

**IBM® eServer® xSeries® 366 c/s  
and  
DB2® UDB 8.2**

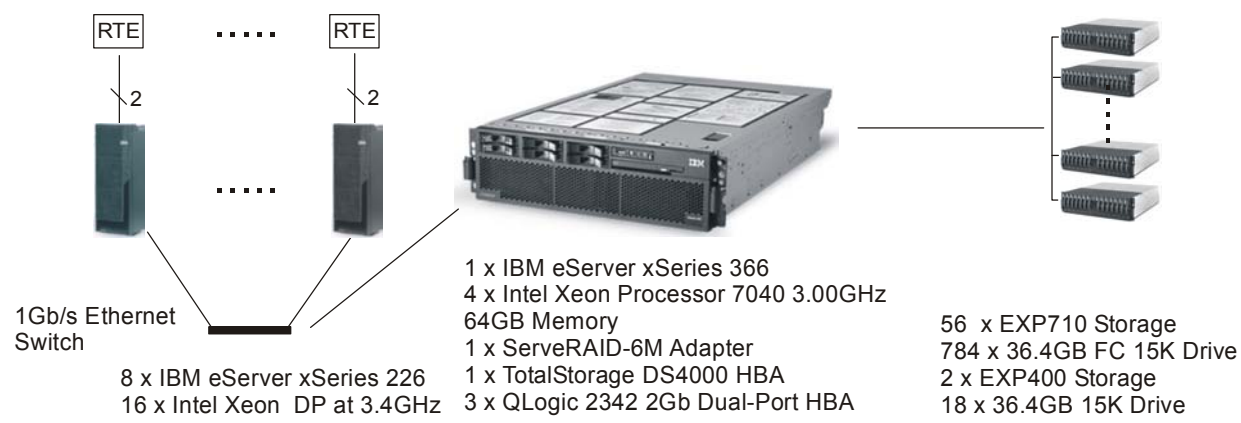
TPC-C Rev. 5.5

Report Date: Oct. 31, 2005

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
<b>\$1,827,784 USD</b>	<b>221,017 tpmC</b>	<b>\$8.27 USD / tpmC</b>	<b>Mar. 31, 2006</b>

Database Server Processors/Cores/Threads	Database Manager	Operating System	Other Software	Number of Users
<b>4/8/16 Intel® Xeon® Processor 7040 3.00GHz</b>	<b>DB2 UDB 8.2</b>	<b>Microsoft Windows® Server 2003 Enterprise x64 Edition</b>	<b>Microsoft Visual C++ Standard Edition Microsoft COM+</b>	<b>176,000</b>

8 RTEs emulating 176,000 Users



<b>System Component</b>	<b>Qty</b>	<b>Server:</b>	<b>Qty</b>	<b>Each of Eight Clients:</b>
<b>Processors/Cores/Threads</b>	<b>4/8/16</b>	<b>Intel Xeon Processor 7040 3.00GHz</b>	<b>2/2/4</b>	<b>Intel Xeon Processor at 3.4GHz</b>
<b>Cache</b>		<b>2x2MB L2 Cache</b>		<b>2MB L2 Cache</b>
<b>Memory</b>	<b>16</b>	<b>4GB ECC RDIMM</b>	<b>4</b>	<b>512MB</b>
			<b>2</b>	<b>256MB</b>
<b>Disk Controllers</b>	<b>1</b>	<b>ServeRAID-6M Adapter</b>	<b>1</b>	<b>Ultra320 SCSI Interface</b>
	<b>1</b>	<b>TotalStorage DS4000 HBA</b>		
	<b>3</b>	<b>Qlogic 2342 2Gb Dual-Port HBA</b>		
<b>Disk Drives</b>	<b>784</b>	<b>36.4GB 2Gbps FC (15K)</b>	<b>1</b>	<b>36.4GB (15000 rpm)</b>
	<b>18</b>	<b>36.4GB Ultra320 (15K)</b>		
<b>Total Storage</b>		<b>28865GB</b>		

IBM Corporation	IBM @server xSeries 366 c/s with DB2 UDB 8.2			TPC-C Revision 5.5			
				Report Date: Oct. 31, 2005			
Description	Part Number	Third Party Brand	Pricing	Unit Price	Quantity	Extended Price	3-Yr. Maint. Price
<b>Server Hardware</b>							
xSeries 366 with 1 x Intel Xeon Processor 7040 3.00GHz/2x2MB L2	8863-4RU	IBM		11,999	1	11,999	
Intel Xeon Processor 7040 3.00GHz/2x2MB L2	25R9842	IBM		5,999	3	17,997	
8GB (2x4GB) PC2-3200 CL3 2RX4 ECC DDR2 SDRAM RDIMM	30R5145	IBM		15,499	8	123,992	
Active Memory™ 4-Slot Memory Expansion Card	13M7409	IBM		499	3	1,497	
ServeRAID-6M Ultra320 SCSI Adapter	32P0033	IBM		879	1	879	
E54 15" (13.8" Viewable) Color Monitor	633147N	IBM		139	1	139	
IBM USB Keyboard Enhanced Performance Keyboard	73P2620	IBM		39	1	39	
IBM Optical Wheel Mouse - USB	90P0743	IBM		15	1	15	
ServicePac for 3-Year 24x7x4 Support (x366)	96P2253	IBM		900	1		900
ServicePac for 3-Year 24x7x4 Support (Monitor)	30L9183	IBM		90	1		90
<b>Subtotal</b>						156,557	990
<b>Server Storage</b>							
Qlogic 2342 2Gb Dual-Port Host Bus Adapter (2 spares)	QLA2342	IBM		1,500	5	7,500	
IBM TotalStorage DS4000 Host Bus Adapter	24P0960	IBM		1,485	1	1,485	
IBM TotalStorage DS4500 Midrange Disk Subsystem	174290U	IBM		49,900	7	349,300	
IBM DS4000 Mini Hub	19K1269	IBM		899	14	12,586	
IBM Short Wave SFP Module	19K1271	IBM		499	223	111,277	
IBM 1m LC-LC Fibre Channel Cable	19K1247	IBM		79	91	7,189	
IBM 5m LC-LC Fibre Channel Cable	19K1248	IBM		129	42	5,418	
IBM 16-Port Fibre Channel Switch	2005H16	IBM		7,300	2	14,600	
IBM TotalStorage DS4000 EXP710 Storage Exp. Unit	1740710	IBM		6,000	56	336,000	
2Gbps FC 36.4GB 15K Hot-Swap HDD	06P5772	IBM		1,115	784	874,160	
IBM EXP400 Rack Storage Exp. Enclosure	17331RU	IBM		3,099	2	6,198	
IBM 36.4GB 15K Ultra320 SCSI Drive	90P1380	IBM		299	18	5,382	
2M SCSI cable	03K9310	IBM		75	2	150	
IBM UPS 750TLV	21301TX	IBM		299	1	299	
IBM 42U Standard Rack	930745X	IBM		1,489	7	10,423	
ServicePac for 3-Year 24x7x4 Support (2005H16)	29R5130	IBM		2,460	2		4,920
ServicePac for 3-Year 24x7x4 Support (EXP710)	41L2768	IBM		760	56		42,560
ServicePac for 3-Year 24x7x4 Support (EXP400)	41L2768	IBM		760	2		1,520
ServicePac for 3-Year 24x7x4 Support (DS4500)	96P2062	IBM		1,087	7		7,609
ServicePac for 3-Year 24x7x4 Support (Rack)	41L2760	IBM		300	7		2,100
<b>Subtotal</b>						1,741,967	58,709
<b>Server Software</b>							
DB2 UDB ESE 8.2 for Windows Operating Systems on 64-Bit Extended Systems - SW License and Maintenance 12 Months		IBM		22,608	4	90,432	
SW Maintenance Renewal - 1 Year		IBM		1,077	8		8,616
Microsoft Windows Server 2003 Enterprise x64 Edition*	P72-00981	Microsoft		3,999	1	3,999	
Microsoft Problem Resolution Services	N/A	Microsoft		245	1		245
<b>Subtotal</b>						94,431	8,861
<b>Client Hardware</b>							
x226 with 3.4GHz/2MB Xeon DP, 512MB (2x256MB) Memory	8648-6AU	IBM		1,939	8	15,512	
3.4GHz/2MB Xeon DP Processor Upgrade	13N0666	IBM		989	8	7,912	
1GB (2x512MB) PC-3200 DDR2 ECC SDRAM RDIMM	73P3522	IBM		399	16	6,384	
36.4GB 15K Ultra320 SCSI Drive	90P1380	IBM		299	8	2,392	
NetXtreme 1000T Dual-Port Ethernet Adapter	73P4201	Intel		249	16	3,984	
E54 15" (13.8" Viewable) Color Monitor	633147N	IBM		139	8	1,112	
ServicePac for 3-Year 24x7x4 Support (x226)	96P2250	IBM		586	8		4,688
ServicePac for 3-Year 24x7x4 Support (Monitor)	30L9183	IBM		90	8		720
<b>Subtotal</b>						37,296	5,408
<b>Client Software</b>							
Microsoft Windows 2000 Server with COM+*	C11-00821	Microsoft		738	8	5,904	
Microsoft Visual C++ Standard Edition	254-00170	Microsoft		109	1	109	
<b>Subtotal</b>						6,013	
<b>Network Components</b>							
DLink Gigabit Ethernet Switch (2 spares)	DGS-1008TL			190	4	760	
Ethernet Cable 14 Ft. (2 spares)	CC5E-B14B			4	11	44	
<b>Subtotal</b>						804	
Compsat Technology Discounts (See Quote to View Line Items)						275,439	7,813
<b>Total</b>						2,037,068	73,968
Pricing: 1- Compsat Technology; 2 - IBM; 3 - Microsoft (*See Quote for Discounts); 4 - newegg.com						<b>Three-Year Cost of Ownership USD:</b> \$1,827,784	
Audited by Francois Raab, InfoSizing, Inc.						tpmC: 221,017	
						<b>\$ USD/tpmC:</b> \$8.27	
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 stated prices are not available according to these terms, please inform the TPC at pricing@tpc.org.							

<b>Numerical Quantities Summary</b>			
MQTh, Computed Maximum Qualified Throughput: <b>221,017 tpmC</b>			
<b>Response Times (in seconds)</b>	<b>90th Percentile</b>	<b>Average</b>	<b>Maximum</b>
New-Order	0.32	0.20	1.44
Payment	0.40	0.29	3.24
Delivery	0.30	0.30	0.84
Stock Level	0.86	0.60	2.05
Order Status	0.30	0.23	1.72
Delivery (Deferred)	0.30	0.19	0.89
Menu	0.29	0.20	0.91
Response Time Delay Added for Emulated Components: 0.1 Seconds			
<b>Transaction Mix (in percent of total transactions)</b>			<b>Percent</b>
New-Order			44.95
Payment			43.01
Delivery			4.01
Stock-Level			4.02
Order Status			4.01
<b>Keying/Think Times (in seconds)</b>	<b>Minimum</b>	<b>Average</b>	<b>Maximum</b>
New Order	18.00 / 0.00	18.00 / 12.04	18.02 / 120.31
Payment	3.00 / 0.00	3.00 / 12.04	3.02 / 120.31
Delivery	2.00 / 0.00	2.00 / 5.04	2.02 / 50.31
Stock Level	2.00 / 0.00	2.00 / 5.04	2.02 / 50.31
Order Status	2.00 / 0.00	2.00 / 10.04	2.02 / 100.31
<b>Test Duration</b>			
Ramp-up time			19 minutes 27 seconds
Measurement interval			120 minutes
Number of checkpoints			NA
Checkpoint interval			NA
Number of transactions (all types) completed in measurement interval			58,998,863