

**EMC Technologies Report Number: M071118\_Cert\_4965AGN\_NII\_BT**

## **APPENDIX G**

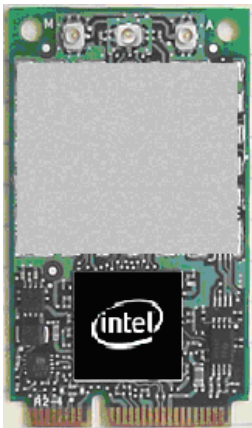
### **WLAN SPECIFICATIONS**



# Intel® Wireless WiFi Link 4965AGN

## Product Description:

The Intel® Wireless WiFi Link 4965AGN is an embedded 802.11a/b/g/Draft N<sup>ϕ</sup> PCIe<sup>+</sup> Mini Card network adapter card that operates in both the 2.4GHz and 5GHz spectra. This product delivers high throughput and a host of features that enhance today's mobile lifestyle.



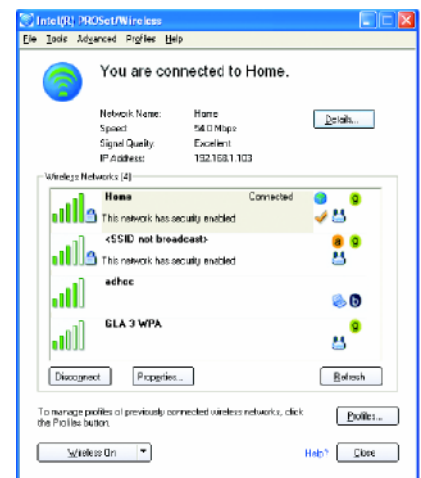
## Key Features:

- Data rates up to 300 Mbps
- Intel® Active Management Technology features deliver improved manageability over wireless LAN
- IEEE 802.11e QoS with enhancements for VoIP
- Wake on WLAN support
- Interference Filter enhances performance in congested (noisy) wireless environments
- Business Class Wireless Suite\* (version 2) offers High Density Network and Enterprise Conferencing Enhancements
- IEEE 802.11a/b/g/Draft N<sup>ϕ</sup> quad-mode Wireless LAN support (2.4GHz and 5GHz)
- Highest industry-standard wireless LAN security support (802.11i, 802.1X, WEP\*, WPA\*, WPA2\*, AES<sup>§</sup>)
- Cisco Compatible Extensions\* v4 support available on certain models. Check with your PC manufacturer
- Support for up to 3 antennas allows MIMO diversity for improved wireless throughput at longer range

## Intel® PROSet/Wireless Software v11.1

Intel® PROSet/Wireless Software v11.1 is available for users of Intel® Wireless and Intel® PRO/Wireless hardware. The latest version of the software helps enable a superior experience via enhancements for end users as well as IT administrators who deploy and manage wireless networks.

- Support for Microsoft Windows Vista\* operating system
  - Support for high rate Draft N<sup>ϕ</sup> wireless networks
  - Support for Intel® Active Management Technology
  - Support for Business Class Wireless Suite<sup>o</sup> (v2):
    - High-Density Networking Enhancements
    - Enterprise Conferencing Enhancements
  - Support for Cisco Compatible Extensions\* v4
  - Support for Wi-Fi\* Protected Setup for improved ease of use
  - Supports the following hardware:
    - Intel® Wireless WiFi Link 4965AGN
    - Intel® PRO/Wireless 3965ABG Network Connection
    - Intel® PRO/Wireless 3945ABG Network Connection
    - Intel® PRO/Wireless 2915ABG Network Connection
    - Intel® PRO/Wireless 2200BG Network Connection
- (Note: Some features may only be supported on the latest hardware)



| Technical Specifications    |                                                                                                                                   |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Product Name                | Intel® Wireless WiFi Link 4965AGN                                                                                                 |
| Dimensions (H x W x D)      | 2.00 in x 1.18 in x 0.13 in (50.95 mm x 30.00 mm x 3.30 mm)                                                                       |
| Weight                      | 7g                                                                                                                                |
| Antenna Interface Connector | Hirose* U.FL-R-SMT mates with cable connector U.FL-LP-066                                                                         |
| Antenna Diversity           | On-board diversity support for systems designed with two or three antennas                                                        |
| Radio ON/OFF Control °      | Supported in both hardware and software                                                                                           |
| Connector Interface         | Mini Card form factor, based on PCIe electrical interface                                                                         |
| LEDs output                 | Link, Activity                                                                                                                    |
| Operating Temperature       | 0 to +80° Celsius                                                                                                                 |
| Humidity Non-Operating      | 50% to 90% RH non-condensing (at temperatures of 25°C to 35°C)                                                                    |
| Operating Systems           | Microsoft* Windows* Vista 32/64 bit, XP 32/64 bit, 2000, and Linux                                                                |
| Wi-Fi Alliance              | Wi-Fi Certified* for 802.11a, 802.11b, 802.11g, WMM*, WPA*, and WPA2*                                                             |
| Microsoft WHQL              | YES                                                                                                                               |
| IEEE WLAN Standard          | IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, Draft N <sup>Φ</sup>                                                                    |
| Architecture                | Infrastructure or ad hoc (peer-to-peer)                                                                                           |
| Roaming #                   | Supports seamless roaming between respective access points (802.11b, 802.11g, 802.11a/b/g, and 802.11a/b/g/Draft N <sup>Φ</sup> ) |
| Security §                  |                                                                                                                                   |
| Authentication              | WPA § and WPA2 §, 802.1X (EAP-TLS, TTLS, MD5, PEAP, LEAP, EAP-FAST), EAP-SIM                                                      |
| Authentication Protocols    | PAP, CHAP, MD5, GTC, MS-CHAP*, MS-CHAPv2*                                                                                         |
| Encryption                  | 64-bit and 128-bit WEP, AES-CCMP, CKIP, TKIP                                                                                      |
| Product Safety              | UL, C-UL, CB (IEC 60590)                                                                                                          |

| Products Available                | Model Code                                                        |
|-----------------------------------|-------------------------------------------------------------------|
| Intel® Wireless WiFi Link 4965AGN | 4965AGN                                                           |
|                                   | 4965AG_ (version with Draft N <sup>Φ</sup> capabilities disabled) |

Φ "Draft N" refers to: IEEE P802.11n™/D1.0 Draft Amendment to STANDARD [FOR] Information Technology-Telecommunications and information exchange between systems-Local and Metropolitan networks-Specific requirements-Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications: Enhancements for Higher Throughput

\* Other names and brands may be claimed as the property of others.

+ Wireless connectivity and some features may require the purchase of additional software, services, or external hardware. Availability of public wireless LAN access points is limited, wireless functionality may vary by country and some hotspots may not support Linux-based Intel Centrino mobile technology systems. System performance measured by MobileMark\* 2005. System performance, battery life, wireless performance, and functionality will vary depending on the specific operating system, hardware, and software configurations. See [http://www.intel.com/products/centrino/more\\_info](http://www.intel.com/products/centrino/more_info) for more information.

§ Some security solutions, Intel® PROSet/Wireless Software, and/or Business Class Wireless Suite features may not be supported by your PC's operating system and/or by your PC manufacturer. Check with your PC manufacturer for details on availability.

◊ Intel® PROSet/Wireless software may not be supported by your PC manufacturer. Check with your PC manufacturer for details on availability.

# Roaming is supported only between each respective band and mode of access points.

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