

WiFi-110E Datasheet

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Revision History

Rev.	Date	History
1.0	2011/3/1	1. 1 st release
2.0	2011/8/1	1. Add dimension and terminal definition

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1. Overview



The WiFi-110E is an IEEE802.11 n/b/g mini-PCI module that connects your notebook to a wireless local area. The WiFi-110E 2*3 MIMO Technology improves effective throughput and range over existing 802.11 b/g products better expands the receiving distance and efficiently eliminates wireless connection dead spots compared with normal 11g products.

The WiFi-110E is a very small module that can fit into any notebook, handheld or desktop computer equipped with a mini-PCI (Type III B slot) interface for wireless network applications. It allows you to take full advantage of your notebook's mobility with access to real-time information and online services anytime and anywhere. It slides easily into the mini-PCI expansion slot to enable a wireless connection to your network.

2. Features

- Chipset: Ralink RT2860
- Mini PCI Interface Type IIIB
- 300 Mbps PHY Rate Support
- 2*3 MIMO Technology improves effective throughput and range over existing 802.11 b/g products
- Qos WMM, WMM-PS,
- Support 802.11n/b/g standard
- Low power consumption
- Operating Systems Support: Windows 2000, Windows XP, Windows Vista, Linux

3. Specification

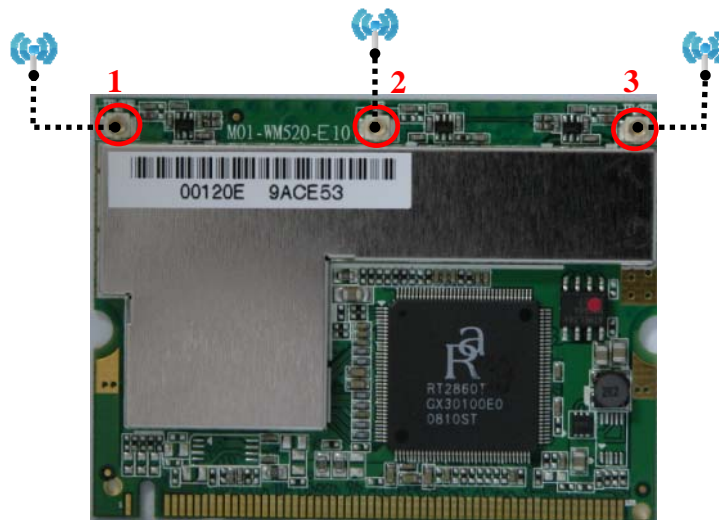
Standard	
802.11b/g/n	
Chipset	
Mac/BB /RF	Ralink RT2860
Host Interface	
Mini PCI Interface Type IIIB	
Radio	
Antenna	Detachable antenna
Operating Frequency	802.11 n/b/g USA (FCC): 2.412GHz ~ 2.462GHz Europe (ETSI): 2.412GHz ~ 2.472 GHz Japan (TELEC): 2.412GHz ~ 2.483GHz
Number of Selectable Channels	802.11n 20MHz/40MHz ;802.11b/g USA (FCC) 11 channels; EU (ETSI) 13 channels; Japan (TELEC) 13 channels
Data rate	802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: up to 300Mbps
Coverage Area	Up to 12 times faster than existing 802.11 b/g products
Transmit Power(EIRP)	11n HT40 : +17dBm 11b CCK: +19dBm 11g OFDM: +17dBm
Receive Sensitivity	-65dBm at 300Mbps -70dBm at 54Mbps, 10% PER -86dBm at 11Mbps, 8% PER
Operating Voltage	
DC 3.3V ± 5%	
Environmental	
Temperature Range	0 ~ 55°C
Physical Specification	
Dimensions	44.6mm(L)*59.9mm(W)*3.1mm(H)
Software	
Driver	Windows XP/Vista/Win 7/ Linux

4. Hardware Description

4.1 Terminal Definition

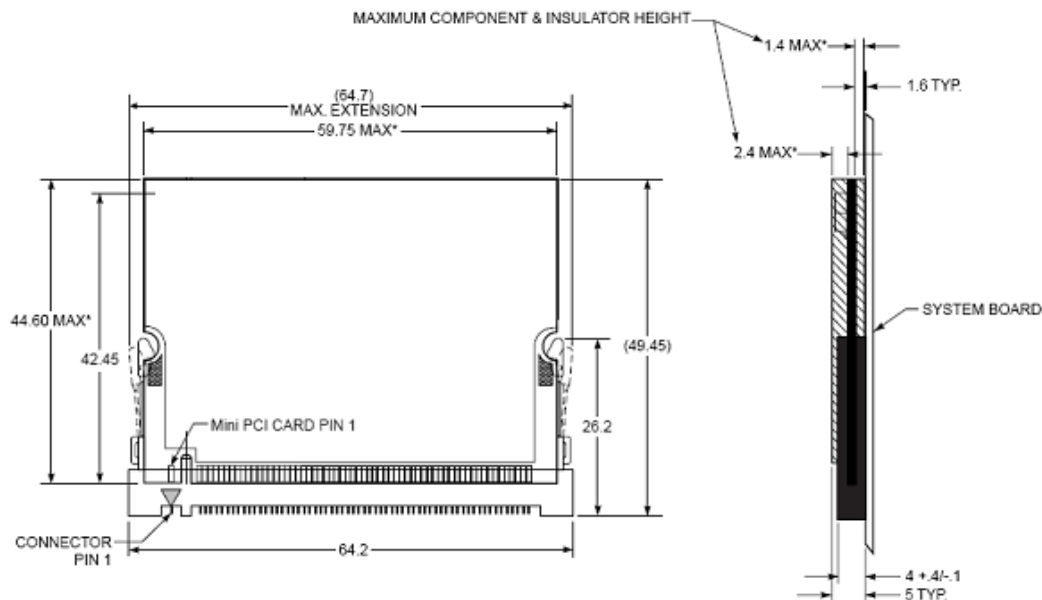
The WiFi-110E supports 2*3 MIMO technology. Please use 3 antennas to contact the antenna connector point of 1, 2 and 3. If using 2 antennas, please contact to connector point of 1 and 3.

But, please don't use single antenna with this module. Since the signal of Tx, Rx are separated. And the throughput will be dropped while using single antenna.

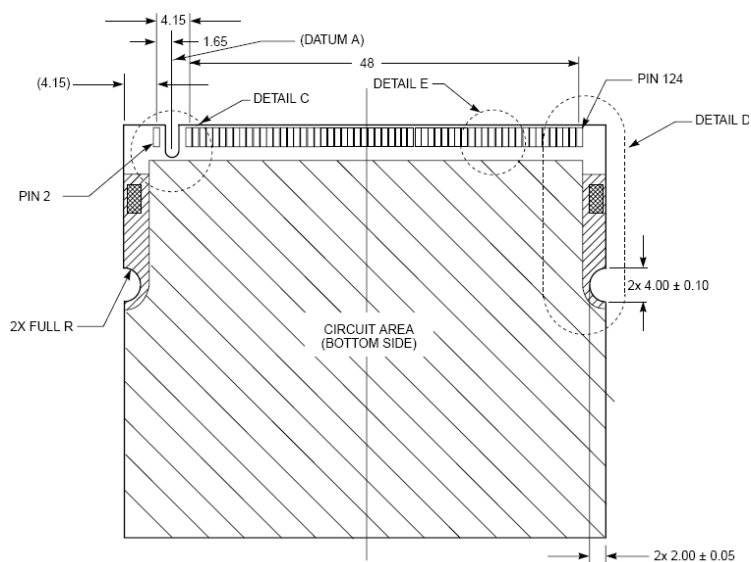


5. Mechanical Dimension

5.1 Top View



5.2 Bottom View



Appendix: Part Number Table

Product	Advantech PN
802.11b/g/n, Ralink RT2860, Mini-PCI card	WIFI-110E