



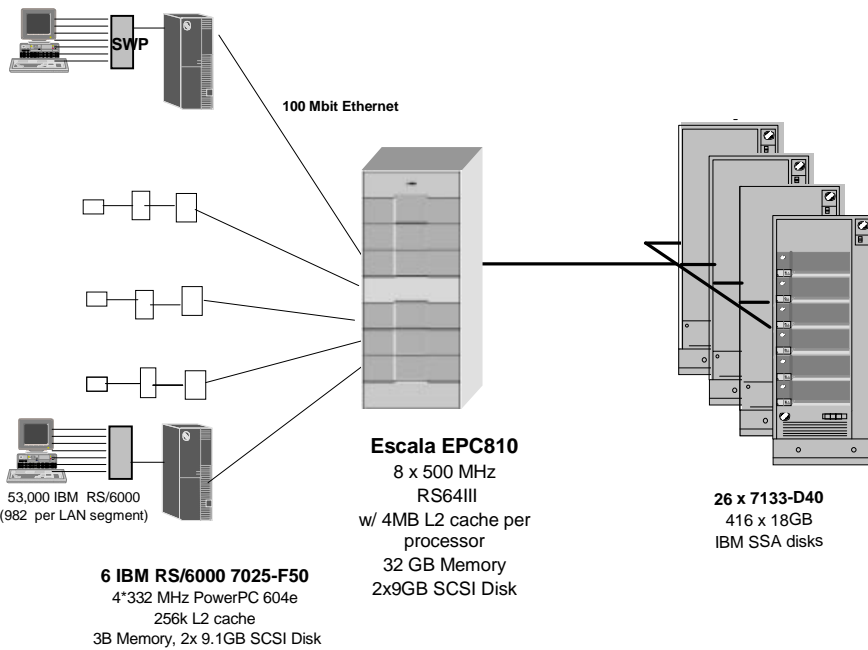
Bull Escala EPC 810 c/s

TPC-C Rev. 5.0

ORACLE

Report Date
May 28, 2001

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date	
\$2,508,189	66,750.27 tpmC	\$37.57/tpmC	Available	
Processors	Database Manager	Operating System	Other Software	No. Users
6 x IBM RS64-III	Oracle8i Enterprise Edition(64-bit) Release 3 (8.1.7) for AIX - Based System	AIX 4.3.3 +APAR IY10778	Websphere Application Server Enterprise Edition Version 3.0	53 000



System Components	Clients		Server	
	Quantity	Description	Quantity	Description
Processor	6	4 x 332 MHz PowerPC 604e w/ 256KB L2 cache each	1	8 x 500 MHz RS64-III w/ 4MB L2 cache each
Memory		3 GB		32 GB
Disk Controllers	1	SCSI-2 integrated	1	SCSI-2 Integrated SSA Adapters
Disk Drives	2	9.1 GB SCSI each client	416	18 GB SSA disk
			2	9.1 GB SCSI Disk
Total Storage		16.93 GB each client		7 031.21 GB
Terminals	6	System Console	1	System Console



ORACLE

BULL Escala EPC 810

TPC-C Rev. 5.0 Upgrade From TPC-C Rev. 3.5

Report Date: May 28, 2001

Description	Part Number	Brand	Pricing	Unit Price	Quantity	Extended Price	3-year Maint. Price
Server Hardware							
ESCALA NODE EPC810 including AIX 4.3.3 license	CPSG027-0000	Bull	1	15 478	1	15 478	14 220
MEMORY BOARD, 32 POSITION	MBRG006-0000	Bull	1	1 500	1	1 500	0
Remote I/O Cable - 3m	CBLG202-1000	Bull	1	595	1	595	0
Redundant Power Supply I/O Drawer (5EIA)	PSSG039-0000	Bull	1	725	1	725	0
32X (Max) SCSI-2 Internal CD ROM drive	CDRG016-0000	Bull	1	375	1	375	0
9,1 GB Ultra-SCSI Disk Drive (1"/7200rpm)	MSUG133-0000	Bull	1	1 160	2	2 320	0
ETHERNET 10/100Mb/s PCI ADAPTER	DCCG137-0000	Bull	1	275	6	1 650	0
4096MB (8x512MB DIMMS)	CMMG157-0000	Bull	1	36 834	8	294 672	0
CPU Board with 4 RS64-3@500MHz - 4MB L2 cache	CPUG051-0000	Bull	1	74 000	2	148 000	30 240
Power Regulator 190A (6&8 CPUs)	REFG002-0000	Bull	1	4 000	1	4 000	0
Secondary I/O Drawer 5 EIA with :	DRWG017-0000	Bull	1	7 000	1	7 000	0
Internal IPL Disk Mounting Hardware	CKTG133-0000	Bull	1	100	1	100	0
Rack 36U (with one PDU)	RCKG005-0000	Bull	1	4 350	5	21 750	5 760
ADDITIONAL POWER DISTRIBUTION UNIT- SING	PSSG028-0000	Bull	1	1 000	5	5 000	0
3.5M CABLE LOCAL RS232 (D25F/D25M)	CBLG104-1600	Bull	1	73	1	73	0
SYSTEM CONSOLE BQ 306 (White display, AZERT	CSUG002-1100	Bull	1	620	1	620	0
Advanced SerialRAID Adapter	6230	IBM	1	3 000	7	21 000	0
32MB Fast-Write Cache Option	6235	IBM	1	575	2	1 150	0
SSA disk Subsystem, Black Cover	7133-D40	IBM	1	13 000	26	338 000	114 816
50/60 Hz AC, 300 VDC Power Supply	8022	IBM	1	2 000	26	52 000	0
Prestige 3000VA, 208-240V 50/60Hz	9910-U33	IBM	1	3 822	1	3 822	0
18.2GB Advanced DiskDriver Modules	8518	IBM	1	4 500	416	1 872 000	0
SSA Cables	8802	IBM	1	125	26	3 250	0
Subtotal						2 795 080	165 036
Server Software							
C for AIX V5.0 Initial User (incl. Media)	CLGG023-WA0A	Bull	1	799	1	799	540
AIX 4. Unlimited Users(Maintenance only)		Bull	1		1	0	8 910
PERFORMANCE AIDE FOR AIX 4.3 LICENCE - QT	UTSG135-RA0A	Bull	1	450	1	450	0
Oracle Version 8.1.7 64 bits		Oracle	2	199500	1	199 500	277 200
Subtotal						200 749	286 650
Client Hardware							
RS/6000 Model F50	7025-F50	IBM	1	15 900	6	95 400	33 120
Intg SCSI-2 FW, Intg Enet, CDROM		IBM					0
2 x 9.1 GB 1" Ultra SCSI Disk (2919)	2908	IBM	1	1 260	6	7 560	0
Async Terminal/ Cable	2934	IBM	1	45	6	270	0
10/100 Mbps Ethernet Adapter, PCI	2968	IBM	1	275	18	4 950	0
Memory Expansion Feature	4093	IBM	1	1 038	6	6 228	0
256MB SDRAM DIMM Memory	4106	IBM	1	1 024	6	6 144	0
256MB SDRAM DIMM Memory	4110	IBM	1	2 048	66	135 168	0
2-way 332MHz, 512KB L2	4357	IBM	1	3000	6	18 000	7 344
2-way 332MHz, 512KB L2	4359	IBM	1	10000	6	60 000	15 984
IBM ASCII Terminal, Keyboard, Cable	3153-BG3	IBM	1	577	6	3 462	21 888
Subtotal						337 182	78 336
Client Software							
AIX 4. Unlimited Users(Media only)	5756-C34	IBM	1	50	6	300	15 661
IBM Websphere Applicaton Server	41L3462	IBM	1	21000	6	126 000	11 665
Subtotal						126 300	27 327
Discounts						-1 466 915	-41 555
TOTAL						1 992 396	515 793

Notes: Pricing: 1-Bull 2-Oracle

Three-Year Cost of Ownership: \$2 508 189
tpmC Rating: 66750,27
\$/ tpmC: 37,57

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 EPC 810

MQTH, computed Maximum Qualified Throughput: 66,750.27 tpmC

Repeatability Run: 66,738.70 tpmC 0.017% difference

<u>Response Times (in seconds)</u>	<u>90th %</u>	<u>Average</u>	<u>Maximum</u>
New Order	0.85	0.39	105.10
Payment	0.77	0.34	105.46
Order-Status	0.83	0.37	101.69
Delivery (interactive)	0.19	0.11	2.62
Delivery (deferred)	1.18	0.48	8.03
Stock-Level	1.19	0.66	106.34
Menu	0.01	0.00	2.47

Transaction Mix, in percent of total transactions

	<u>Percent</u>
New Order	44.88%
Payment	43.01%
Order-Status	4.05%
Delivery	4.02%
Stock-Level	4.02%

Keying/Think Times (in seconds)

	<u>Min.</u>	<u>Average</u>	<u>Max.</u>
New Order	18.00/0.01	18.01/12.03	18.12/120.21
Payment	3.00/0.01	3.01/12.01	3.15/120.21
Order-Status	2.00/0.01	2.01/10.00	2.14/100.11
Delivery	2.00/0.01	2.01/5.01	2.11/50.20
Stock-Level	2.00/0.01	2.01/5.01	2.10/50.21

Test Duration

Ramp-up Time	39 min 55 sec
Measurement interval	30 minutes
Transactions during measurement interval (all types)	4,461,742
Ramp-down time	10 minutes

Checkpointing

Number of checkpoints	1
Checkpoint interval	29 min 41 sec