    0.000000] ACLK160=160000000, ACLK133=133333333, ACLK100=100000000
[    0.000000] EXYNOS4: ACLK400=24000000 ACLK266=800000000
[    0.000000] uclk1: source is mout_mpll_user (6), rate is 100000000
[    0.000000] uclk1: source is mout_mpll_user (6), rate is 100000000
[    0.000000] uclk1: source is mout_mpll_user (6), rate is 100000000
[    0.000000] uclk1: source is mout_mpll_user (6), rate is 100000000
[    0.000000] sclk_csis: source is xusbxti (1), rate is 1500000
[    0.000000] sclk_csis: source is xusbxti (1), rate is 1500000
[    0.000000] sclk_cam0: source is xusbxti (1), rate is 1500000
[    0.000000] sclk_cam1: source is xusbxti (1), rate is 1500000
[    0.000000] sclk_fimc: source is xusbxti (1), rate is 1500000
[    0.000000] sclk_fimc: source is xusbxti (1), rate is 1500000
[    0.000000] sclk_fimc: source is xusbxti (1), rate is 1500000
[    0.000000] sclk_fimc: source is xusbxti (1), rate is 1500000
[    0.000000] sclk_fimd: source is xusbxti (1), rate is 1500000
[    0.000000] sclk_fimd: source is xusbxti (1), rate is 1500000
[    0.000000] sclk_mfc: source is mout_mfc0 (0), rate is 50000000
[    0.000000] sclk_g3d: source is mout_g3d0 (0), rate is 50000000
[    0.000000] sclk_pwi: source is xusbxti (1), rate is 1500000
[    0.000000] PERCPU: Embedded 7 pages/cpu @c17e4000 s6208 r8192 d14272 u32768
[    0.000000] Built 1 zonelists in Zone order, mobility grouping on.  Total pages: 511746
[    0.000000] Kernel command line: root=/dev/mmcblk0p2 rootfstype=cramfs init=/linuxrc console=ttySAC0,115200
[    0.000000] PID hash table entries: 4096 (order: 2, 16384 bytes)
[    0.000000] Dentry cache hash table entries: 131072 (order: 7, 524288 bytes)
[    0.000000] Inode-cache hash table entries: 65536 (order: 6, 262144 bytes)
[    0.000000] Memory: 736MB 1279MB = 2015MB total
```

```
[    0.000000] Memory: 1960584k/1960584k available, 102776k reserved, 1309696K highmem
[    0.000000] Virtual kernel memory layout:
[    0.000000]          vector  : 0xffff0000 - 0xffff1000   (   4 kB)
[    0.000000]          fixmap  : 0xfff00000 - 0xfffe0000   ( 896 kB)
[    0.000000]          DMA     : 0xfea00000 - 0xffe00000   (  20 MB)
[    0.000000]          vmalloc : 0xee800000 - 0xf6000000   ( 120 MB)
[    0.000000]          lowmem  : 0xc0000000 - 0xee000000   ( 736 MB)
[    0.000000]          pkmap   : 0xbfe00000 - 0xc0000000   (   2 MB)
[    0.000000]          modules : 0xbf000000 - 0xbfe00000   (  14 MB)
[    0.000000]            .init : 0xc0008000 - 0xc009a000   ( 584 kB)
[    0.000000]            .text : 0xc009a000 - 0xc073e000   (6800 kB)
[    0.000000]            .data : 0xc073e000 - 0xc07917a0   ( 334 kB)
[    0.000000]             .bss : 0xc07917c4 - 0xc07d4c00   ( 270 kB)
[    0.000000] SLUB: Genslabs=13, HWalign=32, Order=0-3, MinObjects=0, CPUs=4, Nodes=1
[    0.000000] Preemptible hierarchical RCU implementation.
[    0.000000] NR_IRQS:456
[    0.000000] Calibrating delay loop... 1992.29 BogoMIPS (lpj=4980736)
[    0.045000] pid_max: default: 32768 minimum: 301
[    0.045000] Mount-cache hash table entries: 512
[    0.045000] Initializing cgroup subsys debug
[    0.045000] Initializing cgroup subsys cpuacct
[    0.045000] Initializing cgroup subsys freezer
[    0.045000] CPU: Testing write buffer coherency: ok
[    0.045000] L310 cache controller enabled
[    0.045000] l2x0: 16 ways, CACHE_ID 0x4100c4c8, AUX_CTRL 0x7e470001, Cache size: 1048576 B
[    0.055000] rpregister_lcd: add lcd: (null)
[    0.075000] CPU1: Booted secondary processor
[    0.095000] CPU2: Booted secondary processor
[    0.115000] CPU3: Booted secondary processor
[    0.115000] Brought up 4 CPUs
[    0.115000] SMP: Total of 4 processors activated (7969.17 BogoMIPS).
[    0.120000] gpio: GPK0 has missing PM functions
[    0.120000] NET: Registered protocol family 16
[    0.120000] SMDK MAIN Board Rev 0.1 (ADC value:433)
[    0.130000] exynos4_pmu_init: PMU supports 4412(96)
[    0.130000] S3C Power Management, Copyright 2004 Simtec Electronics
[    0.130000] EXYNOS4: Initializing architecture
[    0.130000] samsung-pd samsung-pd.0: power domain registered
[    0.130000] samsung-pd samsung-pd.1: power domain registered
[    0.130000] samsung-pd samsung-pd.2: power domain registered
[    0.130000] samsung-pd samsung-pd.5: power domain registered
[    0.130000] samsung-pd samsung-pd.4: power domain registered
[    0.130000] samsung-pd samsung-pd.6: power domain registered
[    0.130000] samsung-pd samsung-pd.7: power domain registered
[    0.130000] samsung-pd samsung-pd.8: power domain registered
```

```
[    0.130000] s3c24xx-pwm s3c24xx-pwm.1: tin at 100000000, tdiv at 100000000, tin=divclk, base 8
[    0.130000] s5p-sysmmu s5p-sysmmu.15: Initialized for s5p-fimg2d.
[    0.130000] s5p-sysmmu s5p-sysmmu.5: Initialized for s5p-jpeg.
[    0.130000] s5p-sysmmu s5p-sysmmu.16: Initialized for exynos4-fimc-is.
[    0.130000] s5p-sysmmu s5p-sysmmu.17: Initialized for exynos4-fimc-is.
[    0.130000] s5p-sysmmu s5p-sysmmu.18: Initialized for exynos4-fimc-is.
[    0.130000] s5p-sysmmu s5p-sysmmu.19: Initialized for exynos4-fimc-is.
[    0.145000] bio: create slab <bio-0> at 0
[    0.145000] SCSI subsystem initialized
[    0.145000] usbcore: registered new interface driver usbfs
[    0.150000] usbcore: registered new interface driver hub
[    0.150000] usbcore: registered new device driver usb
[    0.150000] s3c-i2c s3c2440-i2c.0: i2c-0: S3C I2C adapter
[    0.150000] s3c-i2c s3c2440-i2c.1: i2c-1: S3C I2C adapter
[    0.150000] s3c-i2c s3c2440-i2c.2: i2c-2: S3C I2C adapter
[    0.150000] s3c-i2c s3c2440-i2c.3: i2c-3: S3C I2C adapter
[    0.150000] s3c-i2c s3c2440-i2c.4: i2c-4: S3C I2C adapter
[    0.150000] i2c i2c-5: Invalid 7-bit I2C address 0x00
[    0.150000] i2c i2c-5: Can't create device at 0x00
[    0.150000] s3c-i2c s3c2440-i2c.5: i2c-5: S3C I2C adapter
[    0.150000] i2c i2c-6: Invalid 7-bit I2C address 0x00
[    0.150000] i2c i2c-6: Can't create device at 0x00
[    0.150000] s3c-i2c s3c2440-i2c.6: i2c-6: S3C I2C adapter
[    0.150000] i2c i2c-7: Invalid 7-bit I2C address 0x00
[    0.150000] i2c i2c-7: Can't create device at 0x00
[    0.150000] s3c-i2c s3c2440-i2c.7: i2c-7: S3C I2C adapter
[    0.150000] Advanced Linux Sound Architecture Driver Version 1.0.24.
[    0.150000] Bluetooth: Core ver 2.16
[    0.150000] NET: Registered protocol family 31
[    0.150000] Bluetooth: HCI device and connection manager initialized
[    0.150000] Bluetooth: HCI socket layer initialized
[    0.150000] Bluetooth: L2CAP socket layer initialized
[    0.150000] Bluetooth: SCO socket layer initialized
[    0.150000] cfg80211: Calling CRDA to update world regulatory domain
[    0.155000] Switching to clocksource mct-frc
[    0.155101] Switched to NOHz mode on CPU #3
[    0.156695] NET: Registered protocol family 2
[    0.156844] IP route cache hash table entries: 32768 (order: 5, 131072 bytes)
[    0.157410] TCP established hash table entries: 131072 (order: 8, 1048576 bytes)
[    0.158903] TCP bind hash table entries: 65536 (order: 7, 786432 bytes)
[    0.159680] Switched to NOHz mode on CPU #0
[    0.159786] TCP: Hash tables configured (established 131072 bind 65536)
[    0.159795] TCP reno registered
[    0.159807] UDP hash table entries: 512 (order: 2, 16384 bytes)
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[    0.159838] UDP-Lite hash table entries: 512 (order: 2, 16384 bytes)
[    0.159940] Switched to NOHz mode on CPU #1
[    0.159998] Switched to NOHz mode on CPU #2
[    0.160112] NET: Registered protocol family 1
[    0.160372] RPC: Registered named UNIX socket transport module.
[    0.160381] RPC: Registered udp transport module.
[    0.160388] RPC: Registered tcp transport module.
[    0.160395] RPC: Registered tcp NFSv4.1 backchannel transport module.
[    0.160577] PMU: registered new PMU device of type 0
[    0.160723] Exynos4 : ARM Clock down on idle mode is enabled
[    0.161984] Loaded driver for PL330 DMAC-0 s3c-pl330
[    0.161995]    DBUFF-64x8bytes Num_Chans-8 Num_Peri-1 Num_Events-32
[    0.162288] Loaded driver for PL330 DMAC-1 s3c-pl330
[    0.162297]    DBUFF-32x4bytes Num_Chans-8 Num_Peri-32 Num_Events-32
[    0.162398] Loaded driver for PL330 DMAC-2 s3c-pl330
[    0.162407]    DBUFF-32x4bytes Num_Chans-8 Num_Peri-32 Num_Events-32
[    0.172394] highmem bounce pool size: 64 pages
[    0.172580] ashmem: initialized
[    0.181564] fuse init (API version 7.16)
[    0.181870] msgmni has been set to 1271
[    0.182486] io scheduler noop registered
[    0.182495] io scheduler deadline registered
[    0.182545] io scheduler cfq registered (default)
[    0.183460] s3cfb s3cfb.0: [fb2] dma: 0x69ff4000, cpu: 0xee859000, size: 0x00177000
[    0.184291] Start display and show logo
[    0.539656] s3cfb s3cfb.0: registered successfully
[    0.540102] s5pv210-uart.0: ttySAC0 at MMIO 0x13800000 (irq = 16) is a S3C6400/10
[    1.374489] console [ttySAC0] enabled
[    1.435060] s5pv210-uart.1: ttySAC1 at MMIO 0x13810000 (irq = 20) is a S3C6400/10
[    1.510066] s5pv210-uart.2: ttySAC2 at MMIO 0x13820000 (irq = 24) is a S3C6400/10
[    1.590060] s5pv210-uart.3: ttySAC3 at MMIO 0x13830000 (irq = 28) is a S3C6400/10
[    1.676094] brd: module loaded
[    1.679143] loop: module loaded
[    1.679787] PPP generic driver version 2.4.2
[    1.680082] PPP Deflate Compression module registered
[    1.680143] PPP BSD Compression module registered
[    1.680583] PPP MPPE Compression module registered
[    1.680643] NET: Registered protocol family 24
[    1.703428] dm9000 Ethernet Driver, V1.31
[    2.107366] dm9000 revision 0x19
[    2.108209] eth0: dm9000a at ee848020,ee84a022 IRQ 358 MAC: 00:09:c0:ff:ec:48 (platform data)
[    2.117062] usbcore: registered new interface driver asix
[    2.122297] usbcore: registered new interface driver cdc_ether
[    2.128112] usbcore: registered new interface driver dm9601
[    2.133668] usbcore: registered new interface driver net1080
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[    2.139315] usbcore: registered new interface driver cdc_subset
[    2.145212] usbcore: registered new interface driver zaurus
[    2.150681] cdc_ncm: 04-Aug-2011
[    2.153963] usbcore: registered new interface driver cdc_ncm
[    2.159527] ehci_hcd: USB 2.0 'Enhanced' Host Controller (EHCI) Driver
[    2.166230] s5p-ehci s5p-ehci: S5P EHCI Host Controller
[    2.171306] s5p-ehci s5p-ehci: new USB bus registered, assigned bus number 1
[    2.178394] s5p-ehci s5p-ehci: irq 134, io mem 0x12580000
[    2.190035] s5p-ehci s5p-ehci: USB 0.0 started, EHCI 1.00
[    2.190558] hub 1-0:1.0: USB hub found
[    2.192762] hub 1-0:1.0: 3 ports detected
[    2.197148] ohci_hcd: USB 1.1 'Open' Host Controller (OHCI) Driver
[    2.202990] s5p-ohci s5p-ohci: Already power on PHY
[    2.207786] s5p-ohci s5p-ohci: s5p OHCI
[    2.211619] s5p-ohci s5p-ohci: new USB bus registered, assigned bus number 2
[    2.218650] s5p-ohci s5p-ohci: irq 134, io mem 0x12590000
[    2.279458] hub 2-0:1.0: USB hub found
[    2.279515] hub 2-0:1.0: 3 ports detected
[    2.280177] usbcore: registered new interface driver cdc_acm
[    2.280245] cdc_acm: USB Abstract Control Model driver for USB modems and ISDN adapters
[    2.280336] Initializing USB Mass Storage driver...
[    2.283510] usbcore: registered new interface driver usb-storage
[    2.289376] USB Mass Storage support registered.
[    2.294183] usbcore: registered new interface driver usbserial
[    2.299920] USB Serial support registered for generic
[    2.304936] usbcore: registered new interface driver usbserial_generic
[    2.311336] usbserial: USB Serial Driver core
[    2.315767] USB Serial support registered for GSM modem (1-port)
[    2.321822] usbcore: registered new interface driver option
[    2.327219] option: v0.7.2:USB Driver for GSM modems
[    2.332374] s3c-udc : S3C HS USB OTG Device Driver,(c) 2008-2009 Samsung Electronics
[    2.332380] s3c-udc : version 15 March 2009
[    2.344114] g_ether gadget: using random self ethernet address
[    2.349883] g_ether gadget: using random host ethernet address
[    2.356435] usb0: MAC ae:5a:1e:dd:1e:33
[    2.359497] usb0: HOST MAC 7a:16:18:7c:b9:78
[    2.363786] g_ether gadget: Ethernet Gadget, version: Memorial Day 2008
[    2.370365] g_ether gadget: g_ether ready
[    2.374339] Registered gadget driver 'g_ether'
[    2.379292] input: samsung-keypad as /devices/platform/samsung-keypad/input/input0
[    2.386866] input: ADS7843 TouchScreen as /devices/virtual/input/input1
[    2.401196] S3C24XX RTC, (c) 2004,2006 Simtec Electronics
[    2.401317] s3c-rtc s3c64xx-rtc: rtc disabled, re-enabling
[    2.404115] using rtc device, s3c, for alarms
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[       2.407963] s3c-rtc s3c64xx-rtc: rtc core: registered s3c as rtc0
[       2.414319] i2c /dev entries driver
[       2.418825] Linux media interface: v0.10
[       2.421889] lirc_dev: IR Remote Control driver registered, major 252
[       2.427995] IR NEC protocol handler initialized
[       2.432506] IR RC5(x) protocol handler initialized
[       2.437279] IR RC6 protocol handler initialized
[       2.441793] IR JVC protocol handler initialized
[       2.446306] IR Sony protocol handler initialized
[       2.450911] IR RC5 (streamzap) protocol handler initialized
[       2.456463] IR LIRC bridge handler initialized
[       2.460889] Linux video capture interface: v2.00
[       2.465582] gspca: v2.13.0 registered
[       2.469303] exynos-mdev: Media65535[0xe9104000] was registered successfully
[       2.476235] [INFO]flite_probe:2068: FIMC-LITE0 probe success
[       2.481749] [INFO]flite_probe:2068: FIMC-LITE1 probe success
[       2.487658] fimc_is_init_mem_mgr : [cma_info] start_addr : 0x68000000, end_addr : 0x68bcc000, total_size : 0xbcc000,
free_size : 0xbcc000
[       2.499797] ctrl->mem.base = 0x68000000
[       2.503509] ctrl->mem.size = 0xbcc000
[       2.505052] usb 1-3: new high speed USB device number 2 using s5p-ehci
[       2.513684] ctrl->mem.fw_ref_base = 0x68a01000
[       2.518091] ctrl->mem.setfile_ref_base = 0x68b81000
[       2.523141] FIMC-IS probe completed
[       2.526537] Initialize JPEG driver
[       2.530030] s5p-jpeg s5p-jpeg: JPEG driver is registered to /dev/video12
[       2.536629] s5p-jpeg s5p-jpeg: JPEG driver is registered to /dev/video11
[       2.543607] Samsung Graphics 2D driver, (c) 2011 Samsung Electronics
[       2.549754] samsung-fake-battery samsung-fake-battery: samsung_fake_bat_probe
[       2.557494] S3C2410 Watchdog Timer, (c) 2004 Simtec Electronics
[       2.562736] s3c2410-wdt s3c2410-wdt: watchdog inactive, reset disabled, irq enabled
[       2.570853] device-mapper: uevent: version 1.0.3
[       2.575096] device-mapper: ioctl: 4.20.0-ioctl (2011-02-02) initialised: dm-devel@redhat.com
[       2.583216] Bluetooth: Generic Bluetooth USB driver ver 0.6
[       2.588877] usbcore: registered new interface driver btusb
[       2.594218] Bluetooth: Generic Bluetooth SDIO driver ver 0.1
[       2.600463] cpuidle: using governor ladder
[       2.604990] cpuidle: using governor menu
[       2.608050] dw_mmc dw_mmc: Using internal DMA controller.
[       2.613489] dw_mmc dw_mmc: DW MMC controller at irq 141, 32 bit host data width, 128 deep fifo
[       2.622021] sdhci: Secure Digital Host Controller Interface driver
[       2.627996] sdhci: Copyright(c) Pierre Ossman
[       2.632393] s3c-sdhci s3c-sdhci.2: clock source 2: sclk_mmc (100000000 Hz)
[       2.639379] mmc1: SDHCI controller on samsung-hsmmc [s3c-sdhci.2] using ADMA
[       2.646247] mmc_host mmc0: Bus speed (slot 0) = 100000000Hz (slot req 400000Hz, actual 400000HZ div = 125)
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[       2.655933] s3c-sdhci s3c-sdhci.3: clock source 2: sclk_mmc (100000000 Hz)
[       2.662940] mmc2: SDHCI controller on samsung-hsmmc [s3c-sdhci.3] using ADMA
[       2.662957] hub 1-3:1.0: USB hub found
[       2.673484] hub 1-3:1.0: 3 ports detected
[       2.682386] usbcore: registered new interface driver usbhid
[       2.682999] usbhid: USB HID core driver
[       2.729447] mmc_host mmc0: Bus speed (slot 0) = 100000000Hz (slot req 52000000Hz, actual 50000000HZ div = 1)
[       2.729892] mmc0: new high speed MMC card at address 0001
[       2.730309] mmcblk0: mmc0:0001 SEM04G 3.68 GiB
[       2.730469] mmcblk0boot0: mmc0:0001 SEM04G partition 1 2.00 MiB
[       2.732859] mmcblk0boot1: mmc0:0001 SEM04G partition 2 2.00 MiB
[       2.739647]  mmcblk0: p1 p2 p3 p4
[       2.743593]  mmcblk0boot1: unknown partition table
[       2.747816]  mmcblk0boot0: unknown partition table
[       2.960195] usb 1-3.1: new full speed USB device number 3 using s5p-ehci
[       3.067497] hub 1-3.1:1.0: USB hub found
[       3.067691] hub 1-3.1:1.0: 4 ports detected
[       3.705056] AC97: Unable to activate!
[       3.748268] asoc: wm9713-hifi <-> samsung-ac97 mapping ok
[       3.750798] ALSA device list:
[       3.750838]    #0: SMDK WM9713
[       3.750956] GACT probability NOT on
[       3.751004] Mirror/redirect action on
[       3.751050] u32 classifier
[       3.751082]       Actions configured
[       3.751125] Netfilter messages via NETLINK v0.30.
[       3.755360] nf_conntrack version 0.5.0 (16384 buckets, 65536 max)
[       3.762126] ctnetlink v0.93: registering with nfnetlink.
[       3.766719] NF_TPROXY: Transparent proxy support initialized, version 4.1.0
[       3.773636] NF_TPROXY: Copyright (c) 2006-2007 BalaBit IT Ltd.
[       3.779702] xt_time: kernel timezone is -0000
[       3.785167] ip_tables: (C) 2000-2006 Netfilter Core Team
[       3.789202] arp_tables: (C) 2002 David S. Miller
[       3.793734] TCP cubic registered
[       3.797725] NET: Registered protocol family 10
[       3.804239] Mobile IPv6
[       3.804293] ip6_tables: (C) 2000-2006 Netfilter Core Team
[       3.809341] IPv6 over IPv4 tunneling driver
[       3.817338] NET: Registered protocol family 17
[       3.817739] NET: Registered protocol family 15
[       3.822229] Bluetooth: RFCOMM TTY layer initialized
[       3.827115] Bluetooth: RFCOMM socket layer initialized
[       3.832141] Bluetooth: RFCOMM ver 1.11
[       3.835873] Bluetooth: BNEP (Ethernet Emulation) ver 1.3
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[       3.841166] Bluetooth: BNEP filters: protocol multicast
[       3.846375] Bluetooth: HIDP (Human Interface Emulation) ver 1.2
[       3.852474] NET: Registered protocol family 35
[       3.856961] Registering the dns_resolver key type
[       3.861415] VFP support v0.3: implementor 41 architecture 3 part 30 variant 9 rev 4
[       3.869038] Registering SWP/SWPB emulation handler
[       3.874006] exynos4_pm_hotplug_device_init: 0
[       3.878145] EXYNOS4 PM-hotplug init function
[       3.883612] exynos_usb_switch: Exynos USB Switch Driver
[       3.887636] s3c-rtc s3c64xx-rtc: setting system clock to 2000-01-01 00:00:19 UTC (946684819)
[       3.899215] VFS: Mounted root (cramfs filesystem) readonly on device 179:2.
[       3.903052] Freeing init memory: 584K
Bad inittab entry at line 5
Setting system clock:                                      done
Remounting root rw:                                        done
Mounting devpts:                                           done
Mounting tmpfs:                                            done
Mounting applications on /root: [       4.363241] EXT4-fs (mmcblk0p3): warning: checktime reached, running e2fsck is
recommended
[       4.364842] EXT4-fs (mmcblk0p3): recovery complete
[       4.364907] EXT4-fs (mmcblk0p3): mounted filesystem with ordered data mode. Opts: (null)
                                                           done
Setting hostname:                                          done
Backup last logfiles:                                      done
Cleaning up system:                                        done
Setting up interface lo:                                   done
Running start scripts.
Starting syslogd:                                          done
Starting klogd:                                            done
                                                           Fail
[       4.810046] dm9000 dm9000: eth0: link up, 100Mbps, full-duplex, lpa 0x45E1
Starting custom devices initing:                           done
Running vsftpd server.
                                                           done


[       5.035384] eth0: IPv6 duplicate address fe80::209:c0ff:feff:ec48 detected!
Processing /etc/profile...                                 done
Running vsftpd server...
                                                           done
                                                           done
[root@UP-TECH yaffs]#
```

至此，UP-CUP IOT-4412-II 系统烧写完毕

2014-08-11