Linux-like build environment on Windows

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Contents

> Installation

> Before compile

> Compile

Installation

1. Open 'BuildEnvironment_for_arm_v0.3.pdf'

2. Follow 'Page 7-15'

Before compile

> ## Copy files

1. Rename 'alsa.zi' -> 'alsa.zip', 'curl.zi' -> 'curl.zip', 'lib.zi' -> 'lib.zip' and 'includes.zi'
   ->'includes.zip'

2. Unzip the 'alsa.zip' to 'C:/CrossGcc_4.9.x/libc/usr/include

3. Make 'Directory' (Use the D:/hypnos)

4. Unzip the 'curl.zip' , 'includes.zip' and 'lib.zip' to 'D:/hypnos'

5. Copy file to 'D:/hypnos' (Filename : main_process.c, hpc_process.c,
   server_process.c, alarm_process.c, ipc_func.c, radar_process.c, Makefile)

이름	수정한 날짜	유형	크기
curl	2015-09-21 오후 6:22	파일 폴더	
includes	2015-09-21 오후 9:03	파일 폴더	
lib	2015-09-21 오후 9:08	파일 폴더	
ipc_func.c	2015-08-26 오후 11:56	C 파일	3KB
radar_process.c	2015-09-10 오후 10:44	C 파일	15KB
hpc_process.c	2015-09-10 오후 11:15	C 파일	25KB
alarm_process.c	2015-09-11 오전 11:19	C 파일	22KB
main_process.c	2015-09-21 오후 5:47	C 파일	142KB
server_process.c	2015-09-21 오후 6:23	C 파일	70KB
Makefile	2015-09-21 오후 9:29	파일	2KB

Before compile

> ## Modify 'Makefile'
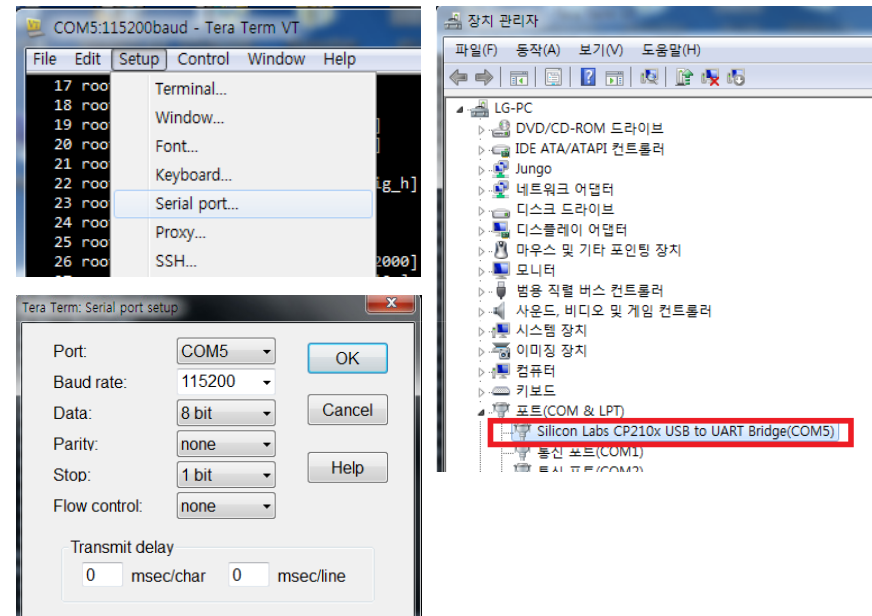
1. Change IP Address of yours

```
cp :
    scp main_process hpc_process alarm_process server_process root@192.168.1.210:/usr/data/hypnos

clean :
    rm -rf *.o main_process alarm_process hpc_process server_process
```
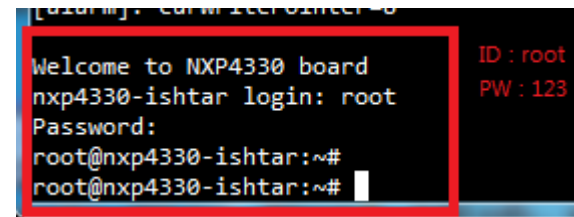
IP Address

Before compile

> ## Use Tera Term (or use PuTTY, next page)

1. Connect 'USB to Serial Cable' to PC
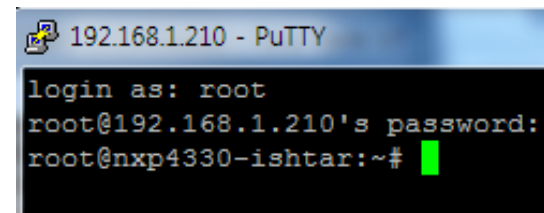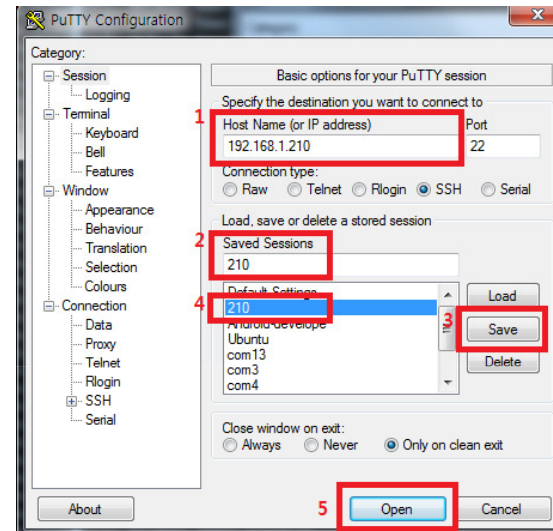
2. Execute 'Tera Term'

3. Set 'Serial port'

4. Power on 'Main board'

Before compile

> Use PuTTY (or use SSH command , next page)

1. Power on 'Main board'

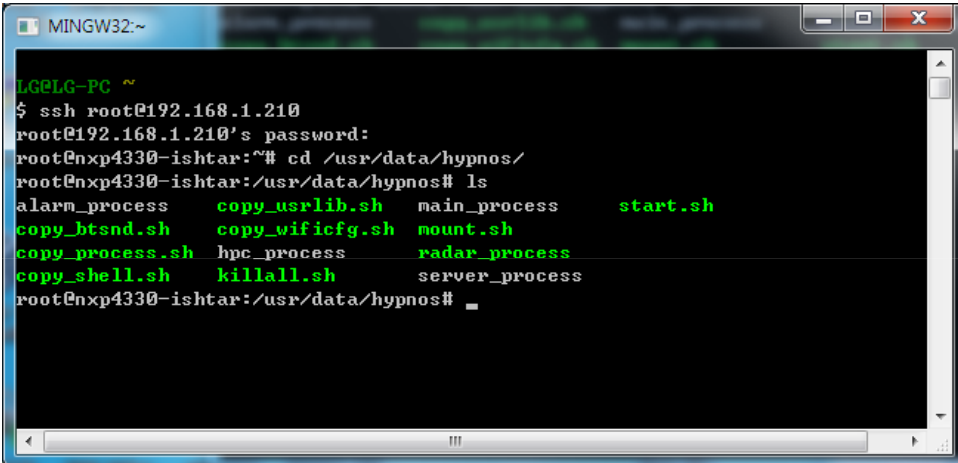2. Execute 'PuTTY'

3. Follow 'Step 1-5'

4. Login password : 123

Before compile

> ## Use SSH command

1. Power on 'Main board'

2. Open 'C:\MinGW32\msys\1.0

3. Excute 'msys.bat'

4. Run the following commands

   ssh root@192.168.1.210

   =>password : 123

Same IP Address, Page 4

Before compile

> ## Setting up Wi-Fi

1. Execute 'cd /usr/etc'

2. Execute 'vi wpa_supplicants2.conf'

3. Push 'Page Down' key on keyboards until end of file

4. Change 'ssid, psk'

5. Push 'wq' key on keyboards

6. Execute 'reboot'

7. After login

8. Execute 'wpa_cli status'

9. Check 'Complete'

Before compile

> Create symbolic link

1. Execute 'cd /usr/bin'

2. ln –s /usr/sbin/dropbearmulti scp

Compile

1. Open 'C:\MinGW32\msys\1.0

2. Excute 'msys.bat'

3. Run the following commands

   make clean (Erase file)

   make (Create 'Linux executable file')

   make cp (Copy 'Linux executable file' to 'Main board')

   => password : 123

Compile

> Compile

4. If you see error, you execute kill process in main board

```
LG@LG-PC /d/project_test/hypnos/hypnos_test
$ make cp
scp main_process hpc_process alarm_process server_process root@192.168.1.210:/u
r/data/hypnos
root@192.168.1.210's password:
scp: /usr/data/hypnos/main_process: Text file busy
scp: /usr/data/hypnos/hpc_process: Text file busy
scp: /usr/data/hypnos/alarm_process: Text file busy
scp: /usr/data/hypnos/server_process: Text file busy
make: *** [cp] Error 1
```

5. Execute 'ps' in main board

6. Execute 'kill PID'

```
180 root          0 SW   [kworker/0:2]
172 root          0 SW   [flush-31:4]
189 root      20004 S    ./main_process
193 root       1668 S    ./hpc_process
195 root       6780 S    ./server_process
197 root       1668 S    ./alarm_process
198 root       2996 R    ps
root@nxp4330-ishtar:/usr/data/hypnos# kill 189 193 195 197
```