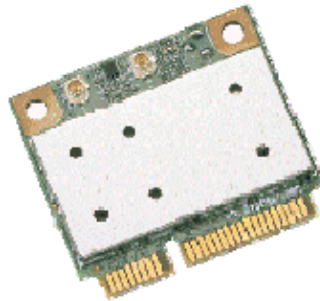




WPEA-121N

Feature

- Reference Design: HB116
- Chipset: Atheros AR9382
- Interface: Half Mini PCI Express
- Wireless connection up to 300Mbps, 2T2R
- Enhanced wireless security: 64/128-bits WEP, WPA, WPA2
- Support Windows 2000/ XP/ Vista/ Win 7, Linux, Android by request



802.11 a/b/g/n Half Mini Card

Highest Performance with Atheros AR9382 (HB116), 2T2R 2-Stream Solution

Superior Performance with Longer Range

SparkLAN WPEA-121N, embedded with Atheros AR9382 chipset, incorporated with Atheros XSPAN with Signal Sustain Technology (SST). It supports 2T2R (2 transmit 2 receive) MIMO technology, which delivers superior throughput up to 300Mbps and improves the overall Wi-Fi coverage area.

Ideal for High-End Notebook

The module adopts the latest 802.11n Dual-Band technology (2.4GHz and 5GHz). It targets enterprise and high-end consumer notebooks. The solution enables up to 6 times the throughput of 802.11a/g solutions.

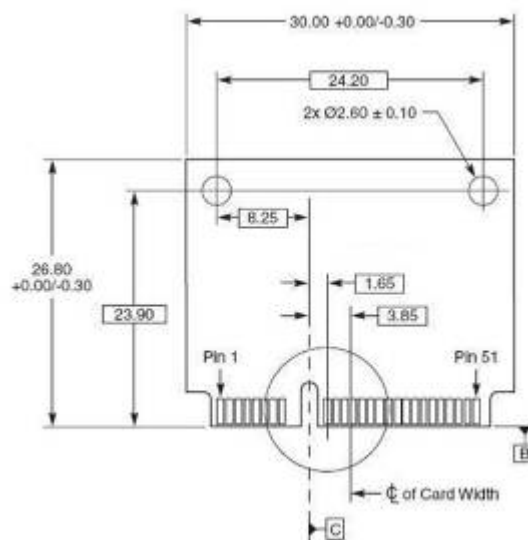
Industry-Leading Power Efficiency

WPEA-121N, featuring Atheros' highest level of 802.11n WLAN throughput, enables a high performance, cost effective, low power, and compact solution for developers to easily integrate with embedded computing platforms.

Application

- Notebook
- Ultra Mobile PC
- Networking Equipment
- Digital Multimedia Device (Gaming Machine, HDTV)

Mechanical Dimension

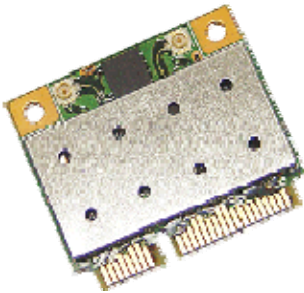




WPEA-121N

Related Product

- WPEA-111N
802.11a/b/g/n Half Mini Card



Ordering Info

- WPEA-121N
802.11a/b/g/n Half Mini Card

Specifications

Standard

802.11a/b/g/n

Chipset

Mac/BB /RF Atheros AR9382

Host Interface

Half Mini PCI Express

Radio

| | |
|---------------------|---|
| Antenna | 2 x U.FL connectors, 2T2R |
| Operating Frequency | 802.11b/g/n ISM Band: 2.412 ~ 2.4835 GHz 802.11a ISM Band: 5.15 ~ 5.85 GHz |
| Modulation | 802.11a: OFDM (BPSK, QPSK, 16-QAM, 64-QAM) 802.11b: DSSS (DBPSK, DQPSK, CCK) 802.11g: OFDM (BPSK, QPSK, 16-QAM, 64-QAM) 802.11n: OFDM (BPSK, QPSK, 16-QAM, 64-QAM) |
| Output Power | 802.11a: 12dBm ± 2dBm 802.11b: 17dBm ± 2dBm 802.11g: 16dBm ± 2dBm 802.11gn HT20: 15dBm ± 2dBm@MCS7 802.11gn HT40: 14dBm ± 2dBm@MCS7 802.11an HT20: 12dBm ± 2dBm@MCS7 802.11an HT40: 11dBm ± 2dBm@MCS7 |
| Receive Sensitivity | 802.11a: ≤ -76dBm@54Mbps 802.11b: ≤ -85dBm@11Mbps 802.11g: ≤ -76dBm@54Mbps 802.11gn HT20: ≤ -75dBm@MCS7 802.11gn HT40: ≤ -72dBm@MCS7 802.11an HT20: ≤ -74dBm@MCS7 802.11an HT40: ≤ -71dBm@MCS7 |

Power consumption

| | |
|-------------|-----------|
| Continue TX | Max 600mA |
| Continue RX | Max 237mA |

Operating Voltage

DC 3.3 V ±10% I/O supply voltage

Environmental

| | |
|------------------------------|--|
| Temperature Range | 0 ~ 75°C (Operating) -40~85°C (Storing) |
| Humidity (non-condensing) | 5 ~ 90% (Operating) 5 ~ 95% (Storing) |

Physical Specification

| | |
|------------|-------------------------|
| Dimensions | 30 mm x 26.8 mm x 4.5mm |
| Weight | ≤ 9g |

Software

| | |
|----------|---|
| Driver | Windows 2000/ XP/ Vista/ Win 7, Linux, Android by request |
| Security | 64/128-bits WEP, WPA, WPA2 |