Killer™ Wireless-N 1202
Powered by QCA2282

Qualcomm Atheros Killer Technology

Qualcomm Atheros’ high-performance Killer technology enables intelligent networking solutions to improve the way people enjoy the Internet. The explosion of online applications and content, and the growing number of devices that access these applications, places increased stress on consumer end points. Killer technology is well positioned to address this challenge with solutions that intelligently manage, prioritize and direct digital content on home and mobile networks.

Product Overview

Killer Wireless-N 1202 high-performance wireless networking adapters have Qualcomm Atheros’ exclusive Killer Wireless Technology, combining intelligence and control along with up to five times the wireless networking speed of competitive wireless adapters. The Killer Wireless-N family includes Advanced Stream Detect™ technology to automatically classify and prioritize latency-sensitive network traffic for online games, HD video and high-quality audio to maximize your online experience. Killer Wireless-N 1202 adapters add Bluetooth 4.0 technology as well, for maximum design flexibility and greater customer options.

Killer Wireless-N 1102 adapters support dual bands (2.4 GHz and 5 GHz), 2-stream MIMO and IEEE standards-based 802.11n technologies to deliver higher data throughput rates over longer distances. Killer Wireless-N 1102 adapters also offer reduced power consumption and Wi-Fi Direct™ technology to ensure maximum flexibility for your mobile lifestyle.

Enhanced Killer Technology

Advanced Stream Detect™ Automatically classifies and prioritizes online games, HD video and high quality audio for better quality and fewer interruptions in your online experience.

Visual Bandwidth Control™ See which applications are hogging bandwidth and tune performance for each, so they don’t interfere with your online gameplay or multimedia applications. Download files or watch a video or browse the web simultaneously – it’s all possible now with Visual Bandwidth Control™.

PC Monitor™ Monitor and manage the health and performance of your wireless notebook PC with graphical displays, detailed logging and an intuitive user interface.

QCA2282 Solution Highlights

- Highly integrated single chip solution combining Atheros’ dual-band, 2x2 802.11n and Bluetooth 4.0
- WLAN
  - 2-stream 802.11n offers a maximum PHY rate of 300 Mbps
  - Conserves power with 1x1 downshift, using Dynamic MIMO Power Save
  - Supports Atheros’ Signal-Sustain Technology™ (SST), which includes advanced WLAN features such as LDPC, TxBF, MLD, and STBC
- Bluetooth
  - Supports High Speed and Low Energy operation
  - Supports Enhanced Data Rate (EDR) of both 2 Mbps (π/4-DQPSK) and 3 Mbps (8-DPSK)
- Wake on Wireless LAN (WoW) and Wake on Bluetooth (WoBT)
- Fast Channel Switch (1 ms within band and 2 ms across bands)
- Advanced integrated coexistence features (beyond discrete chipset coexistence) to maximize combo performance
- Supports antenna sharing between Bluetooth and WLAN
- Two separate On Chip One Time Programmable (OTP) Memories for WLAN and Bluetooth
- Integrated PA, LNA, Tx/Rx switch, Regulator
- 8-bit resolution for Spectral Analysis

QCA2282 System Architecture

![QCA2282 System Architecture Diagram]
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QCABHB1202 Module Highlights
• Enhanced Killer Technology
• Standard Half Mini Card form factor
• Driver support for Windows 7
• Worldwide regulatory compliance

Qualcomm Atheros is a wholly owned subsidiary of Qualcomm and a leading provider of wireless and wired technologies for the mobile, networking, computing and consumer electronics markets. We’re focused on inventing technologies that connect and empower people in ways that are elegant and accessible to all.

Our broad connectivity portfolio allows us to offer our global customer base high-performance, end-to-end solutions, featuring Wi-Fi®, GPS, Bluetooth, FM, Ethernet, HomePlug™ Powerline and PON technologies. By leveraging substantial expertise in RF, signal processing, software and networking we can deliver highly-integrated, low-power, system-level solutions that enable developers to create high-performance, differentiated products.

Killer Wireless-N 1202 Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Band</td>
<td>2.4/5 GHz</td>
</tr>
<tr>
<td>Bluetooth Frequency Band</td>
<td>2.4000 - 2.4835 GHz</td>
</tr>
<tr>
<td>Network Standard</td>
<td>Compliant with IEEE 802.11n, 802.11g, 802.11b, 802.11d, 802.11e, 802.11i and 802.11i</td>
</tr>
<tr>
<td>Modulation Technology</td>
<td>OFDM with BPSK, QPSK, 16 QAM, 64 QAM; DQPSK, CCK, G-FSK, π/4-DQPSK, 8-DPSK</td>
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<tr>
<td>FEC Coding</td>
<td>Convolution Code Low-Density Parity Check (LDPC)</td>
</tr>
<tr>
<td>Hardware Encryption</td>
<td>AES, TKIP, WEP</td>
</tr>
<tr>
<td>Quality of Service</td>
<td>802.11e</td>
</tr>
<tr>
<td>Communications Interface</td>
<td>PCIe for WLAN and USB for BT</td>
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<tr>
<td>Peripheral Interface</td>
<td>GPIO</td>
</tr>
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| Supported Data Rates | IEEE 802.11a 6 - 54 Mbps
IEEE 802.11b 1 - 11 Mbps
IEEE 802.11g 6 - 54 Mbps
IEEE 802.11n 6.5 - 300 Mbps |
| Included Software | Killer Network Manager with PC Monitor |

For more information on the Killer Wireless-N 1202 or other solutions from Qualcomm Atheros contact your local representative:

Qualcomm Atheros, Inc.
t +1 408.773.5200
f +1 408.773.9940

Qualcomm Atheros KK-Japan
t +81 3.5501.4100
f +81 3.5501.4129

Qualcomm Atheros Intl, LLC-Taiwan
t +886 2.8751.6385
f +886 2.8751.6397

Qualcomm Atheros (Shanghai) Co., Ltd.
t +86 21.5108.3626
f +86 21.5027.0100

Qualcomm Atheros Hong Kong Limited
t +852 8206.1131
f +852 8206.1301

Qualcomm Atheros China

For more information on Qualcomm Atheros and Qualcomm Atheros wireless technology please visit www.qca.qualcomm.com
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