
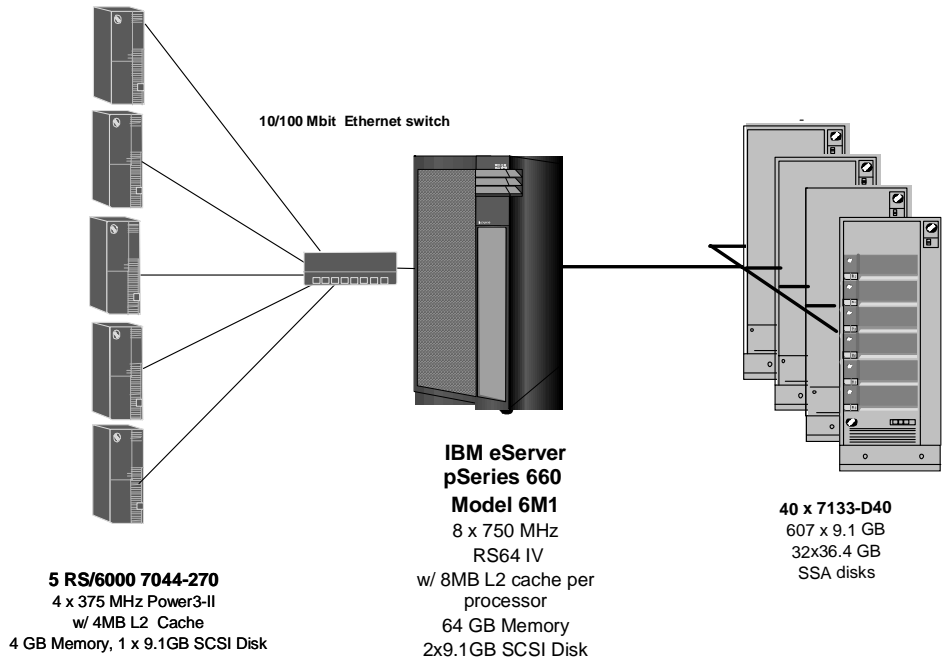
	IBM eServer pSeries 660 Model 6M1		TPC-C Rev. 5.0	
			Report Date February 1, 2002	
Total System Cost	TPC-C Throughput	Price/Performance	Availability Date	
\$2,462,401	105,025.02 tpmC	\$23.45/tpmC	September 21, 2001	
Processors	Database Manager	Operating System	Other Software	No. Users
8 x Database 20 x Clients	Oracle9i Database Enterprise Edition 9.0.1 for AIX - Based System	AIX 4.3.3 +APAR IY22024	Websphere Application Server Enterprise Edition Version 3.0	85,000



System Components	Clients		Server	
	Quantity	Description	Quantity	Description
Processor	5	4 x 375 MHz Power3-II W/4MB L2 cache each	1	8 x 750 MHz IBM RS64 IV w/ 8MB L2 cache each
Memory		4 GB		64 GB
Disk Controllers	1	SCSI-2 (Integrated)	1	SCSI-2 (Integrated)
Disk Drives	1	9.1 GB SCSI each client	9	SSA Adapters
			607	9.1 GB SSA Disk
			32	36.4 GB SSA disk
			2	9.1 GB SCSI Disk
Total Storage		8.67GB each client		6,107 GB
Terminals	5	System Console	1	System Console



ORACLE

IBM eServer pSeries 660 Model 6M1

TPC-C Rev. 5.0

Report Date: February 1, 2002

Description	Part No.	Source	Unit Price	Qty	Ext Price	Maint Price
Server Hardware						
pSeries 660 Model 6M1	7026-6M1	1	4,117	1	4,117	8,760
32x CD-ROM drive	2624	1	375	1	375	0
Async Terminal/ Printer Cable (EIA-232)	2934	1	45	1	45	0
10/100 Mbs Ethernet PCI Adapter	2968	1	275	0	0	0
9.1 GB 10K RPM Ultra SCSI Disk Drive	3027	1	1,160	2	2,320	0
Remote I/O Cable - 3m	3142	1	595	3	1,785	0
Memory Expansion Feature	4073	1	1,500	2	3,000	0
8192 MB (8x1024) Memory	4136	1	28672	8	229,376	0
10/100 Mbs Ethernet PCI Adapter-II	4962	1	275	1	275	0
4-way SStar 750 Mhz, 8MB L2	5213	1	74000	2	148,000	40,320
System Control & Initialization Cable	5992	1	75	1	75	0
Power Control Cable	6008	1	45	2	90	0
CEC to Primary drawer Power Cable	6132	1	95	1	95	0
190A Processor Power Regulator	6197	1	4,000	1	4,000	0
Advanced SerialRAID Plus Adapter	6230	1	3,000	9	27,000	0
32 MB Fast-Write Cache Option Card	6235	1	575	2	1,150	0
Redundant AC power, IO drawer	6283	1	725	2	1,450	0
Redundant AC power, CEC	6284	1	750	1	750	0
Primary I/O Drawer	6324	1	8,000	1	8,000	0
Secondary I/O Drawer	6325	1	7,000	1	7,000	0
IPL Disk Mounting Kit	6540	1	100	1	100	0
InfoWindow II ASCII Display Station	3153-BG3	1	577	1	577	304
System Rack Model T00 (6098,6107)	7014-T00	1	3550	5	17,750	3,840
Additional Power Distribution Unit	6171	1	1,000	9	9,000	0
SSA Disk Subsystem (8031)	7133-D40	1	13000	40	520,000	176,640
50/60 Hz AC, 300 VDC Power Supply	8022	1	2,000	40	80,000	0
10K/9.1 GB Advanced Disk Drive Module	8509	1	2,760	607	1,675,320	0
10K/36.4 GB Advanced Disk Drive Module	8536	1	5,900	32	188,800	0
SSA Cables (8801,8802)	8801	1	125	40	5,000	0
			Subtotal		2,935,450	229,864
Server Software						
AIX 4.3	5765-C34	1	50	1	50	20,556
IBM C for AIX V5	D5A1ELL	1	104	1	104	559
Oracle9i (TM) Database Enterprise Edition 9.1 for AIX		2	140,080	1	140,080	179520
			Subtotal		140,234	200,635
Client Hardware						
RS/6000 Model 44P-270 w/ CD-ROM	7044-270	1	4,030	5	20,150	8,400
Async Terminal/Printer Cable	2934	1	45	5	225	0
9.1 GB 10K RPM Ultra SCSI Enhanced Hard Dis	2906	1	1260	10	12,600	0
10/100 Mbps Ethernet Adapter, PCI	2968	1	0	20	0	0
Serial Port Converter Cable	3925	1	25	5	125	0
Memory Expansion Feature	4098	1	1,038	5	5,190	0
512MB SDRAM DIMM Memory	4120	1	2048	40	81,920	0
2-way 375 MHz Power3, 4MB L2	4362	1	11,000	10	110,000	16,800
10/100 Mbps Ethernet Adapter, PCI	4962	1	275	20	5,500	0
IBM ASCII Terminal, Keyboard, Cable	3153-BG3	1	577	5	2,885	1,520
			Subtotal		238,595	26,720
Client Software						
AIX 4. Unlimited Users	5756-C34	1	50	5	250	10,764
IBM Websphere Application Server Enterprise Edition Version 3.0	D5ALCLL	1	25,356	5	126,780	\$23,480
			Subtotal		127,030	34,244
Third Party Hardware						
8-port 10/100 Ethernet Switch	FS108NA	3	220	3	660	0
			Subtotal		660	0
			Discounts		(1,428,455)	(42,576)
			Total		2,013,514	448,887
Notes:						
Pricing Sources:			Three-Year Cost of Ownership:		\$2,462,401	
1=IBM, 2=Oracle, 3=NETGEAR			tpmC		105,025.02	
Audited by: Francois Raab, Info Sizing			\$/tpmC		\$23.45	

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 pSeries 660 Model 6M1

MQTH, computed Maximum Qualified Throughput: 105,025.02 tpmC

<u>Response Times (in seconds)</u>	<u>90th %</u>	<u>Average</u>	<u>Maximum</u>
New Order	1.58	0.85	37.59
Payment	1.50	0.79	35.58
Order-Status	1.56	0.84	34.18
Delivery (interactive)	0.19	0.10	1.64
Delivery (deferred)	0.23	0.14	3.44
Stock-Level	1.68	0.95	34.10
Menu	0.00	0.01	5.31

<u>Transaction Mix, in percent of total transactions</u>	<u>Percent</u>
New Order	44.91%
Payment	43.03%
Order-Status	4.02%
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	18.00/0.01	18.01/12.02	18.10/120.21
Payment	3.00/0.01	3.01/12.02	3.10/120.20
Order-Status	2.00/0.01	2.01/10.02	2.10/100.10
Delivery	2.00/0.01	2.01/5.02	2.10/50.20
Stock-Level	2.00/0.01	2.01/5.01	2.09/50.20

Test Duration

Ramp-up Time	41 min 06 sec
Measurement interval	2 hours
Transactions during measurement interval (all types)	28,060,471
Ramp-down time	10 minutes

Checkpointing

Number of checkpoints	4
Checkpoint interval	29 min 40 sec