NeXTSTEP Benchmarks

Conducted by the University of Houston
Engineering Computing Center
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These benchmarks are based on three public domain programs, BenchPress, NXBench and DrivePerformance. These programs attemp to calculate the performance of the machine by running various tests on the system. These results may or may not reflect actual "real life" conditions nor can they be considered "ideal". The benchmarks are far from being accurate, and until a standardized benchmark is developed, the results may be different than expected. The best thing to do is to run the benchmarks yourself on a machine that you are planning to purchase/evaluate. Then you can make your own decision. There are far too many factors that can (and will) skew results of a performance test and sometimes the same benchmarks running on the same machine will generate extremely different results each time...

System Vendor	Gateway2000	Gateway2000	NeXT	NeXT	Compaq	eCesys	DeLL	Epson
Model	4DX2-66V	4DX2-66V	NeXTStation Color	NeXTStation	Qvision		Jaws	Progession NX
Kernel Version	NeXT Mach 3.1	NeXT Mach 3.1	NeXT Mach 3.0	NeXT Mach 3.1	NeXT Mach 3.0	NeXT Mach 3.0	NeXT Mach 3.0	NeXT Mach 3.0
CPU	Intel 80486	Intel 80486	68040	68040	Intel 80486	Intel 80486	Intel 80486	Intel 80486
Clock Speed	66	66	25	25	66	66	50	50
Main Memory	16 MB	16 Mb	32MB	20 MB	37 MB	32 MB	32 MB	36 MB
Video Hardware	ATI Ultra Pro 2MVram	ATI Ultra ProCLX VLB	NeXT Proprietary	NeXT Proprietary	QVision	Ece Wingine	Jaws	Wingine
Video Resolution	1024x768/16	1024x768/8	1180x832/12	1180x832/2		1024x768/16		

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Video Driver		ATI 1.0	ATI 1.1	NeXT	NeXT	Compaq QVision	Wingine	Dell JAWS DGX	Epson Wingine
Date Updated		15-Jun-93	22-Nov-93	22-Nov-93	22-Nov-93		15-Nov-93		

BenchPress*

Display PostScript									
	Animate Tensor Logo	121.04	114.19	66.62	87.78	120.68	35.22	93.44	105.52
	Draw Color Ramps	146.94	196.24	70.09	111.22	156.68	97.88	119.57	100.70
	Draw Polygons	115.40	204.74	69.08	504.35	119.31	118.38	144.14	109.17
	Draw Lines	119.50	184.48	76.64	190.96	99.30	108.06	148.54	116.19
	Text Manipulation	105.28	191.33	80.85	62.95	91.03	92.80	118.54	94.36
Display PostScript Imaging									
	Image Scaling	171.14	90.39	97.77	12.85	184.08	145.10	146.09	146.73
	Image Decompression	62.15	49.91	66.63	46.39	42.39	79.11	34.54	30.93
	Image Compositing	110.45	231.41	97.90	385.35	89.01	112.03	169.89	94.29
Threads									
	50 Threads	94.07	88.39	100.84	114.69	92.09	80.20	91.25	91.41
	100 Threads	80.17	82.26	72.69	89.36	79.32	68.36	72.37	73.23
CPU Benchmarks									
	Dhyrstone	246.93	246.80	99.32	100.79	267.58	259.53	190.58	202.63
	Floating Point	150.58	150.64	98.42	99.72	152.56	147.05	109.63	145.90
	Integer	236.82	236.05	98.45	99.66	240.50	239.02	177.39	238.08
	Trigometric	590.37	588.70	98.96	94.66	595.43	579.92	431.72	575.10

Disk I/O									
	Seeking	161.04	171.61	98.03	105.88	164.75	134.99	130.97	136.77
	Writing	43.77	49.45	69.70	129.35	93.95	64.15	48.01	63.73
	Reading with Caching	228.05	232.45	102.68	93.00	239.58	160.70	199.98	172.94
	Reading without Caching	172.71	165.10	94.55	86.82	157.28	96.03	137.48	110.31

NXBench 2.0*

Drystone 2.1		58593.00	58708.00	26408.00	26155.00	64102.00	57471.00	44510.00	46012.00
VAX Mips		37.20	37.27	16.77	16.61	40.70	36.49	28.26	29.21
NXFactor 2.0		0.81	1.01	0.56	1.04	0.71	0.63	0.87	0.67
	Line	0.71	0.67	0.56	1.03	0.59	0.56	1.03	0.63
	Arc/bezier	0.68	0.72	0.55	1.03	0.55	0.53	0.99	0.61
	fill	0.53	0.76	0.43	1.06	0.48	0.43	0.57	0.42
	transform	1.58	1.58	0.85	1.05	1.42	1.31	1.29	1.28
	composite	0.61	0.88	0.43	1.05	0.50	0.50	0.77	0.52
	userpath	1.63	1.94	0.97	0.98	1.51	0.97	1.40	1.08
	text	0.51	1.10	0.65	1.04	0.47	0.44	0.48	0.43
	window	0.26	0.40	0.33	1.11	0.17	0.33	0.45	0.38

DrivePerformance*

Index			0.67	0.42	0.83				

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Write	Index	0.50	0.40	1.30
	kb/sec	365.00	290.00	952.00
Read	Index	0.90	0.40	0.40
	kb/sec	848.00	441.00	404.00

* For explanations of the benchmark programs, please see the respective readme files....