CPE803K IEEE 802.11b/g/n Wi-Fi mini PCI Express Card



Bointec



The cost effective industrial wireless LAN solution

Introduction of Products

BOINTEC CPE803K is a WLAN module supporting IEEE 802.11 b/g/n standards .This is a small form factor and low cost compact WLAN module designed for the wireless connectivity of products with embedded system. This module operates in 2.4GHz ISM frequency band, it applies a highly integrated MAC/BBPand RF single chip RT5390 with 150Mbps PHY rate supporting. This module can be built-in other embedded applications such as IP Camera, IP set top box, GPS, Internet radio apparatus, it can be directly soldered on a main PCB.

Bointec CPE803K implements half-duplex OFDM, CCK and DSSS base-band processing supporting IEEE 802.11b/g/n data rates. The MAC supports the IEEE 802.11 wireless MAC protocol as well as 802.11i security, receive and transmit filtering, error recovery, and quality of service (QoS). CPE803K also supports software based Wi-Fi Protected Setup (WPS). Simply enable the WPS feature from the WIFI software and your device will automatically setup the WIFI security with a compatible WPS wireless router. Setting up a secure wireless network has never been so easy.

Product Highlight

CMOS single chip (RT5390) with RF (PA, LNA, T/R SW, and diversity SW), Baseband, and MAC integration.

Complies with IEEE 802.11b/g/n, 802.11n(Draft 4.0).

- Dynamic data rate: 802.11b:1,2,5.5,11Mbps; 802.11g: 6,9,12,18,24,36,48,54Mbps.
- 802.11n: (20MHz) MCS0-7, up to 72Mbps;(40MHz) MCS0-7, up to 150Mbps

Security support for 64/128 WEP, WPA, WPA2

QoS: WMM & WMM-PS

Cisco CCX 5.0 support

Operates in 2.4GHz frequency bands.

- Antenna configuration: one I-PEX receptacle for external antenna.
- Drivers supporting Windows XP/Vista,2K, Mac OS X and Linux.

Hardware	
Main Chipset	Ralink RT5390
Host interface	PCI EXPRESS 1.1
Card type	Mini PCle
LED	Link/ Activity
RF	
Antenna	one External Antenna via I_PEX receptacle
Antenna Impedance	50 ohm@2.4GHz
Operation Frequency	2412~2483.5 MHz
Transmit Power	802.11b (CCK):18+/-1dBm@11Mb ps 802.11g (OFDM): 14+/-1dBm@54Mbps
	802.11n: (HT20), 13+/-1dBm@MCS7 802.11n: (HT40), 13+/-1dBm@MCS7
Receive Sensitivity	802.11b: -83dBm@11Mbps 802.11g: -72dBm@54Mbps
	802.11n: (HT20), -68dBm@MSC7 802.11n: (HT40), -65dBm@MSC7
Max Rx input Level	-6dBm@54Mbps; -8dBm@MSC7
Software	
Operation System	Win CE/2000/XP/Vista/7; Linux 2.6.X; Mac OS X
Security	WEP/TKIP/AES/WPA/WPA2/WAPI
Operation Conditions	
Voltage Range*	DC 3.3V ± 5% & 1.5V± 5%
Current Consumption (HT 40MHz, MCS7)	Receive: 3.3V input:: 30mA, 1.5V input: 225mA
	Transmit: 3.3V input: 255mA, 1.5V input: 125mA
Operating Temperature	-10°C - 60°C
Storage Temperature	-20°C - 70°C
Operating Humidity	RH 95% (Non-Condensing)
Storage Humidity	RH 95% (Non-Condensing)
Physical Specification	
Dimensions	30*26.8*3.0mm / 60*26.8*5.2mm







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