

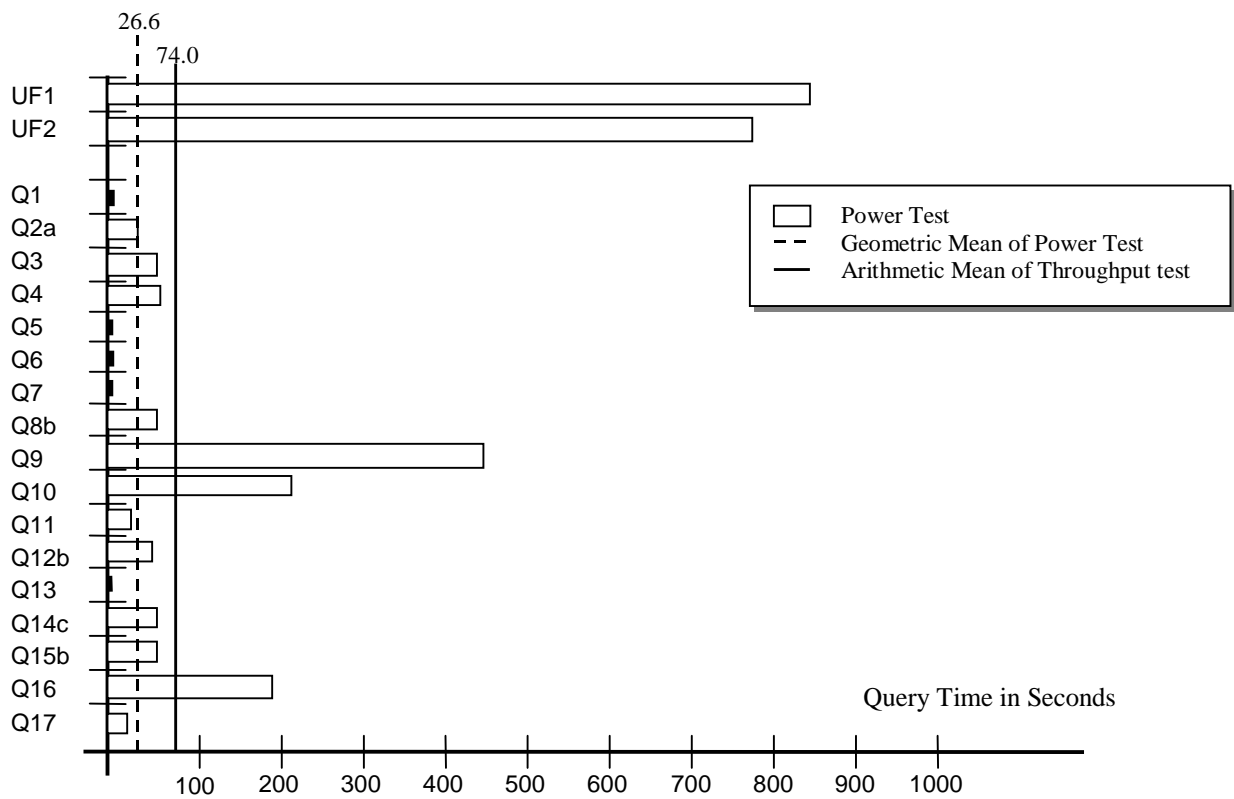


**NEC Express5800
HV8600 Model2
Using Oracle8i**

TPC-D 1.3.1

Report Date:
10 Feb. 1999

Total System Cost	TPC-D Power	TPC-D Throughput	Price/Performance	
608,305	13,554.3 QppD@100GB	2,143.6 QthD@100GB	113 per QphD@100GB	
Database Size	Database Manager	Operation System	Other Software	Availability Date
100GB	Oracle8i v8.1.5.1	Windows NT Server 4.0 Enterprise Edition	MKS Toolkit Visual C++	May 18,1999



Database Load Time = 34 h 16 m

Disk Size/Database Size = 11.6

RAID:N

System Configuration:

- 8 x 450MHz PentiumII Xeon CPUs each with 2MB Cache
- 4Gbytes memory
- 3 x 9.1GB internal drives
- 5 NEC SecuRAID 530 RAID controller with 24 x 9.1GB drives each
- 1 NEC SecuRAID 530 RAID controller with 4 x 9.1GB drives each



**NEC Express5800
HV8600 Model2
Using Oracle8i**

TPC-D 1.3.1

Report Date:
10 Feb. 1999

Description	Part Number	Source	Unit Price	Qty	Ext.Price	5 Yr. Maint.
Server Hardware						
NEC Express5800 HV8600 model2 Inc. 8 x PentiumII Xeon 450MHz/2MB 4GB Memory 1 x SecuRAID 530 w/32MB cache w/battery Win NT 4.0 Enterprise Hotload	850131701	1	106,326	1	106,326	25,519
NEC SecuRAID 530	062-00026-000	1	1,399	5	6,995	1,679
32MB cache w/battery for SecuRAID 530	062-00030-000	1	579	5	2,895	695
9.1 GB 10,000rpm HDD	203497	1	999	3	2,997	720
NEC 15" Multisync Monitor	JC-1576VMA	1	229	1	229	72
Subtotal					119,442	28,685
Storage						
NEC Express5800 ST8000 Tower Model	203269	1	3,999	17	67,983	16,316
9.1 GB 10,000rpm HDD Option	062-01501-000	1	999	124	123,876	0
68-pin VHD SCSI-3 data cable	203277	1	149	12	1,788	0
68-pin Wide SCSI to VHD SCSI-3 data cable	203273	1	149	5	745	0
Ultra Expansion Card	203268	1	799	17	13,583	0
Single Bus Option Module	203330	1	89	17	1,513	0
Subtotal					209,488	16,316
Hardware Subtotal					328,930	45,001
Software						
Oracle8i for WinNT	Oracle 8i 8.1.5.1	2	100,320	1	100,320	133,280
MKS Toolkit for NT	MKS NT	3	399	1	399	0
Microsoft Visual C++ Professional Edition 5.0	6752278	4	375	1	375	0
Subtotal					101,094	133,280
Total					430,024	178,281
Five Year Cost of Ownership:	\$608,305					
QphD@100GB:	5,390.3					
\$/QphD@100GB:	113					

Notes (Source): 1. NEC Corporation 2. Oracle Corporation 3. Mortice Kern Systems 4. Software Distribution Inc.

Audited by: Francois Raab, Information Paradigm, Inc.

Prices used in TPC benchmarks reflect the actual prices a customer would pay for a one-time purchase of the stated components. Individually negotiated discounts are not permitted. Special prices based on assumptions about past or future purchase are not permitted. All discounts reflect standard pricing policies for the listed components. For complete details, see the pricing sections of the TPC benchmark specifications. If you find the stated prices are not available according to these terms, please inform the TPC at pricing@tpc.org. Thank you.

Note: Hardware Available by April 30, 1999; Oracle Software Available by May 18, 1999.



**NEC Express5800
HV8600 Model2
Using Oracle8i**

TPC-D 1.3.1

Report Date:
10 Feb. 1999

Numerical Quantity Summary

Measurement Results:

Database Scaling Factor(SF/Size) = 100GB
Total Data Storage/Database Size = 11.6
Database Load Time = 34 hours 16 minutes
Query Stream for Throughput Test = 0
TPC-D Power Metric (QppD@100GB) = 13,554.3
TPC-D Throughput Metric (QthD@100GB) = 2,143.6
Composite QphD@100GB = 5,390.3
Total System Price Over 5 Years = 608,305
TPC-D Price/Performance Metric = 113

Measurement Intervals:

Measurement Interval in Throughput Test (Ts) = 2,855 seconds
Duration of Stream Execution:

Stream ID	Seed	Start Date	Start Time	End Date	End Time
Stream00	454986351	1/29/99	16:55:03	1/29/99	17:42:38
UF1		1/29/99	16:55:03	1/29/99	17:09:23
UF2		1/29/99	17:30:22	1/29/99	17:42:38

TPC-D Timing Intervals (in seconds)

Q1	Q2a	Q3	Q4	Q5	Q6	Q7	Q8b	Q9	Q10
0.2	27.1	42.6	53.8	0.8	0.1	0.6	60.2	456.1	228.1

Q11	Q12b	Q13	Q14c	Q15b	Q16	Q17	UF1	UF2
20.8	42.1	5.8	57.4	56.5	193.4	12.2	859.6	736.7