SNEAK PEEK
Killer Performance Results

As an early pre-order sign-up, we are happy to announce to you some of our preliminary performance results. We tested World of Warcraft® (WoW)and Quake 4®, and the results were stunning both in Ping and in Frames Per Second improvement.

In-Game Test Performance

Performance Improvements		
Game Title	FPS Increase	Ping Reduction
World of Warcraft	8%	10 ms to 20 ms
Quake 4	6.5%	3 ms to 6 ms

Testing was performed on identical machines with the following configurations:

- AMD FX55 processor
- 1GB DDR3200
- Creative SoundBlaster X-Fi
- EVGA e-GeForce 7900 GT KO
- Maxtor 250GB SATA HDD
- Broadband Internet Connection
- Windows XP Professional (32 bit) SP2
- Marvell Yukon 88E8053 PCI-E Gigabit Ethernet Controller in one machine, and Killer NIC in the other.

Testing was done side by side, playing on the same server, in the same round/world, with the same other players. In Quake 4, we saw reductions of Ping from between 3 to 6 milliseconds, and in WoW we saw larger reductions in the range of 10 to 20 milliseconds. FPS improvements were taken using the FRAPS® benchmarking tool (www.fraps.com), and Ping results were taken through the in-game Ping or Latency measurements .

Raw Performance

One of the metrics that can illustrate the UDP latency improvement is a network card's maximum number of calls per second. A game's calls per second rating would indicate how frequent a game could poll or select for new data. The more calls per second the card can achieve, the less latency between calls.

Performance testing was conducted using the Killer NIC and some of the more popular onboard and PCI network interface cards on the market today. The 3rd party program used for testing is called "Test TCP", and is freely available from www.pcausa.com. According to the website, *"Test TCP (TTCP) is a command-line sockets-based benchmarking tool for measuring TCP and UDP performance between two systems. It was originally developed for the BSD operating system starting in 1984."*

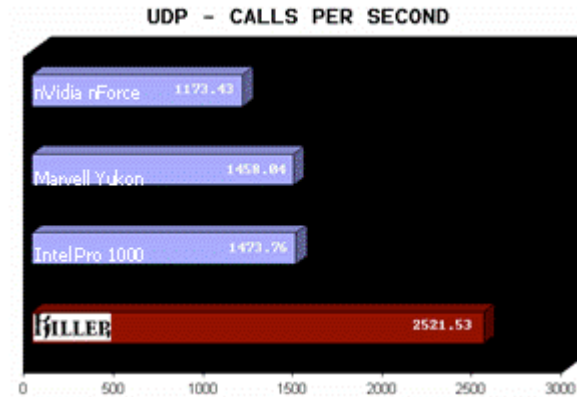**The specifications of the test systems:**

"Transmission" test system:
Motherboard: MSI K8N Diamond Plus
Processor: AMD FX-55
RAM: 1GB Crucial XMS
HDD: 74GB Western Digital Raptor 10K SATA
NICs: Onboard nVidia nForce Networking Controller
        Onboard Marvell Yukon 88E38053
        Intel Pro/1000 GT PCI Desktop Adapter
        Killer NIC
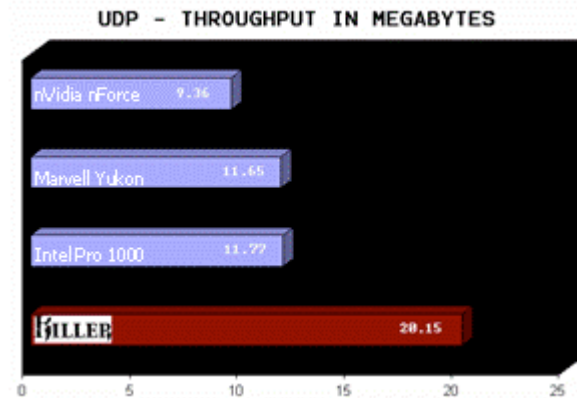
"Receiver" test system:
Dell XPS Dimension XPS Gen 4
Processor: Intel 3.2 Ghz
RAM: 1GB
HDD: 150GB Western Digital SATA
NIC: Onboard Broadcom NetXtreme 57xx

Systems were connected via a Dell PowerConnect 2708 switch using standard CAT5e cables. No other systems or connections were attached to the switch. Each NIC was submitted to three test runs using Test TCP, the lowest two performance results were discarded.

UDP - CALLS PER SECOND

nVidia nForce	1173.43
Marvell Yukon	1458.04
IntelPro 1000	1473.76
KILLER	2521.53

As the results show, the Killer NIC is capable of making 71% more calls per second than the next fastest competitor.

While throughput is not the most important aspect of improving video game performance, UDP throughput was also tested using the same systems.

UDP - THROUGHPUT IN MEGABYTES

nVidia nForce	9.36
Marvell Yukon	11.65
IntelPro 1000	11.77
KILLER	20.15

Again, the Killer NIC tops this performance test and shows why, that if you really want to win, that you should have the Killer in your Rig.