FUJITSU	PRIMERGY TX300 S4	TPC-E 1.5.0 TPC Pricing 1.3.0 Report Date May 30, 2008

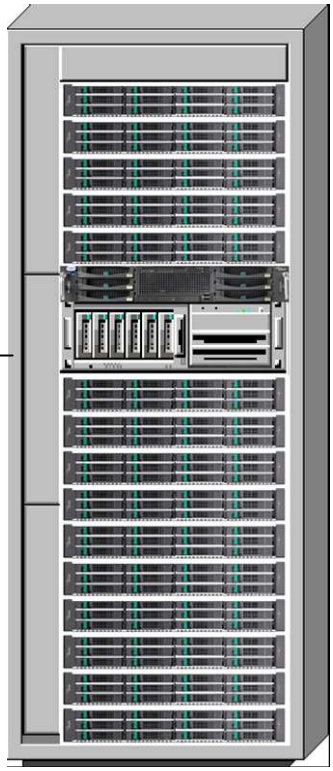
TPC-E Throughput	Price/Performance	Availability Date	Total System Cost
317.45 tpsE	**$ 523.49 USD per tpsE**	**August 30, 2008**	**$ 166,181**

Database Server Configuration

Operating System	Database Manager	Processors/Cores/Threads	Memory
Microsoft Windows Server 2008 Enterprise x64 Edition	**Microsoft SQL Server 2008 Enterprise x64 Edition**	**2/8/8**	**64 GB**

SUT

2 Driver Systems



Tier A
PRIMERGY RX300 S4
1x Intel Xeon E5405 2.00 GHz
4 GB of Memory
1x 250 GB SATA Drive
Onboard 1 Gb/s
Dual Port LAN 1 Gb/s

Tier B
PRIMERGY TX300 S4
2x Intel Xeon X5460 3.16 GHz
64 GB Memory
2x 73 GB 10K SAS Drives
6x 73 GB 15K SAS Drives
Onboard RAID
3x RAID

Storage
PRIMECENTER Rack
15x PRIMERGY SX40
180x 73 GB 15K SAS Drives

Initial Databbase Size	Redundancy Level 1	Storage
1,233 GB	**RAID-10**	**188 x 73 GB**

PRIMERGY TX300 S4

TPC-E 1.5.0
TPC Pricing 1.3.0

Report Date
May 30, 2008

Availability Date
August 30, 2008

Description	Part Number	Price Source	Unit Price	Qty	Extended Price	3-yr. Maint. Price
Database Server Hardware						
FSCT3S4_S26361-K1159-V301_66824-04		1	15,102.80	1	15,102.80	
PY TX300S4r/standard PSU	S26361-K1159-V301			1		
Xeon DP X5460 3.16 GHz 2x6MB 1333MHz	S26361-F3340-E316			2		
Memory Board 2 for TX300 S4	S26361-F3263-E300			1		
8GB 2x4GB FBD667 PC2-5300F d ECC	S26361-F3263-E524			8		
Conversion kit for 2.5" HD Basic Unit	S26361-F2826-E133			1		
F-D-L-Box1	S26361-F2826-E301			1		
CD-RWDVD slimline SATA	S26361-F3268-E1			1		
HD SAS 3Gb/s 73GB 10k hot plug 2.5"	S26361-F3208-E173			2		
HD SAS 3Gb/s 73GB 15k hot plug 2.5"	S26361-F3208-E573			6		
RAID 5/6 SAS based on LSI MegaRAID 256MB	S26361-F3257-E256			1		
RAID Contr BBU Upgrade for RAID 5/6 V70	S26361-F3257-E70			1		
Rack installation ex works	SNP:SY-F1647E301-P			1		
RMK-F2_TX300-S4	S26361-F2735-E103			1		
Cable magmt. for 19" DC- PC- Rack	S26361-F2735-E7			1		
RAID 5/6 SAS based on LSI MegaRAID 512MB 2x External	S26361-F3890-L501	1	479.40	3	1,438.20	
SCENICVIEW A17-3	S26361-K1146-V150	1	226.10	1	226.10	
KB SLIM MF USA	S26381-K370-V510	1	24.65	1	24.65	
Optical Wheelmouse USB silver	S26381-K355-L400	1	15.30	1	15.30	
PYT3S4 Enhanced +, 24 x 7 Phone Support; 24 x 7, 4-hour On-Site Resp.(Sev-1), Warranty Uplift Maintenance, 36 Months, Prepaid billing	PYT3S4-U004361-0NA	1	854.10	1		854.10
				Subtotal	16,807.05	854.10
Server Storage						
FSC_S26361-K826-V103_66824-01		1	2,316.25	1	2,316.25	
PRIMECENTER Rack 38 U, 1000 deep	S26361-K826-V103			1		
Dummy panel, platics, 2U + assembly	S26361-F2735-E131			4		
Socket strip 3phase 3x 8 sockets	S26361-F2262-E31			2		
FSC_S26361-K1122-V200_66824-02		1	4,399.60	15	65,994.00	
FibreCAT SX40 SAS Disk Subsystem	S26361-K1122-V200			15		
HD SAS 3Gb/s 73GB 15k hot pl 3.5" SX40	S26361-F3244-E573			180		
Rack installation ex works, SX10, 1U Nod	S26361-F1647-E302			15		
PYSX40 Enhanced +, 24 x 7 Phone Support; 24 x 7, 4-hour On-Site Resp.(Sev-1), Warranty Uplift Maintenance, 36 Months, Prepaid billing	PYSX40-U004361-0NA	1	1,644.30	15		24,664.50
SAS cable external 2 m	S26361-F3246-L20	1	80.75	6	484.50	
SAS cable external 0.5 m	S26361-F3246-L5	1	59.50	9	535.50	
				Subtotal	69,330.25	24,664.50
Server Software						
SQL Server 2008 Enterprise x64 Edition Per Processor License	n/a	2	23,911.00	2	47,822.00	
Windows Server 2008 Enterprise Edition (x64)	P72-03195	2	2,357.00	1	2,357.00	
Microsoft Problem Resolution Services	n/a	2	245.00	1		245.00
				Subtotal	50,179.00	245.00
Tier A Client Hardware						
FSCR3S4_S26361-K1151-V101_66824-03		1	2,035.75	1	2,035.75	
PY RX300S4 6x3.5	S26361-K1151-V101			1		
Xeon DP E5405 2.00 GHz 2x6MB 1333MHz	S26361-F3882-E200			1		
2GB 2x1GB FBD667 PC2-5300F d ECC	S26361-F3263-E522			2		
CD-RWDVD slimline SATA	S26361-F3268-E1			1		
HD SATA 3Gb/s 250GB 7.2k hot plug 3.5"	S26361-F3265-E250			1		
RAID 0/1 SAS based on LSI MegaRAID 8Port	S26361-F3257-E8			1		
Rack installation ex works	SNP:SY-F1647E301-P			1		
RMK-P_1-2U servers (new)	S26361-F2735-E110			1		
Eth Ctrl 2x1Gbit PCIe PRO/1000PT Cu lp	S26361-F3228-L201	1	183.60	1	183.60	
SCENICVIEW A17-3	S26361-K1146-V150	1	226.10	1	226.10	
KB SLIM MF USA	S26381-K370-V510	1	24.65	1	24.65	
Optical Wheelmouse USB silver	S26381-K355-L400	1	15.30	1	15.30	
PYR3S4 Enhanced +, 24 x 7 Phone Support; 24 x 7, 4-hour On-Site Resp.(Sev-1), Warranty Uplift Maintenance, 36 Months, Prepaid billing	PYR3S4-U004361-0NA	1	854.10	1		854.10
				Subtotal	2,485.40	854.10
Tier A Client Software						
Windows Server 2003 R2 Standard x64 Edition	P73-01664	2	719.00	1	719.00	
Infrastructure or Connectivity						
LAN_crossover-Cat 5e, l=5m	S26361-F3482-L5	1	21.25	2	42.50	
				Total	139,563.20	26,617.70

Notes:	**Three-Year Cost of Ownership USD**	$166,181
Price Source: 1=Fujitsu Computer Systems Corporation, 2=Microsoft Corporation	**TPC-E Throughput**	317.45
	$ USD/tpsE	$523.49

The benchmark results and test methodology were audited by Francois Raab of InfoSizing Inc. (www.sizing.com)

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 section of the TPC benchmark pricing 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.

FUJITSU	PRIMERGY TX300 S4	TPC-E 1.5.0 TPC Rev 1.3.0
		Report Date May 30, 2008
		Availability Date August 30, 2008

Numerical Quantities Summary				
Reported Throughput:	**317.45 tpsE**	**Configured Customers:**		**160,000**
Response Times (in seconds)	**Minimum**	**Average**	**90th%tile**	**Maximum**
Broker Volume	0.00	0.03	0.05	0.16
Customer Position	0.00	0.03	0.05	0.61
Market Feed	0.00	0.03	0.07	0.30
Market Watch	0.00	0.02	0.05	0.73
Security Detail	0.00	0.01	0.03	0.65
Trade Lookup	0.00	0.52	0.70	1.13
Trade Order	0.00	0.08	0.13	0.66
Trade Result	0.00	0.08	0.14	3.00
Trade Status	0.00	0.02	0.04	0.62
Trade Update	0.01	0.62	0.75	4.10
Data Maintenance	0.01	0.09	N/A	0.72
Transaction Mix		**Transaction Count**		**Mix %**
Broker Volume		1,119,936		4.900%
Customer Position		2,971,416		13.001%
Market Feed		228,571		1.000%
Market Watch		4,113,702		17.999%
Security Detail		3,199,821		14.000%
Trade Lookup		1,828,234		7.999%
Trade Order		2,308,430		10.100%
Trade Result		2,285,688		10.001%
Trade Status		4,342,414		19.000%
Trade Update		457,068		2.000%
Data Maintenance		120		N/A
Test Duration and Timings				
Ramp-up Time (hh:mm:ss)		00:22:28		
Measurement Interval (hh:mm:ss)		02:00:00		
Business Recovery Time (hh:mm:ss)		00:41:53		
Total Number of Transactions Completed in Measurement Interval		22,855,280		