



Half PCIe MINI CARD

WLE200N2

WIRELESS-BGN 2 x 2 NETWORK MINIPCI-E ADAPTER

Superior Performance for Multimedia Networking

WLE200N2 is an 802.11n Single-Band wireless mini pci express Half Mini Card based on Atheros AR9287 chipset. It supports 2T2R (2-stream) function, which provides maximum data rate up to 300Mbps and improves the overall Wi-Fi coverage area.

Secure Wireless Connection

This Mini PCIe wireless card, WLE200N2, incorporated advanced security encryption, such as WPA, and WPA2, to help prevent users' devices from malicious attacks.

Features

- Atheros HB97 reference design
- IEEE 802.11n compliant and backward compatible with 802.11b/g
- 2.4GHz Single-band 2 x 2 MIMO spatial multiplexing technique
- Output Power up to 16dBm
- Supports up to 300Mbps physical data rates
- Multi-Country Roaming Supported
- 2 x U.FL Antenna Connector
- Complaint with PCI-Express Mini Card 1.1 Standard
- Enhanced wireless security: WEP, WPA, WPA2
- Support Windows XP/ Vista, Win 7, Android by request

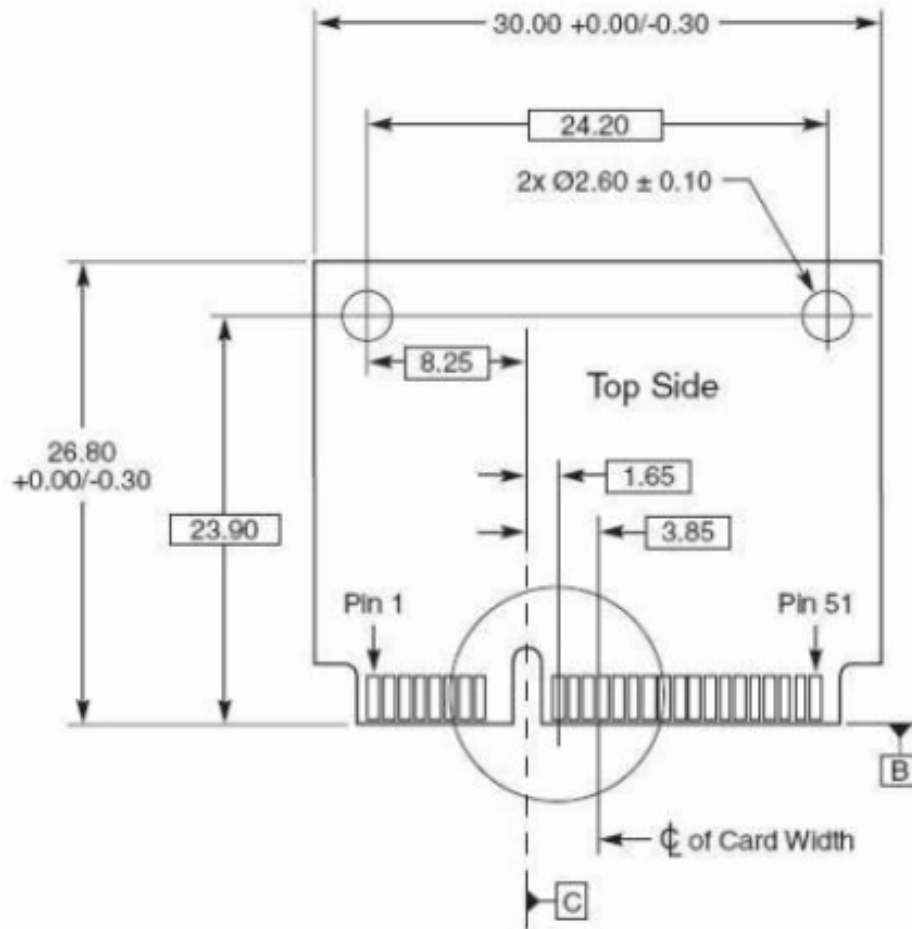
Technical Specifications											
Chipset	AR9287										
Host Interface	PCI–Express 1.1 Standard										
Operating Voltage	DC 3.3 V±9%										
Power Consumption	Continue TX 570mA Continue Rx 530mA										
Antenna Connector	2 x U.FL Antenna Connector										
Output Power (2T)	802.11b: 16dBm ± 1.5dBm@11Mbps 802.11g: 11dBm ± 1.5dBm@54Mbps 802.11gn HT20: 12dBm ± 1.5dBm@MCS7 802.11gn HT40: 11dBm ± 1.5dBm@MCS7										
Receive Sensitivity (2R)	802.11b: -88dBm ± 2dBm@11Mbps 802.11g: -70dBm ± 2dBm@54Mbps 802.11gn HT20: -67dBm ± 2dBm@MCS7 802.11gn HT40: -65dBm ± 2dBm@MCS7										
Standards	IEEE 802.11b :	11Mbps	5.5Mbps	2Mbps	1Mbps						
	IEEE 802.11g :	54Mbps	48Mbps	36Mbps	24Mbps	18Mbps	12Mbps	9Mbps	6Mbps	automatically	
		Fallback to 5.5Mbps, 2Mbps, 1Mbps									
	IEEE 802.11n :	20MHZ	1Nss: 65Mbps @ 800GI, 72.2Mbps @ 400GI (Max.) 2Nss: 130Mbps @ 800GI, 144.4Mbps @ 400GI (Max.)								
		40MHZ	1Nss: 135Mbps @ 800GI, 150Mbps @ 400GI (Max.) 2Nss: 270Mbps @ 800GI, 300Mbps @ 400GI (Max.)								
Frequency Range	IEEE 802.11b/g/n:	2.412GHz ~ 2.462GHz (US & Canada)									
		2.412GHz ~ 2.472GHz (Europe)									
		2.412GHz ~ 2.484GHz (Japan)									
Modulation Techniques	OFDM: BPSK, QPSK, 16 QAM, 64QAM DSSS: DBPSK, DQPSK, CCK										
Environment Specifications	Operating: -20°C to 70°C Storage: -40°C to 90°C										
Humidity	5% to 95% (non-condensing)										
Weight	≤9g										
Dimension	30mm x 26.8mm x 3.45mm										

Ordering Informaion^①

Model Code	Chipset	Form Factor	CARD INFORMATION
WLE200N2 6A0000	AR9287	Half Size	802.11 b/g/n PCIe mini card

- ① Configurations are subject to change without notice
Please contact Compex sales representatives for other available configurations

DIMENSIONS DRAWING



Compex Systems Pte Ltd

135 Joo Seng Road, PM Industrial Building #08-01,
Singapore 368363
Tel: (65) 6286 2086
Fax: (65) 6280-9947
Email: sales@compex.com.sg

Compex (Suzhou) Co. Ltd

No. 12, ChuangTou Industrial Square, LouFeng North, Suzhou
Industrial Park, Suzhou, Jiangsu Province, China 21122
Tel: (86)-512-62950031
Fax: (86)-512-62950032



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For more information, visit www.compex.com.sg

IC Radiation Exposure Statement for Canada

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

User manuals for transmitters equipped with detachable antennas shall also contain the following notice in a conspicuous location:

This radio transmitter (identify the device by certification number, or model number if Category II) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio (identifier le dispositif par son numéro de certification ou son numéro de modèle s'il fait partie du matériel de catégorie I) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Frequency Band (GHz)	Type	Model No.	Antenna Gain (dBi)
2.4 ~ 2.5	Dual Band Omni Directional Antenna	SAA04-22008A	4.5
2.4 ~ 2.5	Omni Directional Antenna	WD12020124G	2.0

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons.

If the module is installed in the host device. The antenna(s) used for this host device must be installed to provide a separation distance of at least 20cm from all persons.

The host device shall be properly labelled to identify the modules within the host device. The Industry Canada certification label of a module shall be clearly visible at all times when installed in the host device, otherwise the host device must be labelled to display the Industry Canada certification number of the module, preceded by the words "Contains transmitter module", or the word "Contains", or similar wording expressing the same meaning, as follows:
Contains transmitter module IC: 7849A-WLE200N2

Compliance Information

FCC Compliance Statement:

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 must accept any interference received, including interference that may cause undesired operation. Product that is a radio transmitter is labeled with FCC ID.

FCC Caution:

- (1) Exposure to Radio Frequency Radiation. This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.
- (2) Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.
- (3) This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- (4) Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

RF exposure warning

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. The equipment must not be co-located or operating in conjunction with any other antenna or transmitter.

IMPORTANT NOTE: In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

The antenna gain which being use as below:

Frequency Band (GHz)	Type	Model No.	Antenna Gain (dBi)
2.4 ~ 2.5	Dual Band Omni Directional Antenna	SAA04-22008A	4.5
2.4 ~ 2.5	Omni Directional Antenna	WD12020124G	2.0

- (1) The modules FCC ID is not visible when installed in the host, or

(2) If the host is marketed so that end users do not have straight forward commonly used methods for access to remove the module so that the FCC ID of the module is visible; then an additional permanent

OEM integration instructions:

This device is intended only for OEM integrators under the following conditions:

The antenna must be installed such that 20 cm is maintained between the antenna and users, and the transmitter module may not be co-located with any other transmit or antenna. The module shall be only used with the integral antenna(s) that has been originally tested and certified with this module.

As long as 3 conditions above are met, further transmitter test will not be required.

However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirement with this module installed(for example, digital device emission, PC peripheral requirements, etc.)

OEM integration instructions:

In the event that these conditions cannot be met (for example certain laptop configuration or co-location with another transmitter), then the FCC authorization for this module in combination with the host equipment is no longer considered valid and the FCC ID of the module cannot be used on the final product. In these and circumstance, the OEM integrator will be responsible for re-evaluating. The end product (including the transmitter) and obtaining a separate FCC authorization

End product labeling:

This transmitter module is authorization only for use in device where the antenna may be installed such that 20 cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following:

“Contains Transmitter Module FCC ID: CF S8DLWLE200N2 or Contains FCC ID: CF S8DLWLE200N2”

Information that must be placed in the end user manual:

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user’s manual of the end product which integrates this module. The end user manual shall include all required regulatory information/warning as show in this manual.