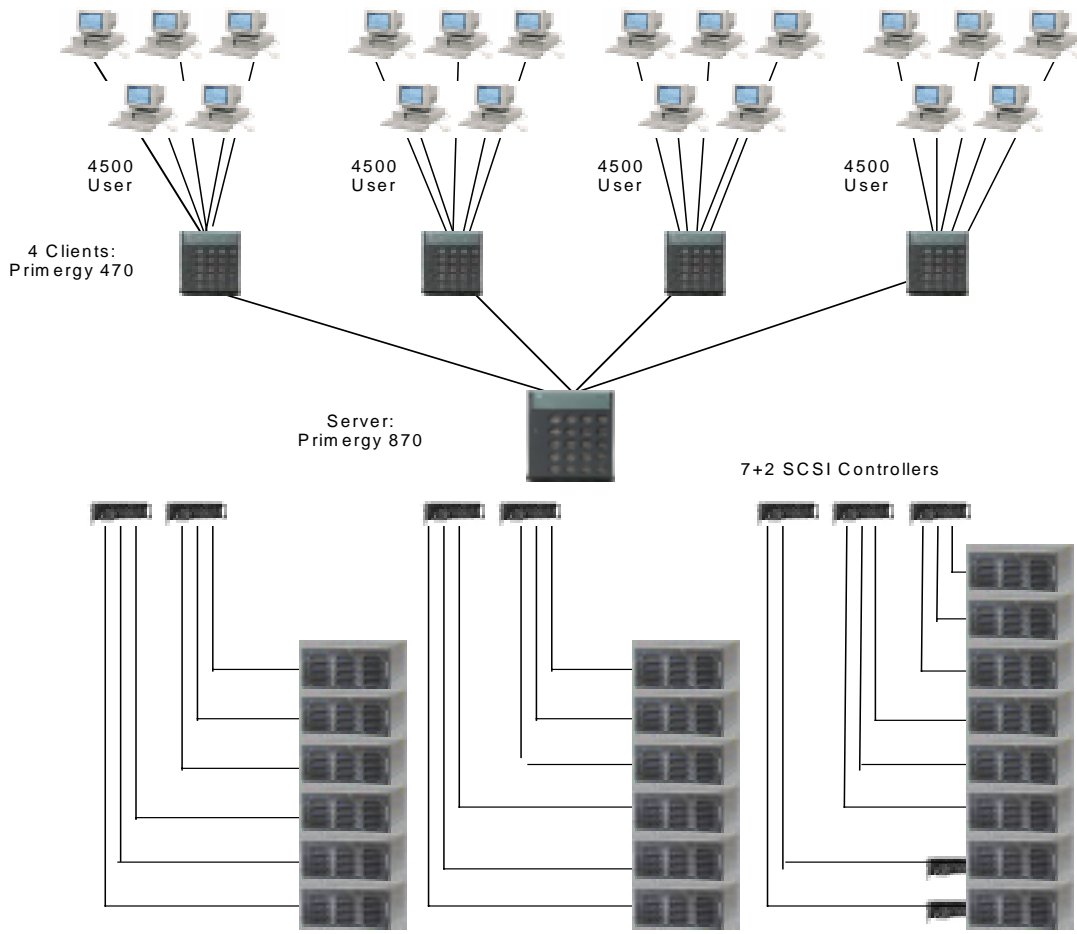


SIEMENS	Primergy 870-40 Client/Server		TPC-C REV 3.4 EXECUTIVE SUMMARY Page 1 of 2
			Report Date: December 23, 1998

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
\$ 577,459	22,349.47 tpmC	\$25.84/tpmC	February 1998

Processors	Database Manager	Operating-System	Other Software	Number of Users
4 Intel Pentium® II Xeon 450 MHz	Microsoft SQL Server 7.0 Enterprise Edition	Microsoft Windows NT 4.0 Enterprise Edition	Microsoft Internet Information Server BEA TUXEDO 6.3 CFS	18,000



18 Primergy S40 + 2 Primergy S40 with 24 disks for backup

System Components	Qty/Srv.	1 Primergy 870-40	Qty/Client	4 Primergy 470
Processors	4	Intel Pentium® II Xeon 450 MHz 2 MB SLC	2	Intel Pentium® II 450 MHz 512 KB SLC
Memory	4	GB	512	MB
Disk Controller	7+2	SCSI Controllers	1	SCSI Controller
Disk Drives	193	9 GB	1	4 GB
Total GB of Storage	8	18 GB	1	4 GB

SIEMENS

Primergy 870-40

TPC-C REV 3.4 EXECUTIVE
SUMMARY
Page 2 of 2

Client/Server

Report Date: December 23, 1998

Description	Part Number	Third Party	Unit Price	Qty.	Extended Price	5yr Maint. Price
		Brand	Pricing			
Base System	SNP:SY-K504V101-P		1 \$11.284	1	\$11.284	
Pentium II Xeon Processor 450MHZ/2MB	SNP:SY-F1824E453-P		1 \$7.958	4	\$31.832	
2. Memory Board	SNP:SY-F1825E1-P		1 \$758	1	\$758	
Memory 512MB EDO-DIMM	SNP:SY-F1549E543-P		1 \$2.189	8	\$17.512	
DAT Drive DDS-3 12GB, SE-SCSI	SNP:SY-F1730E1-P		1 \$1.158	1	\$1.158	
Fast-Ether-Express-Pro/100+ Server (PCI)	SNP:SY-F1868E501-P		1 \$111	1	\$111	
FP 9GB/10K LVD-SCSI, Hot Plug	SNP:SY-F1899E109-P		1 \$968	1	\$968	
Power Supply (add.)	SNP:PS-F234E1-P		1 \$463	1	\$463	
Keyboard	S26381-K271-V310		1 \$25	1	\$25	
Country Pack	SNP:SY-F1699B213-P		1 \$34	1	\$34	
Monitor MCM 1510	S26361-K494-V150		1 \$219	1	\$219	
Server Hardware Subtotal					\$64.364	
RAID-Controller,3 Chan.,32Mb, LVD	S26361-D1124-V1		\$2.838	7	\$19.866	
RAID-Controller,3 Chan.,32Mb, LVD (10% spare)	S26361-D1124-V1		\$2.838	2	\$5.676	
FP 9GB/10K LVD-SCSI, Hot Plug	SNP:SY-F1899E109-P		1 \$968	192	\$185.856	
FP 9GB/10K LVD-SCSI, Hot Plug (10% spares)	SNP:SY-F1899L109-P		1 \$983	20	\$19.660	
Primergy S40 ES 1 channel stack	SNP:SY-K538V201-P		1 \$2.362	18	\$42.516	
Primergy 502, 2-Host, 4-Chan, 64MB	S26361-K426-V592		1 \$7.394	2	\$14.788	
FP 18GB SCSI-3 WIDE-SCA, Hot Plg	S26361-F1322-E180		1 \$1.474	8	\$11.792	
Country Pack Primergy 502 (INT)	S26361-F1290-B773		1 \$34	2	\$68	
SCSI SE/DE Converter - 3 channels	SNP:SY-F1478E30-P		1 \$1.032	1	\$1.032	
SCSI Cable HD-HD 5m	T26139-Y2527-V205		1 \$85	2	\$170	
SCSI Cable UHD-HD LVD 5m	SNP:SY-F1947L50-P		1 \$147	18	\$2.646	
Storage Subtotal					\$304.070	
Maint. Server+Storage						\$28.471
Primergy 470, FS PII 450	SNP:SY-K482V714-A		\$2.316	4	\$9.264	
PII 450MHZ	SNP:SY-F1727E450-A		\$1.474	4	\$5.896	
Keyboard	S26381-K271-V310		\$25	4	\$100	
Country Pack International	SNP:SY-F1699B153-A		\$34	4	\$136	
Memory 256 MB SDRAM 100MHZ	SNP:SY-F1867E504-A		\$1.221	4	\$4.884	
Memory 128 MB SDRAM 100MHZ	SNP:SY-F1867E503-A		\$589	8	\$4.712	
HD 4GB, SCSI-3, Hot Plug	S26361-F1724-E40		\$505	4	\$2.020	
Fast-Ether-Express-Pro/100+ Server (PCI)	SNP:SY-F1868E501-A		\$111	24	\$2.664	
Monitor MCM 1510	S26361-K494-V150		\$219	4	\$876	\$825
Client Hardware Subtotal					\$30.552	\$7.579
Microsoft Windows NT-Server, Enterprise Edition 4.0, incl 25 CALs	Microsoft	2	\$3.999	1	\$3.999	
MS SQL-Server 7.0 Enterp.Edition unlim. License	Mirosoft	2	\$28.999	1	\$28.999	
Server Software Subtotal					\$32.998	\$10.475
Microsoft Windows NT-Server 4.0, incl. 5 CALs	Microsoft	2	\$809	4	\$3.236	
Tuxedo 6.4 Core Functionality Services for NT	BEA	4	\$3.000	4	\$12.000	\$9.000
Microsoft Visual C++ Professional 5.0	Microsoft	2	\$499	1	\$499	
Client Software Subtotal					\$15.735	
Comexp 8-port 10BaseT Hub (8+1) ports (incl.1	Z850033	Compex	5 \$28,75	2500	\$71.875	
Kingston Switch 8 port 10/100 incl. 10% spare	732084	Kingston	5 \$505	3	\$1.515	
User Connectivity Subtotal					\$73.390	
Total					\$521.109	\$56.350

Five-Year Cost of Ownership \$577,459,00
 tpmC 22,349,47
 \$/tpmC \$25,84

1=Siemens, 2=Microsoft, 4=BEA Systems, 5=Software House

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 reflect standard pricing policies for the listed components. For complete details, see the pricing section of the TPC benchmark pricing 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.

Five-Year Cost of Ownership: \$577,459
 tpmC Rating: 22,349.47
 \$ / tpmC: 25.84

Note: The benchmark results and test methodology were audited by Francois Raab of Information Paradigm, Inc.

Numerical Quantities Summary

MQTh, computed Maximum Qualified Throughput		22,349.47 tpmC	
% throughput difference, reported & reproducibility runs		0.31 %	
Response Times (in seconds)	90th percentile	Average	Maximum
- New-Order	0.91	0.61	77.34
- Payment	0.23	0.19	3.05
- Order-Status	0.41	0.29	3.95
- Delivery (interactive portion)	0.33	0.30	1.07
- Delivery (deferred portion)	0.94	0.57	3.64
- Stock-Level	2.49	2.07	3.79
- Menu	0.31	0.20	1.11
Transaction Mix, in percent of total transactions			
- New-Order			44.88 %
- Payment			43.04 %
- Order-Status			4.02 %
- Delivery			4.01 %
- Stock-Level			4.05 %
Emulation Delay (in seconds)		Response Time	Menu
- New-Order		0.1	0.1
- Payment		0.1	0.1
- Order-Status		0.1	0.1
- Delivery (interactive)		0.1	0.1
- Stock-Level		0.1	0.1
Keying/Think Times (in seconds)	Minimum	Average	Maximum
- New-Order	18.00/0.00	18.01/12.04	18.06/120.51
- Payment	3.00/0.00	3.01/12.04	3.05/120.50
- Order-Status	2.00/0.00	2.01/10.04	2.06/100.50
- Delivery (interactive)	2.00/0.00	2.01/ 5.04	2.05/ 50.50
- Stock-Level	2.00/0.00	2.01/ 5.05	2.06/ 50.50
Test Duration and Checkpointing			
- Ramp-up time		71 minutes	
- Measurement interval		30 minutes	
- Number of checkpoints		1	
- Checkpoint interval		30 minutes	
- Transactions during measurement interval (all types)		1,494,099	