
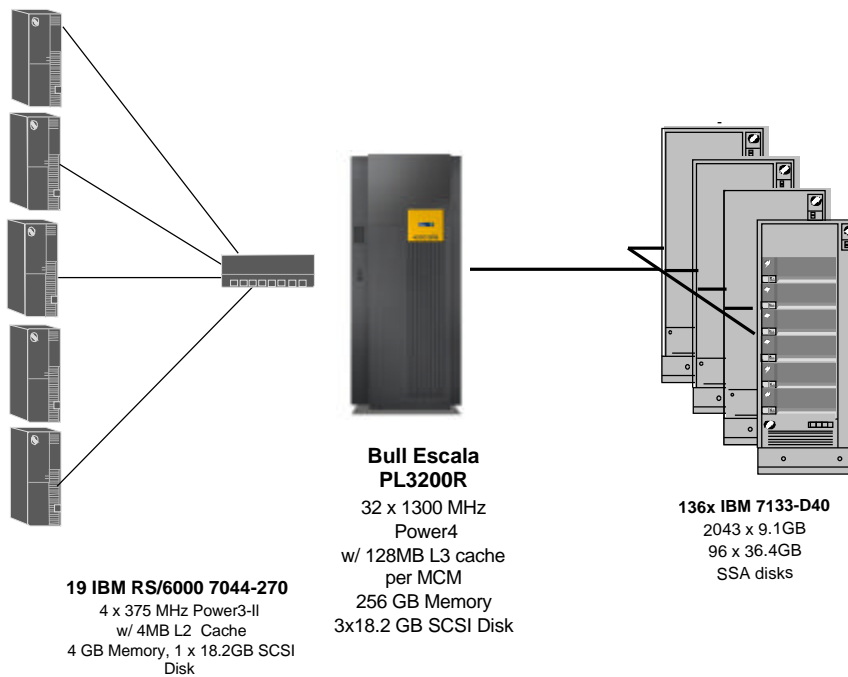
		<h1>Bull Escala PL3200R</h1>		TPC-C Rev. 5.0	
				Report Date June 14, 2002	
Total System Cost \$7 245 205		TPC-C Throughput 403,255.46 tpmC		Price/Performance \$17.96/tpmC	
				Availability Date Nov 22, 2002	
Processors 32 x database 76 x clients		Database Manager Oracle9i Database Enterprise Edition Release 2 (9.2.0.1.0) for AIX 5L V5.2		Operating System AIX 5L V5.2	
				Other Software Websphere Application Server Enterprise Edition Version 3.0	
				No. Users 324 000	



System Components	Clients		Server	
	Quantity	Description	Quantity	Description
Processor	19	4 x 375 MHz Power3-II W/4MB L2 cache each	1	32 x 1300 MHz POWER4 w/ 128 MB L3 cache per MCM, 4 MCM in the SUT
Memory		4 GB		256 GB
Disk Controllers	1	SCSI-2 (Integrated)	1 34	SCSI-2 (Integrated) SSA Adapters
Disk Drives	1	18.2 GB SCSI each client	2043 96 3	9.1GB SSA Disk 36.4GB SSA disk 18.2GB SCSI Disk
Total Storage		16.93 GB each client		19,959.99 GB
Terminals	3	System Console	1	System Console



BULL Escala PL3200R

TPC-C Rev. 5.0

Report Date: June 14, 2002

Description	Part Number	Brand	Pricing	Unit Price	Quantity	Extended Price	3-year Maint. Price
Server Hardware							
ESCALA PL3200R SYSTEM	CPXG258-1000	Bull	1	152 070	1	152 070	33 984
32X (Max) SCSI-2 Internal CD ROM drive	CDRG016-0000	Bull	1	375	1	375	0
8-WAY POWER4 TURBO PROCESSOR OPTION (CPUG077-0000	Bull	1	275 000	4	1 100 000	475 776
PROCESSOR KIT from One to Four MCM Processor	CKTG174-0000	Bull	1	14 850	1	14 850	0
I/O DRAWER 4 EIA (ADDITIONAL)	DRWG030-0000	Bull	1	30 510	3	91 530	14 443
KIT FIRST ADD'L I/O DRAWER IN FIRST RACK	CKTG178-0000	Bull	1	400	1	400	0
KIT FIRST ADD'L I/O DRAWER IN EXP RACK	CKTG181-0000	Bull	1	750	1	750	0
KIT SECOND ADD'L I/O DRAWER IN FIRST RACK	CKTG179-0000	Bull	1	8 750	1	8 750	0
Bulk Power Regulator	REFG004-0000	Bull	1	4 000	2	8 000	0
Power Distribution Assembly, 10 DC Power Converter	PSKG007-0000	Bull	1	3 500	2	7 000	0
KIT BUS SCSI FOR MEDIA DRAWER	CKTG188-0000	Bull	1	970	1	970	0
SLIM LINE REAR DOOR (PRIM&SECOND RACK)	CKTG186-0000	Bull	1	750	2	1 500	0
18,2 GB Ultra3 SCSI Disk Drive (1"/10krpm)	MSUG186-0000	Bull	1	1 500	3	4 500	0
ETHERNET 10/100Mb/s PCI ADAPTER	DCCG137-0000	Bull	1	275	5	1 375	0
128MB LEVEL 3 CACHE, 433MHZ	CCMG002-0000	Bull	1	25 000	4	100 000	0
32GB MEMORY CARD, INWARD FACING	CMMG181-0000	Bull	1	163 840	8	1 310 720	0
EXPANSION RACK, 24", 42U	RCKG012-0000	Bull	1	8 700	1	8 700	0
HARDWARE MANAGEMENT CONSOLE w/o keyboard	CSKG006-0000	Bull	1	5 435	1	5 435	0
QUIET TOUCH KEYBOARD - STEALTH BLACK, US	KBUG005-000E	Bull	1	100	1	100	0
Rack 42U : Black with one PDU	RCKG013-0000	Bull	1	5 000	14	70 000	14 670
ADDITIONAL POWER DISTRIBUTION UNIT- SINGLE	PSSG028-0000	Bull	1	1 000	41	41 000	0
Integrated Battery Backup, redundant, cables	6200	IBM	1	4 600	4	18 400	0
Advanced SerialRAID Adapter	6230	IBM	1	3 000	34	102 000	0
32 MB Fast _Write Cache option card	6235	IBM	1	575	6	3 450	0
SSA Disk Subsystem, pwr supply, Drawer cover	7133-D40	IBM	1	15 000	136	2 040 000	600 576
Dummy Drive	8399	IBM	1	30	2	60	0
10K/9.1 GB Advanced Disk Drive Module	8509	IBM	1	2 760	2043	5 638 680	0
10K/36.4 GB Advanced Disk Drive Module	8536	IBM	1	5 900	96	566 400	0
SSA Cables (8801, 8802)	8801	IBM	1	125	136	17 000	0
Subtotal						11 314 015	1 139 449
Server Software							
AIX 5.1 (media only)	CPXG258-1000	Bull	1		1	0	7 363
IBM Websphere Applicaton Server	D5ALCLL	IBM	1	29 305	32	937 760	173 664
IBM C for AIX V5	CLGG023-WA0A	Bull	1	799	1	799	283
Oracle9i Enterprise Edition Release 2 (9.2.0.1.0)	for AIX 5.L V5.2	Oracle	2	527360	1	527 360	
Server Support Package: Database		Oracle	2		1		6 000
Subtotal						1 465 919	187 310
Client Hardware & Software							
RS/6000 Model 44P-270 w/ CD-ROM	7044-270	IBM	1	4405	19	83 695	31 920
18.2 GB 10K RPM Ultra SCSI Enhanced Disk	3110	IBM	1	1260	19	23 940	
Memory Expansion Feature	4098	IBM	1	1038	19	19 722	
512MB SDRAM DIMM Memory	4120	IBM	1	2048	152	311 296	
2-way 375 MHz Power3 , 4MB L2	4362	IBM	1	11000	38	418 000	63 840
4-port 10/100 Mbps Ethernet adapter	4961	IBM	1	1500	57	85 500	
IBM ASCII Terminal, Keyboard w/ 2934,3925	3153-BG3	IBM	1	647	19	12 293	5 776
AIX 4. Unlimited Users	5765-C34	IBM	1	50	19	950	57 780
Subtotal						955 396	159 316
Third Party Hardware							
8-port 10/100 Ethernet switch	FS108NA	Netgear	3	85	4	340	0
Subtotal						340	0
Discounts						-7 660 623	-315 917
TOTAL						6 075 047	1 170 158

Notes:

Pricing: 1-Bull 2-Oracle 3-Netgear

Three-Year Cost of Ownership: \$7 245 205

tpmC Rating: 403255,46

\$ / tpmC: 17,96

Audited by Francois Raab of InfoSizing

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 for the BULL ESCALA PL3200R

MQTH, computed Maximum Qualified Throughput: 403 255.46 tpmC

<u>Response Times (in seconds)</u>	<u>90th %</u>	<u>Average</u>	<u>Maximum</u>
New Order	1.36	0.70	6.97
Payment	1.29	0.65	6.66
Order-Status	1.32	0.68	5.80
Delivery (interactive)	0.19	0.10	2.17
Delivery (deferred)	0.11	0.07	2.70
Stock-Level	1.29	0.65	5.99
Menu	0.00	0.00	2.54

Transaction Mix, in percent of total transactions

	<u>Percent</u>
New Order	44.91%
Payment	43.02%
Order-Status	4.02%
Delivery	4.01%
Stock-Level	4.01%

Keying/Think Times (in seconds)

	<u>Min.</u>	<u>Average</u>	<u>Max.</u>
New Order	18.00/0.01	18.01/12.02	18.15/120.21
Payment	3.00/0.01	3.01/12.02	3.09/120.21
Order-Status	2.00/0.01	2.01/10.01	2.08/100.10
Delivery	2.00/0.01	2.01/5.02	2.08/50.20
Stock-Level	2.00/0.01	2.01/5.02	2.09/50.20

Test Duration

Ramp-up Time	41 min 11 sec
Measurement interval	2 hours
Transactions during measurement interval (all types)	107,744,315
Ramp-down time	17 minutes

Checkpointing

Number of checkpoints	4
Checkpoint interval	29 min 41 sec