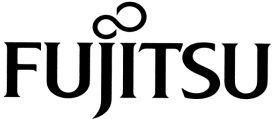
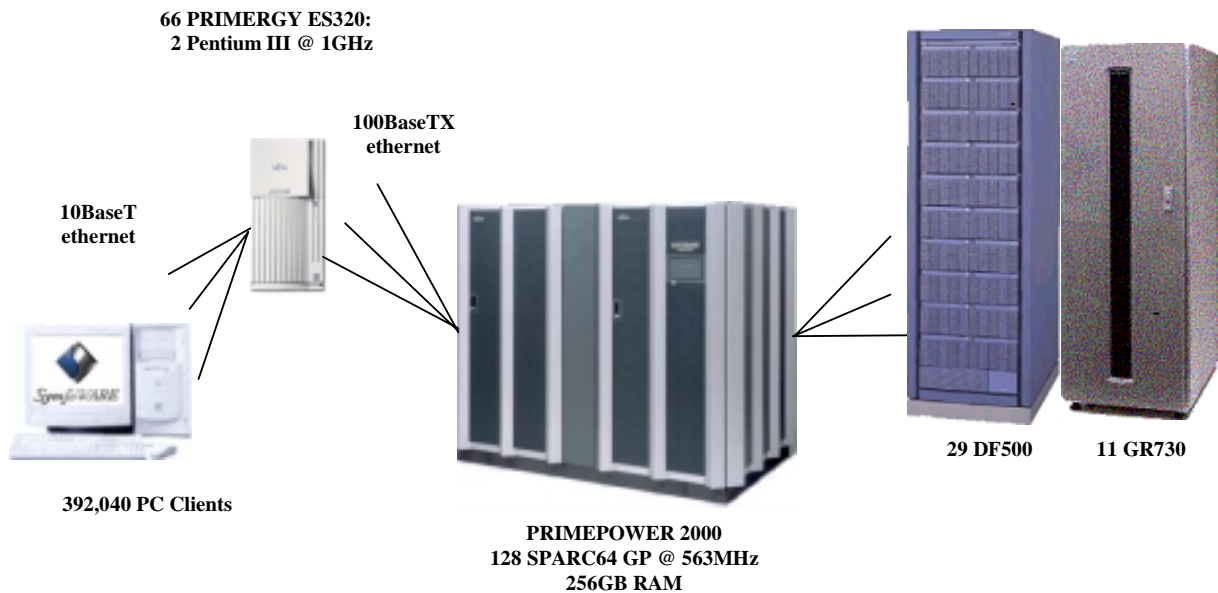


Priced Configuration

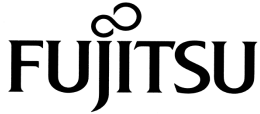
	PRIMEPOWER 2000 c/s w/ 66 Front-Ends		TPC-C Rev. 5	
			Report Date: August 28, 2001	
Total System Cost	TPC-C Throughput	Price/Performance	Availability Date	
\$13,025,524	455,818.20 tpmC	\$28.58/tpmC	February 28, 2002	
Processors	Database Manager	Operating system	Other Software	Number of users
19 :Interrupt 109:Database 132:Client	SymfoWARE Server Enterprise Edition for VLM 3.0.1	Solaris 8	BEA Tuxedo 6.5 CFS, Microsoft Internet Information Server	392,040

PRIMEPOWER 2000 Priced Configuration



RDBMS SERVER			CLIENTS(EACH OF 66)	
	QTY	DESCRIPTION	QTY	DESCRIPTION
PROCESSOR	128	SPARC64 GP @ 563MHz	2	PENTIUM III @ 1GHz
CACHE MEMORY		8MB (EACH PROCESSOR)		256KB (EACH PROCESSOR)
MEMORY		256GB		768MB
DISK CONTROLLER		ULTRA WIDE DIFFERENTIAL SCSI	1	ULTRA2 WIDE SCSI
	80	FIBRE CHANNEL		
DISKS	120	36GB (10,000RPM)	1	9GB
	1160	18GB (15,000RPM)		
	344	18GB(10,000RPM)		
	3	9GB(10,000RPM)		
TOTAL		28,760 GB		
TERMINAL	1	SYSTEM CONSOLE	1	17" MONITOR

Detailed Pricing Information

	<h2>Detailed Pricing Information</h2> <h3>PRIMEPOWER 2000 c/s</h3> <h3>w/ 66 Front-Ends</h3>	<p>TPC-C Rev 5</p> <p>Report Date: August 28, 2001</p>
---	--	--

Order Number	Description	Quantity	Third Party	Unit Price	Extended Price	Maintenance rate/unit		3 Years Maintenance
Server Hardware								
PP200C1U	PRIMEPOWER 2000 w/ 8 x SPARC64 GP 563MHz/8MB, 2 UltraSCSI/D Cards	1		620,060.00	620,060.00	652,437.50	/3yr	652,437.50
GP7N7ER11U	System Expansion Cabinet for PRIMEPOWER 2000	3		137,200.00	411,600.00	*1	/3yr	
PP087SBIU	System Board	30		33,250.00	997,500.00	*1	/3yr	
PP081CI1U	CPU Module (SPARC64 GP 563MHz/8MB)	120		9,800.00	1,176,000.00	*1	/3yr	
GP7N2M61U	Additional Memory (1024MB)	256		2,835.00	725,760.00	*1	/3yr	
GP7N7FT1U	Additional Fan Tray	15		12,600.00	189,000.00	*1	/3yr	
GP7N7PU1U	Additional Power Supply	7		1,260.00	8,820.00	*1	/3yr	
PP087FL1U	Disk Unit	4		672.00	2,688.00	*1	/3yr	
PP087FL91U	Additional Disk Unit	4		672.00	2,688.00	*1	/3yr	
PP083D91U	9GB 10,000rpm disk	3		868.00	2,604.00	*1	/3yr	
PP083D181U	18GB 10,000rpm disk	24		1,680.00	40,320.00	*1	/3yr	
X1034A-X	Quad FastEthernet Card	3		1,256.50	6,282.50	*1	/3yr	1,848.00
QLA2100-CK	QLOGIC Fibre Channel Card	80		1,296.00	103,680.00	*1	/3yr	
DCBL-FCa20	Fibre Channel Interface cable for Optical	80		182.00	14,560.00	*1	/3yr	
GR73AD2T	GR730 Storage System Base Unit	11		44,200.00	486,200.00	1,500.00	/yr*2	33,000.00
GR73A21T	AC Power Cables, US	11		640.00	7,040.00		/yr*2	
GR73A131T	Additional Cache Memory 512MB(256MB Cache * 2)	11		1,600.00	17,600.00	28.00	/yr*2	616.00
GR73A125T	GR730 Fibre Channel Adapter	22		4,000.00	88,000.00	42.00	/yr*2	1,848.00
GR73A202T	GR730 Drive Enclosure	44		10,000.00	440,000.00	175.00	/yr*2	15,400.00
GR73A231T	18GB 10,000rpm disk drive(unformatted)	220		720.00	230,400.00	17.00	/yr*2	10,880.00
GR73A241T	36GB 10,000rpm disk drive(unformatted)	120		1,150.00	138,000.00	27.00	/yr*2	6,480.00
DF500-RK	Basic style of Rackmount	29	1	12,241.00	354,989.00	1,558.00	/yr*2	90,364.00
DF500-RKA	Additional style of Rackmount	87	1	7,745.50	673,858.50	1,558.00	/yr*2	271,092.00
DF-F500-AAH18	Canister unit of 17.8GB Drive 15,000rpm	1160	1	1,359.36	1,576,857.60	*1	/3yr	
DF-F500-C256	256MB Cache unit	58	1	1,682.00	97,556.00	*1	/3yr	
DF-F500-F1F	Control unit	29	1	4,808.00	139,432.00	*1	/3yr	
DF-F500-U6	Rack for DF500-RK	29	1	6,053.00	175,537.00	*1	/3yr	
DF-F500-U1RH15	Rail for 19" Rack (U16)	232	1	475.00	110,200.00	*1	/3yr	
FP020BP1U	PRIMEPOWER 200/250 for System Console	1		4,960.00	4,960.00	4,406.40	/3yr	4,406.40
FP022M41U	256MB Additional Memory	1		840.00	840.00	*1	/3yr	
FP023D92U	9.1GB SCSI disk	1		656.00	656.00	*1	/3yr	
GP7B3DT1U	Internal DDS3 Unit	1		752.00	752.00	*1	/3yr	
X1033A-U	FastEthernet Card	1		556.00	556.00	*1	/3yr	
X3668B-U	PGX32 Color Frame Buffer	1		236.00	236.00	*1	/3yr	
X7143AA	17" Monitor	1		320.00	320.00	*1	/3yr	
Server Hardware Subtotals					8,845,552.60			1,086,523.90
Server Software								
B23PDM8H0	Solaris 8 for PRIMEPOWER 2000	1		80.00	80.00	*3	/3yr	
GP7N7CL9AU	System Console Software	1		2,140.67	2,140.67	*3	/3yr	
B23G870H0	SymfoWARE Server Enterprise Edition for VLM 3.0.1 w/ 16 Processor License	1		251,000.00	251,000.00	50,200.00	/yr	150,600.00
B23G870CB	SymfoWARE Server Enterprise Edition for VLM 16 Processor License	7		170,000.00	1,190,000.00	34,000.00	/yr	714,000.00
B23P251HNH	SymfinityDisk	1		832.00	832.00	*3	/3yr	
Server Software Subtotals					1,444,052.67			864,600.00
Client Hardware								
GP573CL1A	PRIMERGY ES320.w/1 x Pentium III 1BGHz,256 MB mem.1 x 10/100BaseTX	66		2,450.00	161,700.00	650.00	/3yr	42,900.00
GP5-FG21L	Pentium III (1BGHz)	66		370.00	24,420.00	*1	/3yr	
GP5-RM25M	256MB memory	132		415.00	54,780.00	*1	/3yr	
GP5-HD49D	9GB SCSI disk	66		285.00	18,810.00	*1	/3yr	
GP5-185	FastEthernet Adapter (10/100Base-TX)	132		120.00	15,840.00	*1	/3yr	
X7143AA	17" Monitor	66		625.00	41,250.00	*1	/3yr	
Client Hardware Subtotals					316,800.00			42,900.00
Client Software								
	Microsoft Windows 2000 Server 5CAL	66		975.00	64,350.00	*3	/3yr	
	Microsoft Visual C++ Professional 6.0	1		535.00	535.00	*3	/3yr	
	BEA Tuxedo 6.5 CFS	66	2	3,000.00	198,000.00	690.00	/yr	136,620.00
Client Software Subtotals					262,885.00			136,620.00
User Connectivity								
WS-2924M-XL-EN	CISCO Catalyst 2924M-XL-EN 10/100 Ethernet Switch (24ports) *	9	3	1,676.46	15,088.14	388.95	/yr	10,501.65
User Connectivity Subtotals					15,088.14			10,501.65
Totals					10,884,378.41			2,141,145.35
3 Year cost								13,025,521
1ppmC								455,818.20
\$ /ppmC								28.58
*1: include in above component								
*2: 12 month warranty is included in the price								
*3: include in hardware system								
Third Party : 1 = Hitachi Data Systems Corporation								
2 = BEA Systems								
3 = PROVANTAGE								

Notes:

Results independently audited by Francois Raab of InfoSizing, Inc.
 44 unpriced GRANPOWER 5000 and PRIMERGY H200 clients in the benchmarked configuration were substituted by 44 PRIMERGY ES320 clients in the priced configuration.

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 items, please inform the TPC at pricing@tpc.org. Thank you.

Numerical Quantities Summary						
PRIMEPOWER 2000 c/s w/ 66 Front-Ends						
SymfoWARE Server Enterprise Edition for VLM 3.0.1						
MQTH, Computed Maximum Qualified Throughput				455,818.20 tpmC		
Response Times (in seconds)	Average		90%		Max.	
New-Order	1.417		1.900		121.790	
Payment	1.081		1.869		113.564	
Order-Status	1.011		1.824		97.553	
Delivery (interactive portion)	0.310		0.211		78.147	
Delivery (deferred portion)	0.971		1.844		91.312	
Stock-Level	0.995		1.830		101.479	
Menu	0.468		0.210		70.590	
Transaction Mix, in percent of total transaction						
New-Order					44.728	
Payment					43.101	
Order-Status					4.071	
Delivery					4.048	
Stock-Level					4.052	
Emulation Delay (in seconds)			Resp. Time		Menu	
New-Order			.1		.1	
Payment			.1		.1	
Order-Status			.1		.1	
Delivery (interactive)			.1		.1	
Stock-Level			.1		.1	
Keying/Think Times (in seconds)		Min.		Average		Max.
New-Order	18.66	0.01	18.68	12.04	20.68	120.32
Payment	3.25	0.01	3.27	12.04	5.18	120.32
Order-Status	2.15	0.02	2.17	10.09	3.81	100.81
Delivery (interactive)	2.15	0.02	2.17	5.05	3.73	50.39
Stock-Level	2.15	0.01	2.17	5.05	3.65	50.57
Test Duration						
Ramp-up time (seconds)					1,500	
Measurement interval					7,200	
Transactions (all types) during measurement interval					122,289,978	
Checkpointing						
Number of checkpoints					4	
Checkpoint interval					1,800	