

Product Specification

CL-120

IEEE802.11 a/n 3T3R PCIe Module

Version: 1.0

Date: OCT,15,2014

Release History

DATE	REV	Description of Change
2014/10/15	1.0	Initial release

CL-120

IEEE802.11a/n 3T3R PCIe Module

1. Introduction

CL-120 is an integrated the Celeno CLR260 single-chip 5GHz IEEE802.11a/n 3T3R MAC/Baseband/Radio with pcie interface. CL-120 fully complies with IEEE802.11n and IEEE802.11a/n feature rich wireless connectivity at high standards, delivers reliable, cost-effective, throughput from an extended distance.

2. Features

- Interoperable with IEEE802.11a/n WLAN.
- Reverse direction grant data flow and frame aggregation.
- Support 20MHz and 40MHZ Bandwidth PHY Rate max 450Mbps
- operations. Wireless multimedia enhancements quality of service support
- (QoS). Legacy and high throughput modes.
- Multiple BSSID support.
- WEP 64/128, WPA, WPA2, TKIP, and AES software
- encryption. PCIe Interface compliant.
- Low power with advanced power management.
- Operating systems – Windows XP 32/64,Vista 32/64, Linux, Macintosh.

3. General Specifications

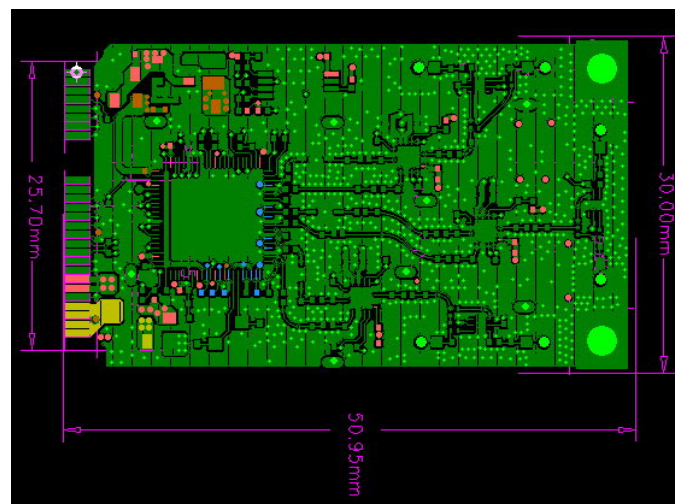
Product Specification	
Model Name	CL-120
WLAN Standard	IEEE 802.11a/n, 3T3R
Host interface	PCIe compatible Major Chipset Celeno CLR260

Dimensions				
	Minimum	Typical	Maximum	Unit
Length			51	mm
Width			31	mm
Antenna Connector	3 Path ipex connector			
Operating Condition				
	Minimum	Typical	Maximum	Unit
Voltage	DC	3.3	5	V
Temperature	-10		70	°C
Storage temperature	-20		70	°C
Humidity Non-Operating	5		80	%

Electrical Specification

Frequency Range	5180 - 5825
Modulation	BPSK, QPSK, 16QAM, 64QAM, DBPSK, DQPSK, and CCK
Data Rate	
802.11b CCK Mode	xx Mbps
802.11a OFDM Mode	54, 48, 36, 24, 18, 12, 9, 6 Mbps
802.11n HT20 Mode GI 800ns	6.5 ~195 Mbps MCS 0 ~ MCS 23
802.11n HT20 Mode GI 400ns	7.2 ~216 Mbps MCS 0 ~ MCS 23
802.11n HT40 Mode GI 800ns	13.5 ~ 405Mbps MCS 0 ~ MCS 23
802.11n HT40 Mode GI 400ns	15 ~ 450Mbps MCS 0 ~ MCS 23
Output Tx power	5 GHz LOW Band 16.5dbm +/-1.5dbm 5 GHz Hi Band 17dbm +/-1.5dbm
Rx Sensitivity	5 GHz a/n mcs7 < -68dbm
Security	WEP 64/128, WPA, WPA2, TKIP, and AES software encryption
Operating System Compatibility	
Windows XP 32/64	
Windows Vista 32/64	
Windows 7 32/64	
Linux Ubuntu	

4. Mechanical Dimensions



5. CL-120 PCIe module installation

- (1) Check main board quality and make sure the connector is soldered right.
- (2) Get the CL-120, and plug into the connector.
- (3) Screw to fix the module
- (4) Assemble the antenna
- (5) Connect to a Wireless Network via a Wireless Network Router or Access Point

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 or more 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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 or operating in conjunction with any other antenna or transmitter.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This module is intended for OEM integrator.

The OEM integrator is still responsible for the FCC compliance requirement of the end product, which integrates this module.

Appropriate measurements (e.g. 15 B compliance) and if applicable additional equipment authorizations (e.g. Verification , Doc) of the host device to be addressed by the integrator/manufacture.

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. The FCC part 15.19 statement below has to also be available in the 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: S4A50-0100-CL-01".