

FIC KN-6010 PCI SYSTEM BOARD BENCHMARKING REPORT

Revision 2.1

Update: 23-Jan-1997

1.0 Introduction

To evaluate the KN-6010's performance and to ensure its compatibility with a complete range of the most popular operating systems and software applications, FIC's Motherboard R&D Team conducted a comprehensive suite of benchmark tests on the board in a variety of hardware configurations, including a full selection of Intel Pentium II 233/266MHz processors as well as EDO DRAM types. The performance of the board running some of the most popular VGA adapter cards was also tested.

In order to demonstrate realistic business application performance, Winstone 97 under Windows 95 was chosen as the primary benchmarking tool for FIC's tests. Winstone 97 Version 1.0 was developed by the Ziff-Davis Publishing Company to provide a tool for accurate and realistic measurement of system performance of personal computers running popular business-oriented applications in the Microsoft Windows 95 operating system environment. To demonstrate the performance of the KN-6010 in the Windows NT operating system environment, tests were also run using the Winstone 97 for Windows NT 4.0 benchmarking tool.

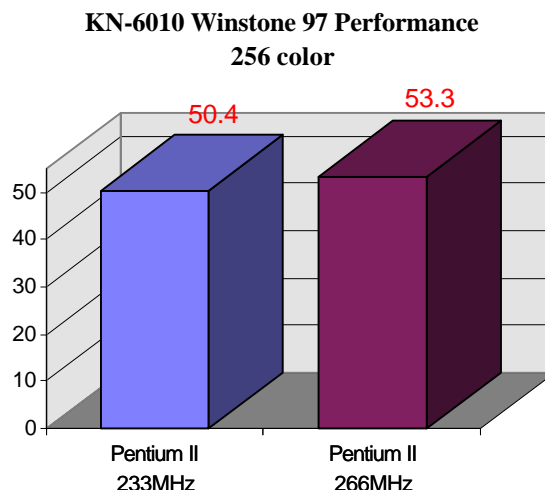
System Tests Configuration :

Main Board	FIC KN-6010
System Core Logic	Intel Natoma 440FX
System BIOS	AMI BIOS Version 626HB11
Cache Size	512k Pipeline Burst SRAM
VGA	Matrox Mystique 4MB SGRAM
VGA Driver	Mystique Windows 95 Driver Version 4.03.00.3410 Mystique Windows NT Driver Version 3.06,4.0.032
IDE Driver	Windows 95 PCI Master Driver
IDE HDD	Quantum Fireball 1.2GB PIO Mode 4 or DMA mode 2 (FB-1280AT)
Memory	64MB EDO DRAM
Operating System	Microsoft Windows 95 (4.00.950 B) Microsoft WindowsNT 4.0 Workstation (build in:1381)

2.0 System Benchmarks Performance Summary

a) Benchmarks Performance for Windows 95:

The chart below illustrates the Winstone 97 under Windows 95 performance processor benchmark with the KN-6010 using Intel Pentium II 233/266MHz processors. The following is a sample of the results using 512KB Pipeline Burst SRAM, 64MB EDO DRAM, with a Matrox Mystique 4MB SGRAM PCI VGA card in 1024 x 768 x 256/High colors, resolution refresh rate of 75Hz, small font.

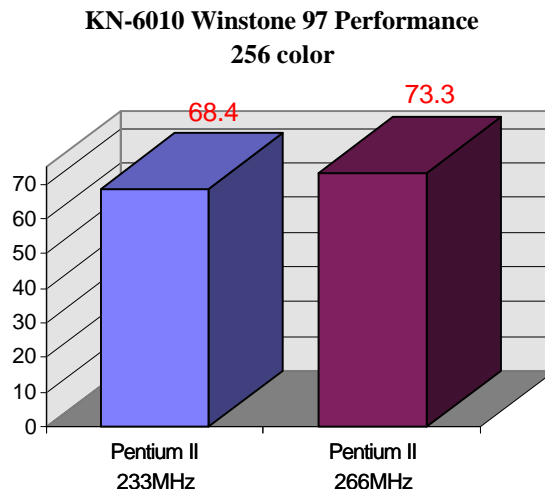


The table below provides more detailed benchmark testing data about the KN-6010 using different speed Intel Pentium processors. The board was configured with 512KB Pipeline Burst SRAM and 64MB EDO DRAM.

Benchmarks	Weighted Suite	Pentium II-233Mhz		Pentium II-266MHz	
		256 color	High color	256 color	High color
WinStone 96	Overall Winstone 96	103.4	98.5	112.9	105.2
	Business Graphics	10.6	10.4	11.6	11.2
	Database	11.9	11.5	13.0	12.2
	Spreadsheet	9.1	8.4	10.0	9.0
	Word Processor	10.4	10.1	11.4	10.6
WinBench96	CPUMark 16	468	470	537	537
	CPUMark 32	615	619	701	709
	Disk WinMark96	1350	1320	1260	1310
	Graphics WinMark96	46.9	37.6	52.6	40.6
WinStone 97	Business Winstone 97	50.4	49.1	53.3	51.8
	High/End Winstone97	26.9	27.1	28.8	28.8
WinBench97	Business Disk WinMark 97	907	916	902	865
	H/E Disk WinMark 97	3010	3170	3030	3070
	CPUMark 16	470	470	535	537
	CPUMark 32	620	617	705	709
	Business Graphics WinMark 97	93.3	76.3	102	82.0
	H/E Graphics WinMark 97	45.5	39.2	51	43.4

b) Benchmarks Performance for Windows NT 4.0 :

The chart below illustrates the Winstone 97 under Windows NT 4.0 performance processor benchmark with the KN-6010 using Intel Pentium II 233/266MHz processors. The following is a sample of the results using 512KB Pipeline Burst SRAM, 64MB EDO DRAM, with a Matrox Mystique 4MB SGRAM PCI VGA card in 1024 x 768 x 256 colors, resolution refresh rate of 75Hz, small font.





The table below provides more detailed benchmark testing data about the KN-6010 using different speed Intel Pentium processors. The board was configured with 512KB Pipeline Burst SRAM and 64MB EDO DRAM.

Benchmarks	Weighted Suite	Pentium II - 233MHz	Pentium II - 266MHz
WinStone 97	Business Winstone 97	68.4	73.3
	High/End Winstone97	30.2	32.4
WinBench97	Business Disk WinMark 97	732	740
	H/E Disk WinMark 97	2280	2390
	CPUMark 16	459	537
	CPUMark 32	626	715
	Business Graphics WinMark 97	116	129
	H/E Graphics WinMark 97	50.7	56.2

