





# Full-size PCIe MINI CARD WLE250NX

WIRELESS-ABGN 2X2 NETWORK MINI PCIE ADAPTER

## **Features**

- · Atheros XB116 reference design
- Maximum 20dBm output power(per chain)/ 25dBm(aggregate)
- Single 3.3V power
- IEEE 802.11n compliant and backward compatible with 802.11a/b/g
- Dual-band 2 x 2 MIMO spatial multiplexing technique
- Supports up to 450Mbps physical data rates
- Atheros XSPAN family chipset with SST3<sup>™</sup>, which increase the link rate by ~100% at short range, ~50% at mid range and ~25% at long range
- Supports Spatial Multiplexing, cyclic-delay diversity (CDD), low-density parity check (LDPC), maximum ratio combining (MRC), space time block code (STBC) and Tx beamforming (TxBF)
- Dynamic Frequency Selection (DFS)
- Multi-Country Roaming Supported (IEEE802.11d Global Harmonization Standard)
- 2 x U.FL Antenna Connector
- Supports 802.11x authentication, 64/128/152Bit WEP, IEEE802.11i encryption
- Supports Windows 7, Windows Vista, Windows XP operating system

Technical Specifications										
Chipset	AR9582/AR9592									
Host Interface	PCI-Express 1.1 Standard									
Operating Voltage	3.3 VDC									
Power Consumption	3.5W									
Antenna Connector	2 x U.FL Antenna Connector									
Data Rate	IEEE 802.11a :	54Mbps	48Mbps	36Mbps	24Mbps	18Mbps	12Mbps	9Mbps	6Mbps	
	IEEE 802.11b:		5.5Mbps		1Mbps					
	IEEE 802.11g :	54Mbps	48Mbps	36Mbps	24Mbps	18Mbps	12Mbps	9Mbps	6Mbps	automatically
		Fallback to 5.5Mbps, 2Mbps, 1Mbps								
	IEEE 802.11n :		1Nss: 65Mbps @ 800GI, 72.2Mbps @ 400GI (Max.)							
		20MHZ	2Nss: 130Mbps @ 800GI, 144.4Mbps @ 400GI (Max.)							
					,			,		
			1Nss: 135Mbps @ 800GI, 150Mbps @ 400GI (Max.)							
		40MHz								
Frequency Range	IEEE802.11b/g/n:	2.412GHz ~ 2.462GHz (US & Canada)								
		2.412GHz ~ 2.472GHz (Europe)								
		2.412GHz ~ 2.484GHz (Japan)								
	IEEE 802.11a/n:	5.150 ~ 5.350 GHz,5.470 ~ 5.725GHz, 5.725 ~ 5.850 GHz (US & Canada)								
		5.150 ~ 5.350 GHz,5.470 ~ 5.725GHz, 5.725 ~ 5.875 GHz (Europe)								
		5.150 ~ 5.250 GHz,5.250 ~ 5.350GHz, 5.470 ~ 5.725GHz(Japan)								
Modulation	OFDM: BPSK, QPSK, 16-QAM, 64-QAM									
Techniques	DSSS: DBPSK, DQPSK, CCK									
RoHS Compliance	Yes									
Temperature	Operating: -20°C to 70°C									
Range	Storage: -40°C to 90°C									
Humidity	Operating:5% to 95% (non-condensing)									
	Storage: Max.90% (non-condensing)									
Dimensions	50.95mm x 30 mm x 3.2 mm (H x W x D)									

# 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.

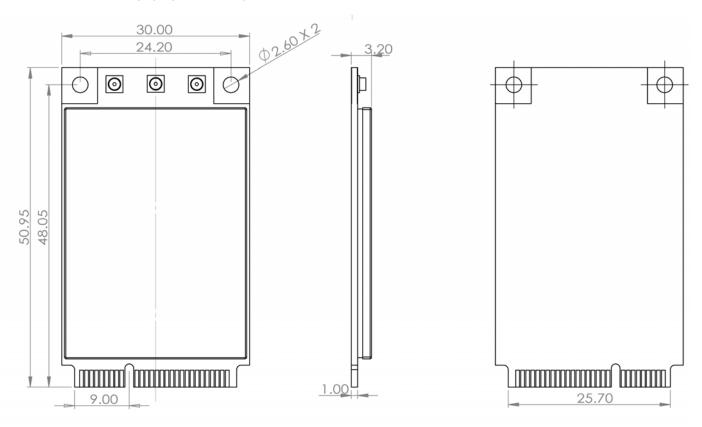
End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

- (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.
- (5) Outdoor Operations in the 5.15~5.25GHz band is prohibited.

**IMPORTANT NOTE**: In the event that these conditions can not 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 can not 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. **WARNING**: This Wireless Mini PCI Adapter does not support ad-hoc mode Function

FCC ID: TK4WLE250NX

### **DIMENSIONS DRAWING**



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- (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 label referring to the enclosed module: Contains Transmitter Module FCC ID: TK4WLE250NX or Contains FCC ID: TK4WLE250NX must be used.