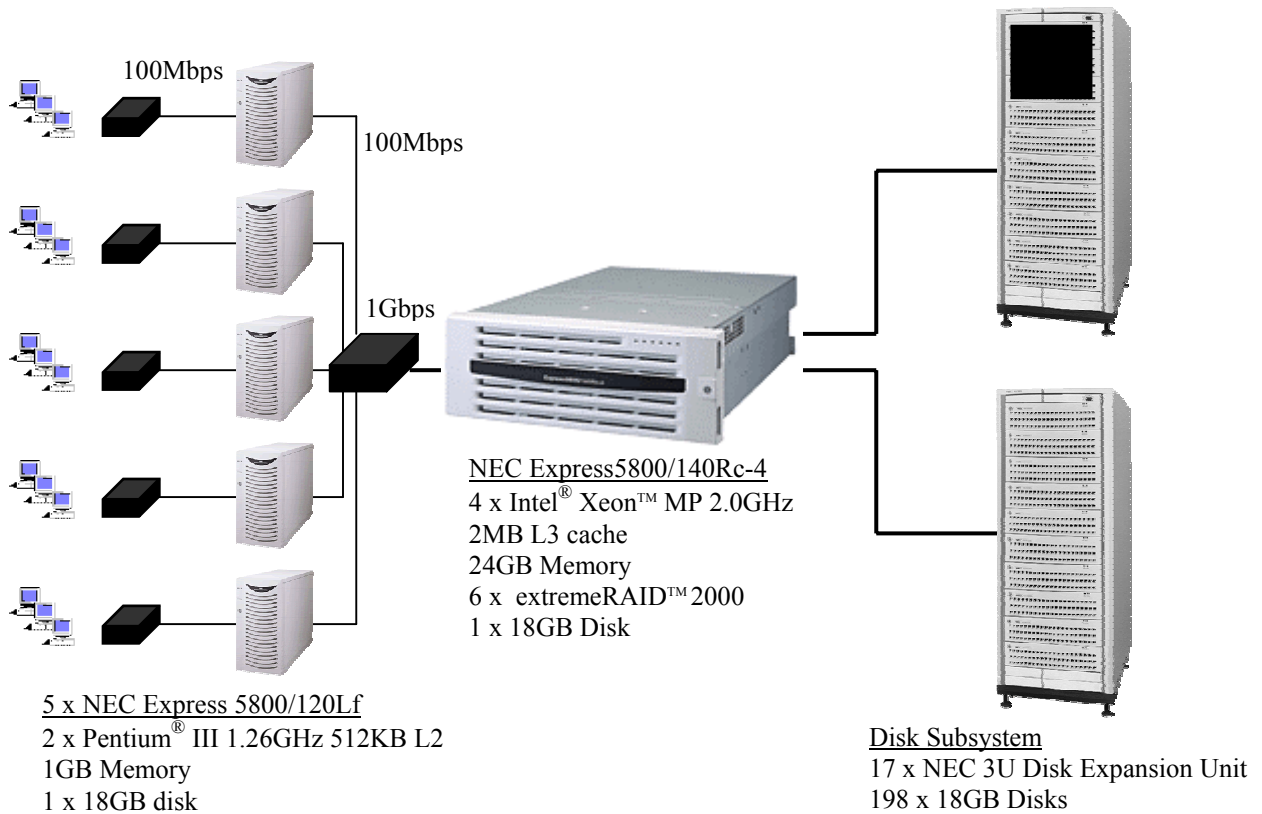




NEC Express5800/140Rc-4 C/S with Express5800/120Lf

TPC-C Rev.5.1
Reported Date
April 9, 2003

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
\$347,076	70,653.01 tpmC	\$4.92 per tpmC	April 30, 2003
Processors	Database Manager	Operating System	Other Software
4 Intel [®] Xeon [™] MP 2.0GHz for Server 5 x 2 Intel [®] Pentium [®] III 1.26GHz for Client	Microsoft [®] SQL Server [™] 2000 Enterprise Edition	Microsoft [®] Windows [®] Server 2003, Enterprise Server	Windows [®] 2000 Server Microsoft [®] Visual C++ Microsoft [®] COM+
Number of Users			
57,000			



System Component	Server		Each Client	
Processors	4	Intel [®] Xeon [™] MP 2.0GHz	2	Intel [®] Pentium [®] III 1.26GHz
Cache		2MB L3 Cache		512KB L2 Cache
Memory		2 GB x 12		512MB x 2
Disk Controllers	6 1	Mylex [®] eXtremeRAID [™] 2000 On-board SCSI	1	On-board SCSI
Disk Drives	1 198	18GB 18GB	1	18GB
Total Storage		3582GB		18GB
Others	1 1	CD-ROM Drive On-board 1Gbps Ether	1 2 1	CD-ROM Drive On-board Ether controller 100Mbps Ether NIC



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

TPC-C REV 5.1

Report Date:

April 9, 2003

Description	Part Number	Third Party		Unit		Extended Price	3-yr Mnt. Price
		Brand	Pricing	Price	Qty		
Server Hardware							
Express5800/140Rc-4 system							
Base system with 1 x Xeon MP 2.0GHz/2MB	850168003	NEC	1	13,999	1	13,999	0
Xeon MP 2.0GHz/2MB BTO Option	062-02289-000	NEC	1	6,999	3	20,997	0
8GB (4 x 2GB DDR200 DIMM) memory,	062-02310-000	NEC	1	15,999	3	47,997	0
18GB 10K rpm HDD,	062-02011-000	NEC	1	329	1	329	0
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	0
Upgrade to 3-year / 4-hour response / 7 days-24hrs	EN-0000-1095-7244	NEC	1	1,799	1	0	1,799
NEC AccuSync50 (15" monitor)	AS50M-BK	NEC	3	128	1	128	0
Subtotal						84,399	1,799
Disk Subsystem							
Extreme RAID2000 4channel controller (+2 spares)	E2000-4-32NB	Mylex	3	1,419	8	11,355	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)	062-02150-000	NEC	1	459	218	100,062	0
42U Rackframe	050-01790-000	NEC	1	1,799	2	3,598	0
APC Smart UPS 3000RM3U	050-01800-000	NEC	1	1,599	2	3,198	768
Subtotal						161,894	768
Server Software							
SQL Server2000 Ent. Edition,Unlimited Client License	810-00846	Microsoft	2	16,541	4	66,164	5,850
Windows Server 2003, Enterprise Server	P72-00264	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 1.26GHz/512KB	850151004	NEC	1	2,799	5	13,995	0
1 x Pentium III 1.26GHz/512KB BTO Option	062-02006-000	NEC	1	699	5	3,495	0
2 x 256MB memory,	062-02008-000	NEC	1	439	10	4,390	0
1 x 18GB 10K rpm HDD,	062-02011-000	NEC	1	329	5	1,645	0
CD-ROM, 2 x On-board LAN, KB/MS	Included	NEC	1	0	5	0	0
Intel PRO/100 S Server Adapter	PILA8470C3	intel	3	69	2	137	0
Intel PRO/100 S Server Adapter, 5-pack	PILA8470C3PAK5	intel	3	286	1	286	0
Upgrade to 3-year / 4-hour response / 7 days-24hrs	DE-0000-1095-7244	NEC	1	1,599	1	0	1,599
Fast Ether Cable 25' RJ45-RJ45 (+10% spares)	C5E-114GY-25FB	AESP	3	11	18	195	0
NEC AccuSync50 (15" monitor)	AS50M-BK	NEC	3	128	5	640	0
Subtotal						24,783	1,599
Client Software							
Windows 2000 Server	C11-00821	Microsoft	2	738	5	3,690	0
Visual C++ Standard	254-00170	Microsoft	2	109	1	109	0
Subtotal						3,799	0
User Connectivity							
Allied Telesyn 6-prt Gigabit Switch (+2spare)	AT-9006T	Allied Telesyn	3	2,249	3	6,747	0
Subtotal						6,747	0
TOTAL						350,185	10,016
NEC Pricing						258,335	4,166
Large volume purchase with cash in advance Discount on NEC hardware (5%)						12,917	208
TOTAL						337,268	9,807
All Microsoft maintenance is covered by the maintenance costs of Microsoft SQL Server Pricing: 1-NEC 2-Microsoft 3-CDW				3-Yr. Cost of Ownership: \$347,076		tpmC Rating: 70653.01	
Audited by Francois Raab, InfoSizing, Inc						\$ / tpmC: 4.92	
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 70,653.01 tpmC

<u>Response Times(in seconds)</u>	<u>Average</u>	<u>Maximum</u>	<u>90%</u>
New-Order	0.59	7.59	0.99
Payment	0.51	7.91	0.91
Delivery(interactive portion)	0.10	0.13	0.11
Stock-Level	1.23	7.28	1.79
Order-status	0.55	6.86	0.95
Delivery(deferred portion)	0.18	1.36	0.25
Menu	0.10	1.20	0.11

Response time delay added for emulated components 0.1

Transaction Mix , in percent of total transaction

New-Order	44.88%
Payment	43.08%
Delivery	4.01%
Stock-Level	4.02%
Order-Status	4.00%

<u>Keying/Think Times (in seconds)</u>	<u>Average</u>		<u>Min</u>		<u>Max</u>	
New-Order	18.02	12.07	18.00	0.00	18.06	120.71
Payment	3.02	12.08	3.00	0.00	3.06	120.71
Order-Status	2.02	5.07	2.00	0.00	2.05	50.71
Delivery	2.02	5.05	2.00	0.00	2.06	50.71
Stock-Level	2.02	10.06	2.00	0.00	2.06	100.70

Test Duration

Ramp-up time	60 minutes
Measurement interval	120 minutes
Number of checkpoints	4
Checkpoint interval	30 minutes
Number of transactions (all types) completed in measurement interval	19,563,346