## **Quick Start Guide for starting Soft-AP mode**

- (A) How to start Soft-AP mode:
  - (1) disable network management or other wireless tools, e.g. wpa\_supplicant
  - (2) uncompress the driver and then compile the driver ./make
  - (3) insmod 8192cu.ko
  - (4) if config wlan 192.168.0.1 (using the static ip for testing)
  - (5) compile HOSTAP, unpack "wpa\_supplicant\_hostapd-0.8\_rtw\_20110524.zip" in the folder (wpa\_supplicant\_hostapd-0.8\hostapd)
    ./make
  - (6) start hostapd daemon:

```
./hostapd rtl_hostapd.conf -B
```

- (B) Configure file for Soft-AP mode setting:
  - (1) rtl\_hostapd.conf is the configure file for functions setting.
  - (2) the major variable setting in the rtl\_hostapd.conf configure file,
    - (a) basic configuration interface=wlan0

```
ssid=rtwap
```

#bridge=br0

```
# channel 1-14 is 2.4 GHz; channel 36, 40, 44, 46, 48, 52, 56, 60, # 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 149, # 153, 157, 161 is 5GHz
# The channels that are available for use in a particular country differ # according to the regulations of that country.

channel=6

# Operation mode (a = IEEE 802.11a, b = IEEE 802.11b, g = IEEE # 802.11g, Default: IEEE 802.11b)

hw_mode=g

#If the wireless interface is included in a bridge,
#an additional configuration parameter, bridge, is needed
```

```
(b) security mode configuration
    # This field is a bit field that can be used to enable WPA
    # (IEEE 802.11i/D3.0)
    # and/or WPA2 (full IEEE 802.11i/RSN):
    # bit1 = IEEE 802.11i/RSN (WPA2) (dot11RSNAEnabled)
    wpa=2
    # wpa passphrase=secret passphrase
    wpa_passphrase=87654321
    # Set of accepted key management algorithms
    # (WPA-PSK, WPA-EAP, or both).
    wpa_key_mgmt=WPA-PSK
    # Set of accepted cipher suites (encryption algorithms)
    # for pairwise keys
    wpa_pairwise=CCMP
(c) IEEE 802.11n related configuration
    # ieee80211n: Whether IEEE 802.11n (HT) is enabled
    #0 = disabled (default)
    #1 = enabled
    ieee80211n=1
    # ht_capab: HT capabilities (list of flags)
    # Supported channel width set: [HT40-] = both 20 MHz and 40 MHz
    # with secondary channel below the primary channel;
    # [HT40+] = both 20 MHz and 40 MHz with secondary channel upon
    # the primary channel
    # Note: There are limits on which channels can be used with HT40- and
    # HT40+.Following table shows the channels that may be available for
    # HT40- and HT40+ use per IEEE 802.11n Annex J:
                        HT40-
    # freq
    # 2.4 CHz
                        5-13
                                           1-7 (1-9 in Europe/Japan)
    # 5 GHz
                         40,48,56,64
                                          36,44,52,60
    # Short GI for 20 MHz: [SHORT-GI-20] (disabled if not set)
    # Short GI for 40 MHz: [SHORT-GI-40] (disabled if not set)
    ht_capab=[SHORT-GI-20][SHORT-GI-40][HT40]
```

- (C) check the station connected to softap using hostapd\_cli: ./hostapd\_cli all\_sta
- (D) How to start WPS process as internal registrar?
  - 1. for PIN code = 12345670
  - \$>./hostapd\_cli wps\_pin any 12345670
  - 2. for PBC
  - \$>./hostapd\_cli wps\_pbc