# Manual PEGATRON UPWL6060

# 1.General Description

The UPWL6060 wireless module is a fully assembled and tested general-purpose module using the BCM4360 wireless System-on-Chip(SoC). The module contains BCM4360 chip and all other necessary components to operate the UPWL6060.

For detailed information on the UPWL6060 component itself, refer to the UPWL6060 datasheet.

# 2. Features

Features	Description					
Network Standard	IEEE 802.11 a/n/ac (final n)					
Chipset	BCM4360					
Input Voltage	3.3V,5V					
Data Rate	802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps					
	802.11n-20 MHz: MCS0~MCS23					
	802.11n-40 MHz: MCS0~MCS23(450Mbps)					
	802.11ac-80 MHz: MCS0~MCS29(1299Mbps)					
	<b>802.11a:</b> BPSK(6Mbps,9Mbps),QPSK(12Mbps,18Mbps),					
	16QAM(24Mbps,36Mbps),64QAM(48Mbps,54Mbps)					
	802.11n:BPSK(MCS0,MCS8, MCS16),					
	QPSK(MCS1,MCS2,MCS9,MCS10, MCS17, MCS18),					
	16QAM(MCS3,MCS4,MCS11,MCS12, MCS19, MCS20),					
	64QAM(MCS5,MCS6,MCS7,MCS13,MCS14,MCS15, MCS21,					
Modulation	MCS22, MCS23)					
	<b>802.11ac:</b> BPSK(MCS0,MCS10, MCS20),					
	QPSK(MCS1,MCS2,MCS11,MCS12, MCS21, MCS22),					
	16QAM(MCS3,MCS4,MCS13,MCS14, MCS23, MCS24),					
	64QAM(MCS5,MCS6,MCS7,MCS15,MCS16,MCS17, MCS25,					
	MCS26, MCS27)					
	256QAM(MCS8,MCS9,MCS18,MCS19, MCS28, MCS29)					
Operating Frequency	802.11a/n/ac (5.18~5.24GHz,5.745~5.825GHz)					
Operating Channel	CH36~CH48,CH149~CH165 for North America,					
Transceiver/Receiver Mode	3T3R Mode					

#### Antenna list:

Set.	Ant.	Brand Holder	Model Name	P/N	Antenna Type	Connector	Gain (dBi)
1	1	HONGLIN TECHNOLOGY CO., LTD	5G Antenna	-	PCB Antenna	I-PEX	2.92
2	2	HONGLIN TECHNOLOGY CO., LTD	EPC-3940L	290-30151	PCB Antenna	I-PEX	2.4
	3	HONGLIN TECHNOLOGY CO., LTD	EPC-3940L	290-30153	PCB Antenna	I-PEX	2.1
	4	HONGLIN TECHNOLOGY CO., LTD	EPC-3940L	290-30154	PCB Antenna	I-PEX	2.2

Note 1: The EUT has two sets of antenna and there are three antennas for each set.

## 3. Benefits

- Small, self-contained SMT module.
- 3X3 MIMO function support
- Comply with 802.11ac criteria

#### **FCC Statement:**

# **Federal Communication Commission Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device and its antenna(s) must not be co-located with any other transmitters except in accordance with FCC multi-transmitter product procedures.

Refering to the multi-transmitter policy, multiple-transmitter(s) and module(s) can be operated simultaneously without C2P.

This device is restricted for indoor use.

#### **IMPORTANT NOTE:**

This module is intended for OEM integrator. The OEM integrator is responsible for the compliance to all the rules that apply to the product into which this certified RF module is integrated.

Additional testing and certification may be necessary when multiple modules are used.

20cm minimum distance has to be able to be maintained between the antenna and the users for the host this module is integrated into. Under such configuration, the FCC radiation exposure limits set forth for an population/uncontrolled environment can be satisfied.

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

#### **USERS MANUAL OF THE END PRODUCT:**

In the users manual of the end product, the end user has to be informed to keep at least 20cm separation with the antenna while this end product is installed and operated. The end user has to be informed that the FCC radio-frequency exposure guidelines for an uncontrolled environment can be satisfied. The end user has to also be informed that any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment. If the size of the end product is smaller than 8x10cm, then additional FCC part 15.19 statement is required to be available in the users manual: This device complies with Part 15 of FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### LABEL OF THE END PRODUCT:

The final end product must be labeled in a visible area with the following " Contains TX FCC ID: VUIUPWL6060". If the size of the end product is larger than 8x10cm, then the following FCC part 15.19 statement has to also be available on the label: This device complies with Part 15 of FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

### About this guide

This user guide contains the information your PEGATRON WIFI Module.

## System requirements

Before installing the PEGATRON WIFI module, make sure that your system meets the following requirements:

- Intel® Pentium® 4 or AMD K7/K8 system
- Minimum 64MB system memory
- Windows® XP/VISTA operating system

# Installing the device drivers

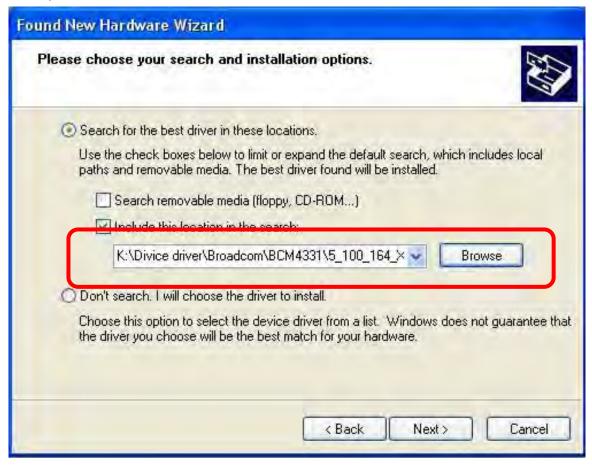
To install the device driver in your computer:

Insert the support CD to the optical drive and follow the following procedure.

Step 1



Step 2





Step 4



