

Vidit 无线测试

1. 硬件

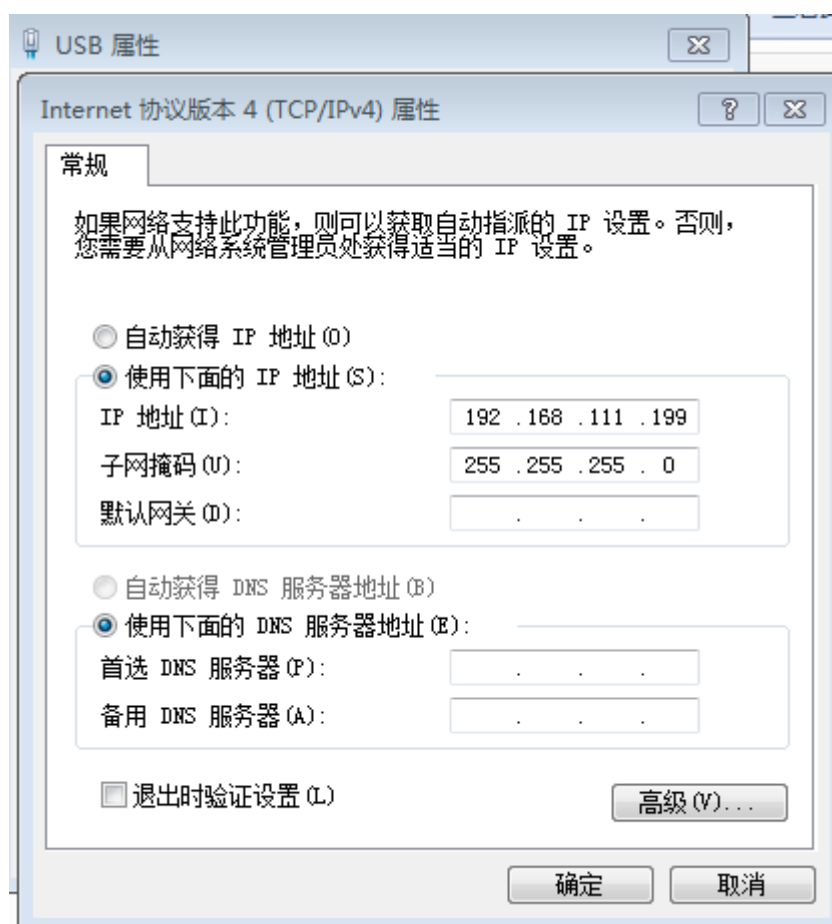
Hachi 测试样机

Windows 7 PC

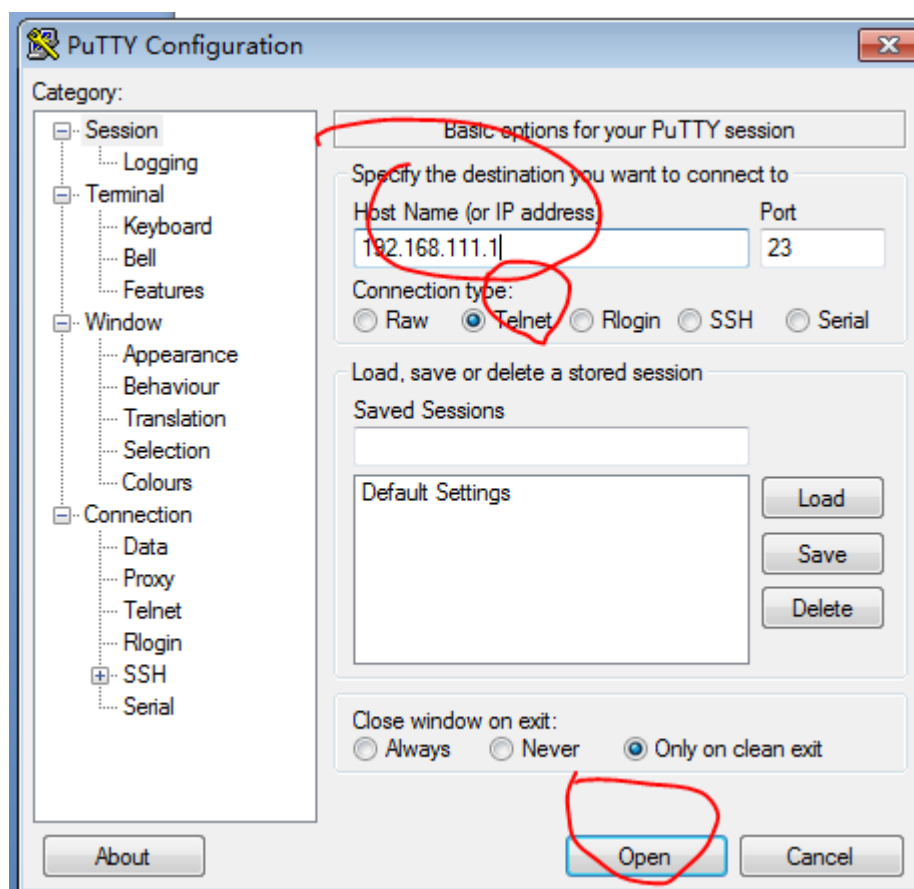
USB cable 一根

2. 连接

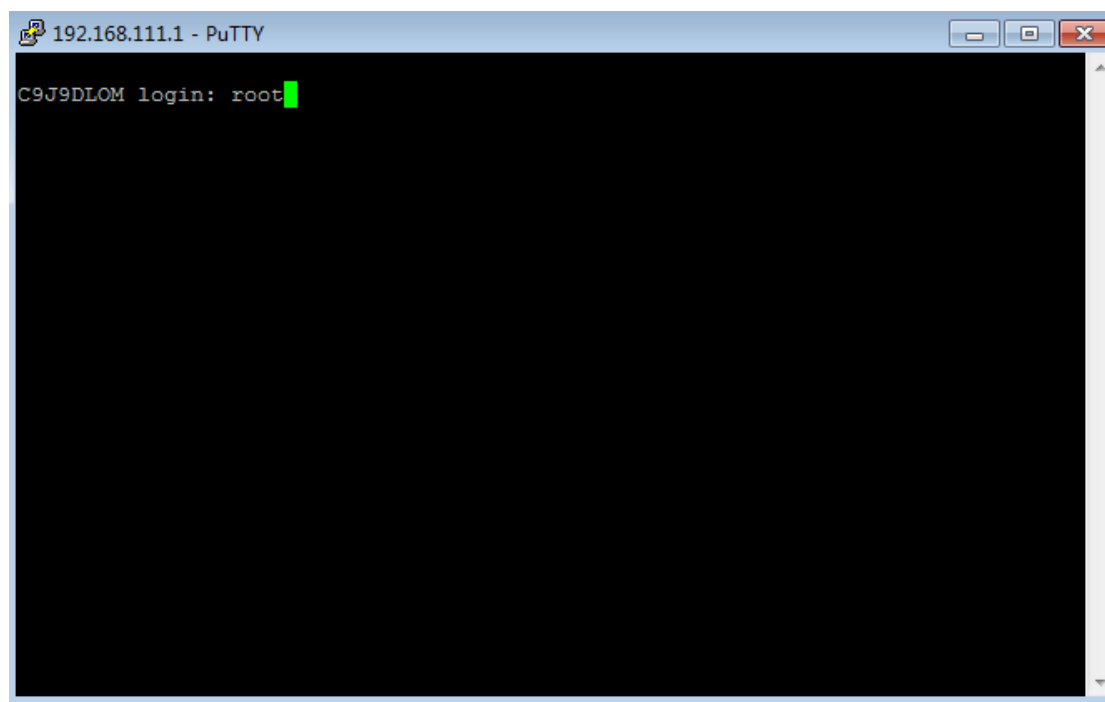
- Vidit 样机开机后，通过 USB cable 连接到 Window7 PC，发现未知设备后手动安装 USB 目录下的 linux.inf 文件。设备安装成功后，等待 DHCP 分配 IP，如果失败，手动设置新添加的网卡 IP 地址，比如 192.168.111.199，如下图：



- 网络安装成功后，运行 putty.exe



- 输入 root，回车登录

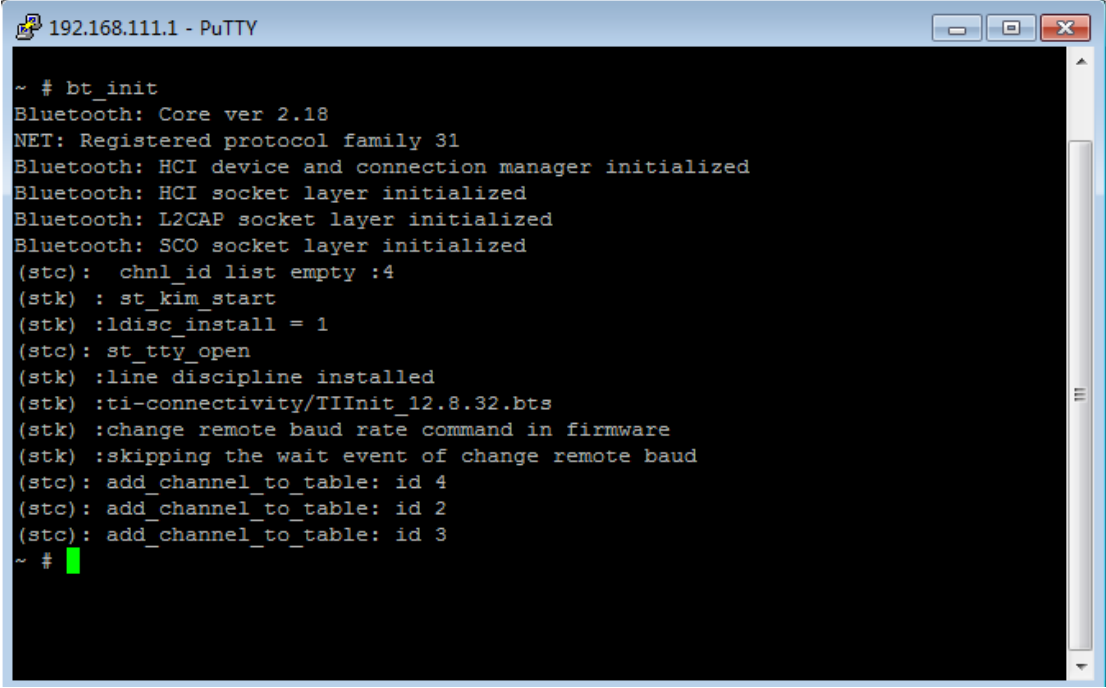


3. 系统的重启/关机/升级

- 命令行重启：在登录后输入 agsh reboot
- 命令行关机：在登录后输入 agsh poweroff
- 按键强制关机：按住机器开机键超过 16s，灯熄灭关机
- 系统开机：长按开机键开机，灯亮放手
- 系统升级：
 - a) 关机
 - b) 拔下 TF 卡，用读卡器复制*.tsf 文件到 TF 卡根目录
 - c) 插入 TF 卡
 - d) 开机，系统会自动升级，屏幕上会有一些显示，系统会在升级完成时自动重启。等 5 分钟左右就可以了。

4. 蓝牙（BT）测试（蓝牙测试须在 Wifi 测试之前跑，或者 wifi 测试之后从重启再跑）

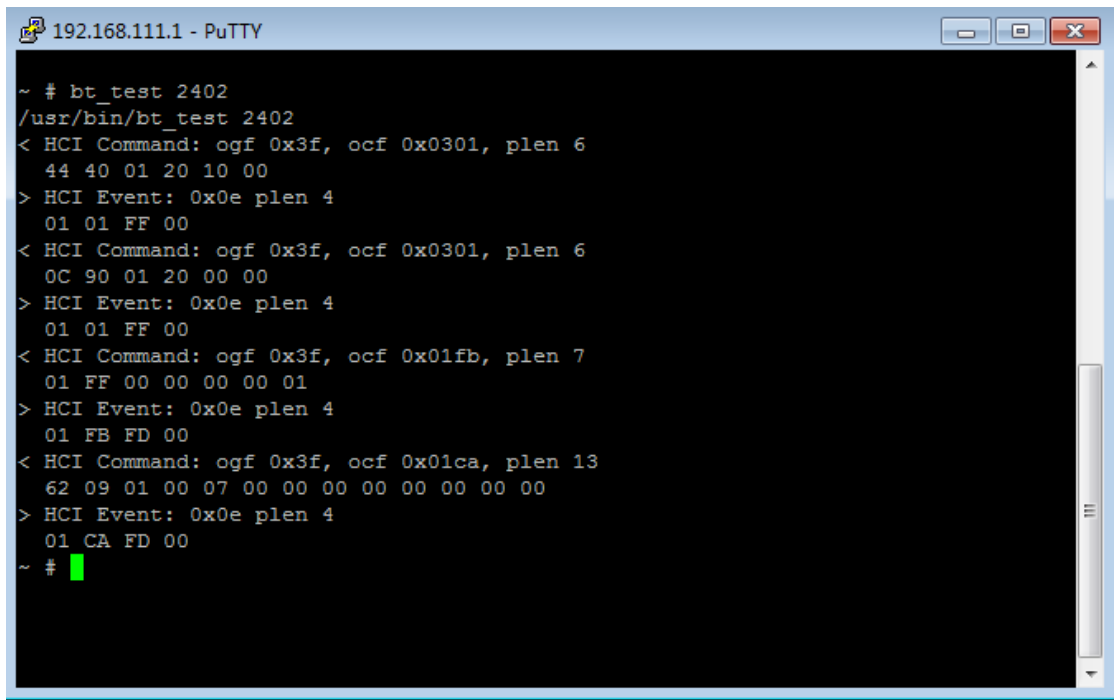
BT 初始化：bt_init



```
~ # bt_init
Bluetooth: Core ver 2.18
NET: Registered protocol family 31
Bluetooth: HCI device and connection manager initialized
Bluetooth: HCI socket layer initialized
Bluetooth: L2CAP socket layer initialized
Bluetooth: SCO socket layer initialized
(stc): chnl_id list empty :4
(stk) : st_kim_start
(stk):ldisc_install = 1
(stc): st_tty_open
(stk) :line discipline installed
(stk) :ti-connectivity/TIIInit_12.8.32.bts
(stk) :change remote baud rate command in firmware
(stk) :skipping the wait event of change remote baud
(stc): add_channel_to_table: id 4
(stc): add_channel_to_table: id 2
(stc): add_channel_to_table: id 3
~ #
```

BT 测试命令: *bt_test frequency[2402-2480]*, 例如 :

bt_test 2402



```
~ # bt_test 2402
/usr/bin/bt_test 2402
< HCI Command: ogf 0x3f, ocf 0x0301, plen 6
  44 40 01 20 10 00
> HCI Event: 0x0e plen 4
  01 01 FF 00
< HCI Command: ogf 0x3f, ocf 0x0301, plen 6
  0C 90 01 20 00 00
> HCI Event: 0x0e plen 4
  01 01 FF 00
< HCI Command: ogf 0x3f, ocf 0x01fb, plen 7
  01 FF 00 00 00 00 01
> HCI Event: 0x0e plen 4
  01 FB FD 00
< HCI Command: ogf 0x3f, ocf 0x01ca, plen 13
  62 09 01 00 07 00 00 00 00 00 00 00 00
> HCI Event: 0x0e plen 4
  01 CA FD 00
~ #
```

5. Wifi 测试命令

- Wifi <rate> table:

11b	11g	11n
0 = 1.0 Mbps	4 = 6.0 Mbps	12 = 6.5 Mbps (MCS0)
1 = 2.0 Mbps	5 = 9.0 Mbps	13 = 13.0 Mbps (MCS1)
2 = 5.0 Mbps	6 = 12.0 Mbps	14 = 19.5 Mbps (MCS2)
3 = 11.0 Mbps	7 = 18.0 Mbps	15 = 26.0 Mbps (MCS3)
	8 = 24.0 Mbps	16 = 39.0 Mbps (MCS4)
	9 = 36.0 Mbps	17 = 52.0 Mbps (MCS5)
	10 = 48.0 Mbps	18 = 58.5 Mbps (MCS6)
	11 = 54.0 Mbps	19 = 65.0 Mbps (MCS7)

硬件支持 b/g/n 模式。

Wifi 初始化 : *wifi_init*

```
192.168.111.1 - PuTTY
~ # wifi_init
wl12xx_sdio_power_on_ambarella
mmc1: card claims to support voltages below the defined range. These will be ignored.
mmc1: queuing unknown CIS tuple 0x91 (3 bytes)
mmc1: new high speed SDIO card at address 0001
ambarella_gpio_irq_set_wake: irq[140] = girq[76] = 1
wl12xx_sdio_power_on_ambarella
wlc core: wl18xx HW: 187x, PG 2.2 (ROM 0x11)
wl12xx_sdio_power_off_ambarella
wlc core: loaded
wlc core: driver version: ol_r8.a9.14
wlc core: compilation time: Sat Dec 13 15:16:01 2014
wlc core: power up
wl12xx_sdio_power_on_ambarella
wlc core: PHY firmware version: Rev 8.2.0.0.218
wlc core: firmware booted in PLT mode PLT_ON (Rev 8.9.0.0.24)
~ #
```

Wifi 测试 11b: *wifi_test11b channel[1-14] rate[0-3]*, 例如:

wifi_test11b 1 3

```
192.168.111.1 - PuTTY
~ # wifi_test11b 1 3
/usr/bin/wifi_test11b 1 3
Calibrator:: Starting TX Simulation (delay=500, rate=3, size=500, mode=0
data_type=0, BW=0, gi=1, opt1=0x0, opt2=0x0
src=00:11:22:33:44:55
dst=01:02:03:04:05:06)...
~ #
```

Wifi 测试 11g: *wifi_test11g channel[1-14] rate[4-11]*, 例如:

wifi_test11g 1 11

```
192.168.111.1 - PuTTY
~ # wifi_test11g 1 11
/usr/bin/wifi_test11g 1 11
Calibrator:: Starting TX Simulation (delay=400, rate=11, size=3000, mode=0
data_type=0, BW=0, gi=1, opt1=0x0, opt2=0x0
src=00:11:22:33:44:55
dst=01:02:03:04:05:06)...
~ #
```

Wifi 测试 11n: *wifi_test11n channel[1-14] rate[12-19]*, 例如:

wifi_test11n 1 19

```
192.168.111.1 - PuTTY
~ # wifi_test11n 1 19
/usr/bin/wifi_test11n 1 19
Calibrator:: Starting TX Simulation (delay=400, rate=19, size=3000, mode=0
data_type=0, BW=0, gi=1, opt1=0x0, opt2=0x0
src=00:11:22:33:44:55
dst=01:02:03:04:05:06) ...
~ #
```

Wifi 测试 11n 40M upper: *wifi_test11n_40_upper channel[5-13] rate[12-19]*, 例如 :

wifi_test11n_40_upper 7 19

```
192.168.111.1 - PuTTY
~ # wifi_test11n_40_upper 7 19
/usr/bin/wifi_test11n_40_upper 7 19
Calibrator:: Starting TX Simulation (delay=300, rate=19, size=4000, mode=0
data_type=0, BW=1, gi=1, opt1=0x0, opt2=0x0
src=00:11:22:33:44:55
dst=01:02:03:04:05:06) ...
~ #
```

Wifi 测试 11n 40M lower: *wifi_test11n_40_lower channel[1-9] rate[12-19]*, 例如 :

wifi_test11n_40_lower 7 19

```
192.168.111.1 - PuTTY
~ # wifi_test11n_40_lower 7 19
/usr/bin/wifi_test11n_40_lower 7 19
Calibrator:: Starting TX Simulation (delay=300, rate=19, size=4000, mode=0
data_type=0, BW=1, gi=1, opt1=0x0, opt2=0x0
src=00:11:22:33:44:55
dst=01:02:03:04:05:06) ...
~ #
```