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Intel® Next-Gen Wireless-N

Product Description

The Intel® Next-Gen Wireless-N product is an embedded 802.11a/b/g/Draft-N[1] PCIe*
Mini Card network adapter that operates in both the 2.4 GHz and 5.0 GHz spectra.
It delivers high throughput and a host of features that enhance today's mobile lifestyle.

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Features

- Up to 5X faster[2] and 2X greater range[2]
- IEEE 802.11a/b/g and Draft-N[1] quad-mode
- Advanced security via 802.11i
- Wireless support for Intel® Active Management Technology[Δ]

- Business-Class Wireless Suite (v2): High-Density Networking
- Support for Cisco Compatible Extensions* v4
- Easy-to-use Intel® PROSet v11.1 WLAN Software
- Intel® "Connect with Centrino®" program
- Friendly Neighbor Assurance

Feature	Benefit
Performance	
Up to 5X faster[2] 300 Mbps[2] Draft-N[1] data rates offer major improvement over 802.11a/g 54 Mbps rates	Allows more simultaneous activity for file transfers, network backups, streaming video, multi-player gaming, VoIP, and more
Up to 2X greater range[2] MIMO, diversity, and three-antennae support enable better wireless reception for greater bandwidth at farther distances	Dramatically improves connectivity throughout the home and enables more consistent coverage in the enterprise
Flexibility and Mobility	
IEEE 802.11a/b/g/Draft-N[1] Wi-Fi certified for existing 802.11a, .11b, and .11g standards, Draft-N[1] certification is also expected when available	Increased connectivity options help mobile clients utilize multiple networks (office, home, hot spots) and facilitate network upgrades to Draft-N[1] or 802.11n
Manageability and Security	
Wireless support for Intel® Active Management Technology[Δ] Enhanced asset management, remote system diagnostics, network protection and security independent of operating system functional state	Allows IT managers to remotely discover, heal, and protect wireless notebooks, which may result in reduced on-site support costs
Advanced Security via 802.11i Wireless security is supported by WPA2 AES, which is the strongest encryption algorithm available today for mobile clients	Helps ensure enterprise wireless networks are protected with stronger authentication and encryption security
Intel® PROSet v11.1[6] Intel® WLAN management software includes an optional toolkit for network managers	Well-known, easy-to-use application and IT administrator tools can help simplify client deployment and remote management of wireless settings and profiles
Interoperability	
Business-Class Wireless Suite v2 (High-Density Networking) Second-generation Intel and Cisco collaboration allows Access Points and clients to change settings based on real-time network conditions	Helps reduce interference and improve performance by enabling more dense AP deployment and increased throughput per client
Support for Cisco Compatible Extensions* v4 Cisco Centralized Key Management, Call Admission Control, Unscheduled Automatic PowerSave Delivery (U-APSD), and Voice Metrics	Help prevent noticeable delays in VoIP calls when roaming between Access Points and enable improved network diagnostics
Friendly Neighbor Assurance 40 MHz channels in the 5.0 GHz spectrum do not impact products that use the 2.4 GHz spectrum	Supports current 802.11n standard direction, allowing maximum performance and peaceful co-existence with legacy 802.11b/g devices
Intel® "Connect with Centrino®" Intel has certified Access Points from leading vendors through extensive compatibility and real-world performance testing	Selecting Access Points with the Intel "Connect with Centrino" identifier can help Intel® Centrino® processor technology end-users connect with confidence

Intel® PROSet for Windows Software[6]

Intel® PROSet/Wireless Software v11.1 helps enable a superior experience for end-users as well as IT administrators. Features include support for:

- Wi-Fi Protected Setup
- Intel® Active Management Technology
- Intel/Cisco Business-Class Wireless Suite v2: High-Density Networking Technology

- Added IT Administration Tool capabilities:
  - Install package creator
  - Central control over driver and application settings
  - Single Sign On for Microsoft and Novell networks
- Hardware[†]: Intel® Wireless Wi-Fi Link 4965AGN, Intel® PRO/Wireless 3945ABG, 2915ABG, 2200BG Network Connections

Intel® Wireless Wi-Fi Link 4965AGN Technical Specifications

General

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	7.2g
Diversity	On-board diversity support for systems designed with two or three antennas
Radio ON/OFF Control[3]	Supported in both hardware and software
Connector interface	Mini Card form factor, based on PCIe electrical interface
LEDs Output	Single LED (as per Mini Card specification)
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 2000*, XP* 32/64-bit, Vista* 32/64-bit
Wi-Fi Alliance	Wi-Fi Certified* for 802.11a, 802.11b, 802.11g, WMM*, WPA*, and WPA2* (Wi-Fi Alliance Draft-N[1] and 802.11n certifications expected when available)
Microsoft WHQL	YES
IEEE WLAN Standard	IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, (targeting IEEE 802.11n when available)
Architecture	Infrastructure or ad hoc (peer-to-peer)
Roaming[4]	Supports seamless roaming between respective access points (802.11b, 802.11g, 802.11a/b/g, and 802.11a/b/g/Draft-N[1])

Security

Authentication	WPA[5] and WPA2[5], 802.1 X, LEAP, EAP-TLS, PEAP-TLS, and PEAP-MSCHAPv2*
Encryption Protocols	CKIP, TKIP, 64-bit and 128-bit WEP (for 802.11a/b/g), AES-CCMP (for 802.11a/b/g/n)
Product Safety	UL, C-UL, CB (IEC 60590)

Products Available	Model Code	Version
Intel® Wireless Wi-Fi Link 4965AGN	4965AGN	4965AGN (supports 802.11a/b/g/Draft-N[1])
		4965AG_ (supports 802.11a/b/g with Draft-N[1] functionality disabled)

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