

## Features:

- **Industrial Grade**
- **High performance**
- **Data Rates: allows link speeds up to 450Mbps**
- **Support Windows XP/ Vista/ Win7/ Linux driver**

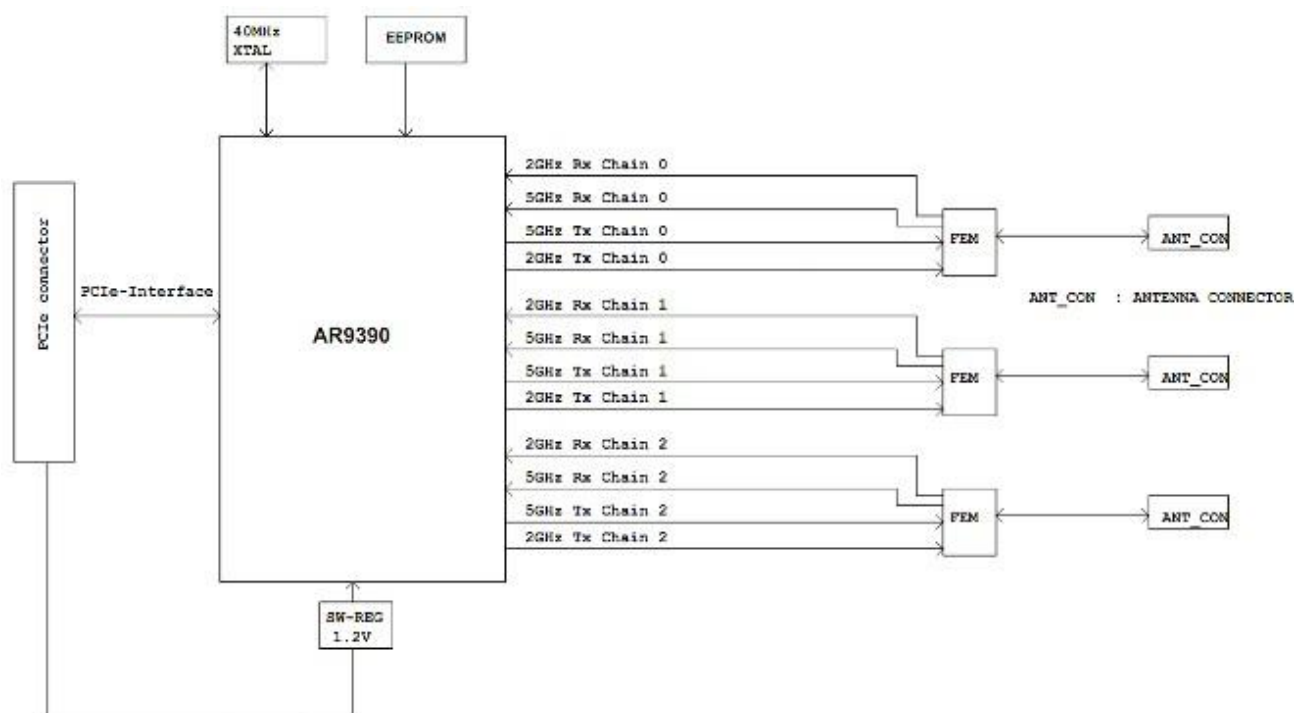
# WPEA-127NI

802.11 abgn Dual-Band 3T3R Mini PCIe Module

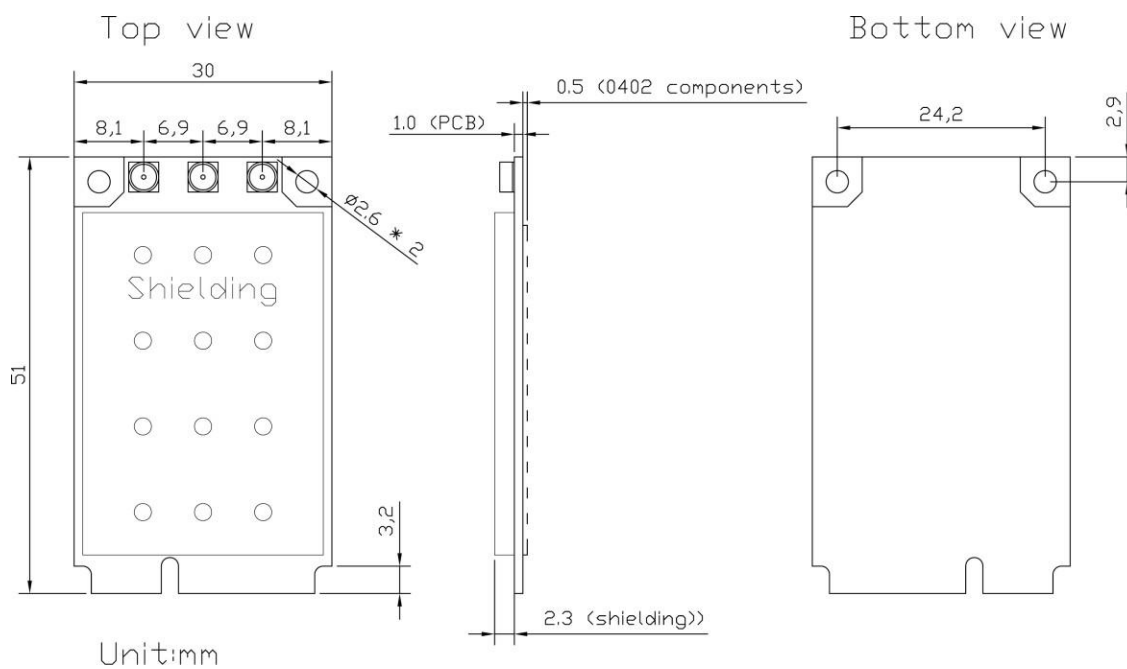


| System                     |                                                                                                                                 |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Standards:                 | IEEE 802.11abgn (3T3R)                                                                                                          |
| Chipset:                   | Qualcomm Atheros AR9390-AL1B                                                                                                    |
| Data Rate:                 | 802.11b: 11Mbps / 802.11a/g: 54Mbps / 802.11n: 450Mbps                                                                          |
| Operating Frequency:       | IEEE802.11abgnISMband, 2.400GHz~2.4835GHz, 5.180MHz~5.825MHz<br>*Subject to local regulations                                   |
| Interface:                 | Mini PCI Express                                                                                                                |
| Form Factor:               | Mini PCI-e                                                                                                                      |
| Antenna:                   | 3 x UFL connector for 3T3R                                                                                                      |
| Modulation:                | 802.11b: DSSS (DBPSK, DQPSK, CCK)<br>802.11a/g: OFDM (BPSK, QPSK, 16-QAM, 64-QAM)<br>802.11n: OFDM (BPSK, QPSK, 16-QAM, 64-QAM) |
| Operating Voltage:         | 3.3V                                                                                                                            |
| Temperature Range:         | -40°C to +80°C (Operating ) / -50°C to +95°C (Storage)                                                                          |
| Humidity (Non-Condensing): | Operating Humidity (non-condensing): 20% ~ 80%<br>Storage Humidity (non-condensing): 5% ~ 95%                                   |
| Power Consumption:         | Continue TX: 970mA / Continue RX : 300mA                                                                                        |
| Dimension (in mm):         | 50.95 x 30 x 3.3 mm                                                                                                             |
| Weight (g):                | ≤ 7g                                                                                                                            |
| Driver Support:            | Windows XP/ Vista/ Win7/ Linux                                                                                                  |
| Security                   | 64/128-bits WEP, WPA, WPA2                                                                                                      |

## Block Diagram



## Mechanical Dimension (mm)



## Pin Assignment

| Pin# | Pin Name          | Status   | Pin# | Pin Name    | Status   |
|------|-------------------|----------|------|-------------|----------|
| 1    | WAKE_L            | NA       | 2    | +3.3V       | YES      |
| 3    | RESERVED(GPIO1 2) | YES      | 4    | GND         | YES      |
| 5    | RESERVED          | NC       | 6    | +1.5V       | NC       |
| 7    | CLKREQ_L          | Optional | 8    | UIM_PWR     | NC       |
| 9    | GND               | YES      | 10   | UIM_DATA    | NC       |
| 11   | REFCLK-           | YES      | 12   | UIM_CLK     | NC       |
| 13   | REFCLK+           | YES      | 14   | UIM_RESET   | NC       |
| 15   | GND               | YES      | 16   | UIM_VPP     | NC       |
| 17   | UIM_C8            | NC       | 18   | GND         | YES      |
| 19   | UIM_C4            | NC       | 20   | W_DISABLE_L | YES      |
| 21   | GND               | YES      | 22   | PERST_L     | YES      |
| 23   | PERn0             | YES      | 24   | +3.3V       | NC       |
| 25   | PERp0             | YES      | 26   | GND         | YES      |
| 27   | GND               | YES      | 28   | +1.5V       | NC       |
| 29   | GND               | YES      | 30   | SMB_CLK     | NC       |
| 31   | PETn0             | YES      | 32   | SMB_DATA    | NC       |
| 33   | PETp0             | YES      | 34   | GND         | YES      |
| 35   | GND               | YES      | 36   | USB_D-      | NC       |
| 37   | RESERVED          | NC       | 38   | USB_D+      | NC       |
| 39   | RESERVED(+3.3V )  | YES      | 40   | GND         | NC       |
| 41   | RESERVED(+3.3V )  | YES      | 42   | LED_WWAN_L  | NC       |
| 43   | RESERVED(GND)     | YES      | 44   | LED_WLAN_L  | Optional |
| 45   | RESERVED          | NC       | 46   | LED_WPAN_L  | NC       |
| 47   | RESERVED(GPIO1 3) | YES      | 48   | +1.5V       | NC       |
| 49   | RESERVED(GPIO1 4) | YES      | 50   | GND         | YES      |
| 51   | RESERVED(GPIO1 5) | YES      | 52   | +3.3V       | YES      |