

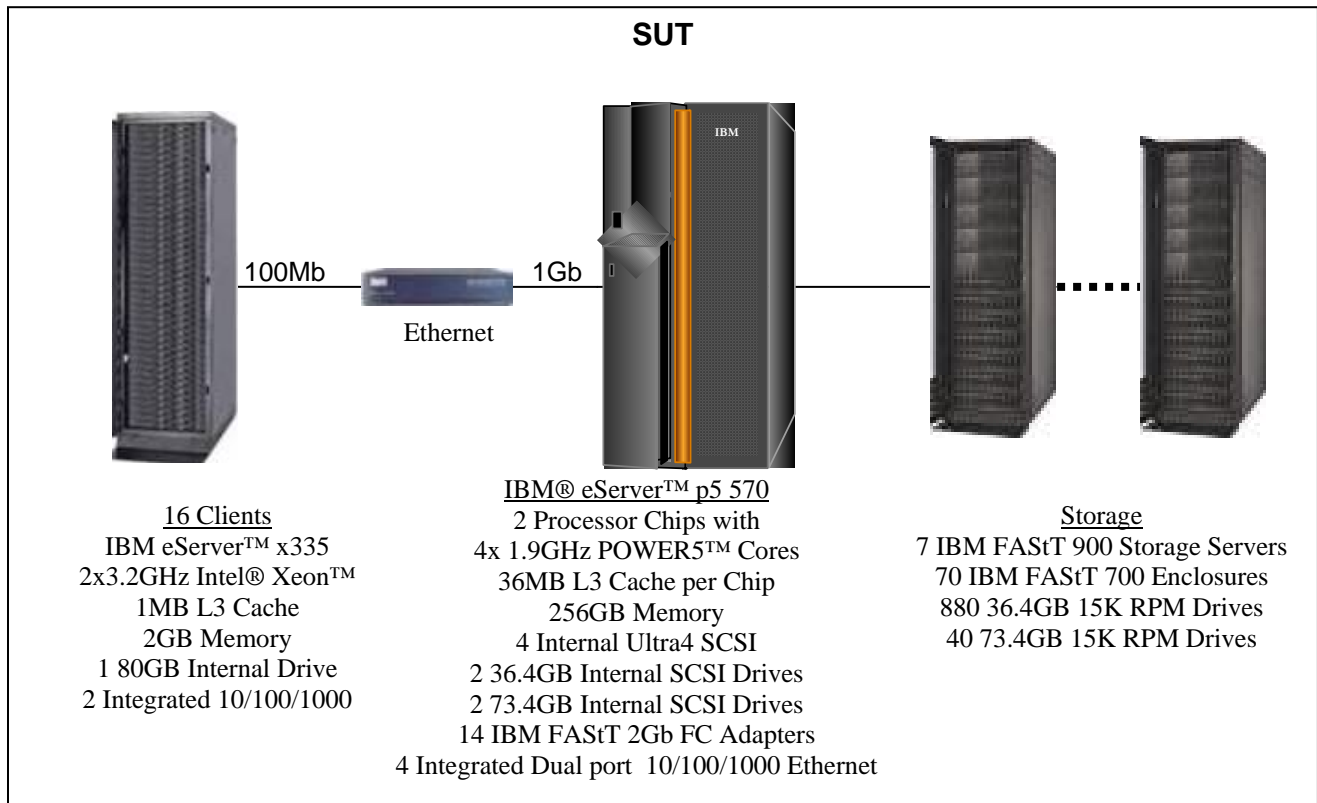
ORACLE

**IBM eServer p5 570
Model 9117-570**

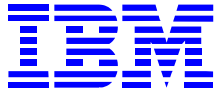
TPC-C Rev. 5.3

Report Date: July 12, 2004

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date	
\$1,092,119 USD	194,391.43	\$5.62 USD	September 30, 2004	
Processor Chips/Cores/Threads	Database Manager	Operating System	Other Software	No. Users
2/4/8	Oracle Database 10g Enterprise Edition	AIX 5L V5.3	Microsoft COM+	157,440



System Components	Each of the 6 Clients		Server	
	Quantity	Description	Quantity	Description
Processor Chips/Cores/Threads	2	3.2GHz 1MB L3 Xeon Processor	4 2	1.9GHz POWER5™ 36MB L3 Cache per chip
Memory	4	512 MB	4	32GB
Disk Controllers	1	EIDE	2 8 4	Integrated Ultra4SCSI FASTT 2Gb FC Adapters IBM FASTT900 Controllers
Disk Drives	1	80 GB	432 16 2 2	36.4GB 15K RPM FC 73.4GB 15K RPM FC 36.4GB 10K RPM SCSI 72GB 10K RPM SCSI
Total Storage		480 GB		15,173.00



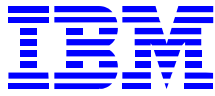
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Table with 7 columns: Description, Part No., Source, Unit Price, Qty, Ext Price, Maint Price. It lists various server hardware components like Anchor Card VPD, processors, storage, and networking equipment, along with their quantities and prices.



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3 Year Warranty Service Upgrade 1740-1RU 24x7x4	694225B1813	1	760	33		25,080
3 Year Warranty Service Upgrade 1742-90U 24x7x4	694225B1915	1	1,087	4		4,348
FASt Storage Manager V8.4 upgrade	1742-7109	1	2,999	1	2,999	
			Subtotal		1,057,201	29,428

Server Software

AIX 5.3 (media only)	5962-A5L	1	50	1	50	
AIX Software	5765-AIX	1	1,225	4	4,900	
AIX Software Maintenance (3Y)	5773-SM3	1	1,958	4		7,832
AIX Software Maintenance 24x7 Upgrade (3Y)	0468	1	496	4		1,984
HMC Software SUB	5639-SB1	1	275	3		825
HMC Software Support	5639-ST1	1	525	3		1,575
C for AIX user Lic+SW maint 12 MO	D5A1DLL	1	515	1	515	
C for AIX user annual SW maint renewal	E1A1FLL	1	103	2		206
Oracle Database 10g Enterprise Edition, for 3 years, Per Processor, Unlimited Users		2	20,000	4	80,000	
Oracle Database Server Support Package for 3 years		2	6,000	1		6,000
Oracle E-Business Discount (license & support)		2		1	-8,600	
			Subtotal		76,865	18,422

Client Hardware and Software

x335 w 3.2GHz/1024KB Xeon DP, one 80GB drive	864762X	1	2,679	6	16,074	2,700
3.2GHz 533 MHz 1MB L3 Cache Xeon Processor	13N0661	1	1,549	6	9,294	
512MB PC2100 CL2.5 ECC DDR SDRAM RDIMM	33L5038	1	219	12	2,628	
Microsoft Windows 2000 Server (Preloaded)	09N9982	1	799	6	4,794	
NetBay42 Standard Rack	9306-421	1	1,439	3	4,317	504
IBM ServicePac for xSeries	29R5396	1	1,375	6		8,250
xSeries Cable Chain Technology Cable Kit	06P4792	1	54	1	54	
IBM Sleek 2-Button Mouse - (PS/2)	28L3673	1	15	1	15	
Preferred Pro Full Size PS/2 Keyboard	31P7415	1	29	1	29	
E54 15" monitor/Keyboard/Mouse	W9SP47N	1	119	1	119	
			Subtotal		37,324	11,454

Third Party Hardware/Software

Visual Studio .NET Professional	528577	3	1,016	1	1,016	
NETGEAR GS108 8-Port Copper Gigabit Switch	435286	3	137	3	411	
			Subtotal		1,427	
			IBM Total System Discounts*		-672,560	-27,339
			Total		1,028,096	64,023

Three-Year Cost of Ownership 1,092,119

*Discounts are based on US list prices for similar quantities & configurations		tpmC	194,391
including pre-payment for maintenance		\$/tpmC	5.62

Audited by: Francois Raab, Info Sizing (www.infosizing.com)

Pricing Sources:

- 1 IBM HW: Bill Casey, eServer pSeries Offering Manager, wrcasey@us.ibm.com, 512-838-1422
- 2 Oracle Corporation; mary.beth.pierantoni@oracle.com, 916-315-5081
- 3 CDW.com

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 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 for the IBM eServer p5 570 Model 9117-570

MQTH, computed Maximum Qualified Throughput: 194,391.43 tpmC

<u>Response Times (in seconds)</u>	<u>90th %</u>	<u>Average</u>	<u>Maximum</u>
New Order	1.17	0.61	3.96
Payment	1.16	0.62	4.00
Order-Status	1.18	0.62	3.92
Delivery (interactive)	0.47	0.24	1.86
Delivery (deferred)	0.05	0.03	0.92
Stock-Level	1.24	0.68	4.00
Menu	0.46	0.23	1.88

Response time delay added for emulated components 0.1 seconds

<u>Transaction Mix, in percent of total transactions</u>	<u>Percent</u>
New Order	44.92%
Payment	43.01%
Order-Status	4.01%
Delivery	4.02%
Stock-Level	4.02%

<u>Keying/Think Times (in seconds)</u>	<u>Min.</u>	<u>Average</u>	<u>Max.</u>
New Order	18.00/0.01	18.01/12.02	18.07/120.23
Payment	3.00/0.01	3.01/12.02	3.07/120.22
Order-Status	2.00/0.01	2.01/10.01	2.06/100.11
Delivery	2.00/0.01	2.01/5.02	2.06/50.20
Stock-Level	2.00/0.01	2.01/5.02	2.06/50.20

Test Duration

Ramp-up Time	1 hour 26 minutes 22 Seconds
Measurement interval	2 hours 00 minutes
Transactions during measurement interval (all types)	77,011,936
Ramp-down time	25 minutes

Checkpoints

Number of checkpoints	4
Checkpoint interval	29 minutes 9 sec