

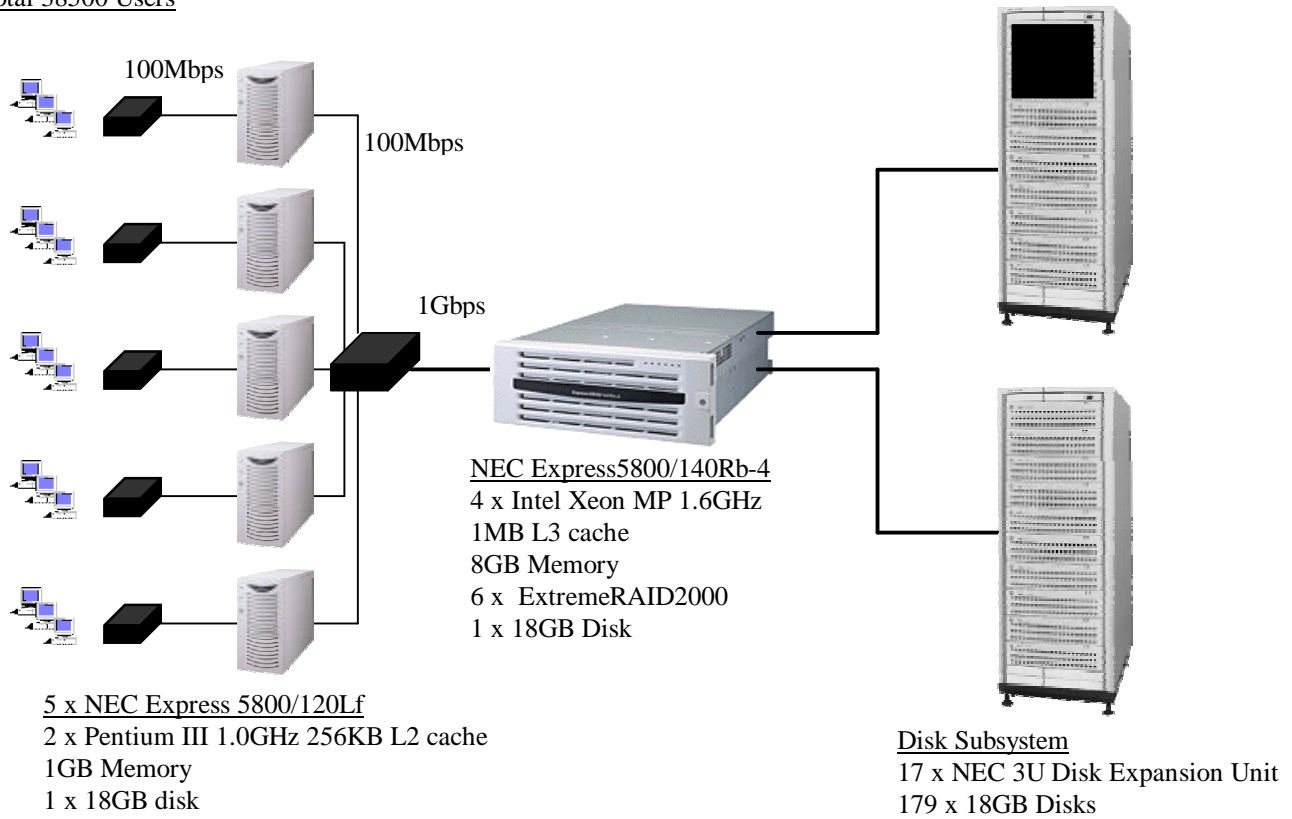


Express5800/140Rb-4 C/S with 5 Express5800/120Lf

TPC-C Rev. 5.0
Reported Date
June 20, 2002

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
\$ 311,093	48,150.72 tpmC	\$6.46 per tpmC	July 31, 2002
Processors	Database Manager	Operating System	Other Software
4 Intel Xeon MP 1.6GHz for Server 5 x 2 Intel Pentium III 1.0GHz for Client	Microsoft SQL Server 2000 Enterprise Edition	Microsoft Windows 2000 Advanced Server	Windows 2000 Server Microsoft VC++
Number of Users			
38,500			

Total 38500 Users



System Component	Server		Each Client	
Processors	4	Intel Xeon MP 1.6GHz	2	Intel Pentium III 1.0GHz
Cache		1MB L3 Cache		256KB L2 Cache
Memory		8GB		1GB
Disk Controllers	6 1	Mylex eXtremeRAID 2000 Onboard SCSI	1	On-board SCSI
Disk Drives	1 179	18GB 18GB	1	18GB
Total Storage		3,073 GB		18GB
Others	1 1	CD-ROM Drive On-board 1Gbps Ether NIC	1 2	CD-ROM Drive On-board Ether NIC



**NEC Express5800/140Rb-4
C/S with 5 Express5800/120Lf**

TPC-C REV 5.0

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Description	Part Number	Third Party Brand	Pricing	Unit Price	Qty	Extended Price	3-yr Mnt. Price
Server Hardware							
Express5800/140Rb-4 system							
Base system with 1 x Pentium Xeon 1.6GHz/1MB	NS240000256	NEC	1	9,200	1	9,200	2,208
Pentium Xeon 1.6GHz/1MB BTO Option	062-02066-000	NEC	1	5,499	3	16,497	3,959
4GB (4 x 1GB DDR200 DIMM) memory,	062-02070-000	NEC	1	3,600	2	7,200	1,728
18GB 10K rpm HDD,	062-02071-000	NEC	1	369	1	369	89
On-board Gbit Ether LAN	Included	NEC	1	0	1	0	0
CD-ROM, On-board LAN, KB/MS	Included	NEC	1	0	1	0	0
20/40GB SCSI DDS-4 DAT Internal Drive	ADT-4010-IN-00	NEC	1	949	1	949	228
NEC AccuSync50 (15" monitor)	AS50	NEC	3	145	1	145	35
Subtotal						34,360	8,246
Disk Subsystem							
Extreme RAID2000 4channel controller (+2 spares)	E2000-4-32NB	Mylex	3	1,427	8	11,416	0
3U Disk Expansion Unit ST1430(+2 spares)	NDE-1430-00-00	NEC	1	2,299	19	43,681	0
18GB 15k rpm HDD(+10% spares)	062-02118-000	NEC	1	486	197	95,742	0
42U Rackframe	050-01790-000	NEC	1	1,799	2	3,598	0
APC Smart UPS	050-01800-000	NEC	1	1,599	2	3,198	768
Subtotal						157,635	768
Server Software							
SQL Server2000 Ent. Edition,Unlimited Client Licenses	810-00846	Microsoft	2	16,541	4	66,164	5,850
Windows2000 Advanced Server, 25 Client Licenses	C10-00475	Microsoft	2	2,399	1	2,399	0
Subtotal						68,563	5,850
Client Hardware							
NEC Express5800/120Lf							
Base System with 1 x Pentium III 1GHz/256KB	850151001	NEC	1	1,899	5	9,495	2,279
1 x Pentium III 1GHz/256 BTO Option	062-02002-000	NEC	1	599	5	2,995	719
2 x 256MB memory,	062-02008-000	NEC	1	499	10	4,990	1,198
1 x 18GB 10K rpm HDD,	062-02011-000	NEC	1	369	5	1,845	443
CD-ROM, 2 x On-board LAN, KB/MS	Included	NEC	1	0	5	0	0
NEC AccuSync50 (15" monitor)	AS50	NEC	3	145	5	725	174
Subtotal						20,050	4,812
Client Software							
Windows2000 Server	C11-00821	Microsoft	2	738	5	3,690	0
Visual C++ Professional 6.0	048-00317	Microsoft	2	549	1	549	0
Subtotal						4,239	0
User Connectivity							
Allied Telesyn 6-prt Gigabit Sw itch (+2spare)	AT-9006T	Allied Telesyn	3	2,190	3	6,570	0
Subtotal						6,570	0
TOTAL						291,417	19,676

Notes:

All Microsoft maintenance is covered by the maintenance costs of Microsoft SQL Server
Pricing: 1-NEC 2-Microsoft 3-CDW
3 : with 3-year warranty

3-Yr. Cost of Ownership: **\$311,093**
tpmC Rating: **48150.72**

\$/ tpmC: 6.46

Audited by Francois Raab and Bradley Askins, InfoSizing, 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 purchases are not permitted. All discounts reflects standard pricing policies for the listed components. For complete details, see the pricing sections of the TPC benchmark specifications. If you find that the stated prices are not available according to these terms, please inform the TPC at pricing@tpc.org. Thank you.

Numerical Quantities Summary

MQTh, Computed Maximum Qualified Throughput		48,150.72 tpmC	
<u>Response Times(in seconds)</u>	<u>90%</u>	<u>Average</u>	<u>Maximum</u>
New-Order	0.70	0.42	6.72
Payment	0.58	0.31	6.20
Stock-Level	2.30	1.63	7.77
Delivery(interactive portion)	0.11	0.10	1.09
Delivery(deferred portion)	1.08	0.58	3.95
Order-status	0.62	0.34	6.79
Menu	0.11	0.10	2.62
Response time delay added for emulated components			0.1
<u>Transaction Mix , in percent of total transaction</u>			
New-Order			44.93%
Payment			43.05%
Order-status			4.00%
Delivery			4.01%
Stock-level			4.01%
<u>Keying/Think Times (in seconds)</u>	<u>Min.</u>	<u>Average</u>	<u>Max</u>
New-Order	18.00 0.00	18.02 12.05	18.04 120.50
Payment	3.00 0.00	3.02 12.05	3.04 120.50
Stock-Level	2.00 0.00	2.02 5.05	2.04 50.50
Delivery	2.00 0.00	2.02 5.07	2.04 50.50
Order-status	2.00 0.00	2.02 10.05	2.04 100.50
<u>Test Duration</u>			
Ramp-up time			50 minutes
Measurement interval			120 minutes
Number of checkpoints			4
Checkpoint interval			30 minutes
Number of transactions (all types) completed in measurement interval			13,377,224