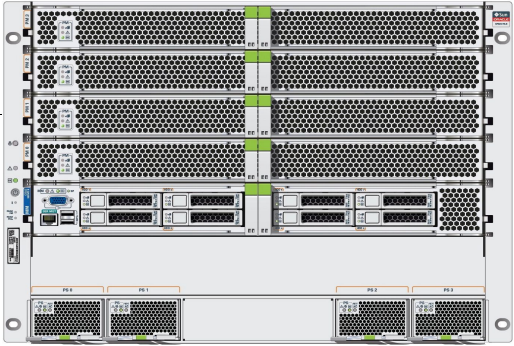


ORACLE®	SPARC T5-8 Server		TPC-C 5.11.0 TPC-Pricing 1.7.0	
			Report Date March 26, 2013	
Total System Cost	TPC-C Throughput	Price/Performance	Availability Date	
\$4,663,073USD	8,552,523 tpmC	\$0.55USD/tpmC	September 25, 2013	
Database Server Processors/Cores/Threads	Database Manager	Operating System	Other Software	Number of Users
SPARC T5 3.6GHz 8 / 128 / 1,024	Oracle Database 11g Release 2 Enterprise Edition With Oracle Partitioning	Oracle Solaris 11.1	Oracle Tuxedo CFSR Oracle Web Tier 1	6,800,000
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p>Clients</p> <p>16 Sun Server X3-2 2 Intel® Xeon® E5-2690 2.93GHz 64GB Memory 2 600GB SAS disk</p> </div> <div style="width: 35%; text-align: center;"> <p>Database System</p>  <p>SPARC T5-8 Server 8 SPARC T5 3.6GHz 4TB Memory 2 600GB 10K RPM SAS 12 8Gb/s FC HBA, 2 port 10GbE SFP+</p> </div> <div style="width: 30%;"> <p>Storage</p> <p>54 DATA COMSTAR Sun Server X3-2L w/ 2 Intel® Xeon® E5-2609 2.4GHz 16GB DDR3 46 w/ 1 3TB 7.2K RPM SAS 8 w/ 2 3TB 7.2K RPM SAS 4 F40 PCI-E 400GB SSD</p> <p>2 REDO COMSTAR Sun Server X3-2L w/ 2 Intel® Xeon® E5-2609 2.4GHz 16GB DDR3 12 3TB 7.2K RPM SAS</p> </div> </div>				
System Component	Each Server Node		Each Client	
Processors/Cores/Threads and cache	8/128/1024	SPARC T5 3.6GHz 8MB L3 Cache	2/16/32	Intel® Xeon® E5-2690 12MB Smart Cache
Memory		4TB		64GB
Disk Controllers	12	8Gb/s FC HBA 2 Port	1	8 port Internal SAS
OS Disks (each system)	2	600GB 10K RPM SAS	2	600GB 10K RPM SAS
External Storage	216	Flash Accelerator F40 PCI-E 400GB eMLC		
	86	3TB 7.2K RPM SAS		
Total Storage		344.4TB		



SPARC T5-8 Server

TPC-C 5.11.0
TPC-Pricing 1.7.0

Report Date
March 26, 2013

Description	Part Number	Price Source	Unit Price	Qty	Extended Price	3 yr Maint. Price
Server Hardware						
Sun SPARC T5-8 Server, XATO chassis	T7104192		1	43,620	1	43,620
2 SPARC T5 3.6GHz	7104194		1	33,856	4	135,424
32GB DDR3-1066 registered DIMM	7104200		1	3,452	128	441,856
600GB 10K RPM 2.5" SAS-2 HDD w/ bracket	7105213		1	615	2	1,230
StorageTek 8Gb/s FC HBA dual port Emulex	SG-PCIE2FC-EM8-Z		1	2,399	12	28,788
Twinax Passive Copper Cable: 2 meters	X2130A-3M-N		1	212	2	424
Power cord, 2.5M, C20 plug	SELY9P31Z		1	29	4	116
Sub-Total					651,458	0
Server Storage						
Sun Sun Server X3-2L; base chassis	7102750		1	3,812	56	213,472
Oracle Solaris 11.1 Preinstall	7100734		1	0	56	0
600GB 10K rpm 2.5" SAS-2 HDD w/ bracket	RA-SS2CF-600G10K2		1	615	112	68,880
3TB 7.2K RPM 3.5" SAS HDD w/ bracket	7102758		1	905	86	77,830
Intel® Xeon® E5-2609 2.4GHz Processor	7100604		1	516	112	57,792
8GB DDR3-1600 DIMM	7100730		1	152	112	17,024
StorageTek 8Gb/s FC PCI-E HBA dual port QLogic	SG-PCIE2FC-QF8-Z		1	2,399	58	139,142
Sun Storage 6Gb/s SAS PCI-E HBA, Internal: 8 port	SG-SAS6-INT-Z		1	419	54	22,626
Sun Storage 6Gb/s SAS PCI-E HBA, 512MB, RAID	SGX-SAS6-R-INT-Z		1	1,079	2	2,158
Flash Accelerator F40 PCI-E 400GB eMLC	7104480		1	4,860	216	1,049,760
Heat Sink (for factory installation)	7102745		1	28	112	3,136
12 LFF slot disk cage and 2 SFF rear slot disk cage	7102743		1	1,406	56	78,736
Power Cord North America and Asia, 2.5M, 5-15P	333A-25-15-NEMA		1	13	112	1,456
15M LC-LC FC Optical Cable	9734A-Z-N		1	105	86	9,030
Sub-Total					1,741,042	0
Server Software						
Oracle Solaris 11.1 Preinstall	7104202		1	0	1	0
Oracle Database 11g Release 2 Enterprise Edition, Per Processor for 3 years (for 64 processors)			1*	23,750	64	1,520,000
Oracle Partitioning, Per Processor for 3 years (for 64 processors)			1*	5,750	64	368,000
Oracle Incident Server Support Package (for 3 years)			1	2,300	3	6,900
Sub-Total					1,888,000	6,900
Client Hardware						
Sun Server X3-2; base chassis	7102735		1	3,076	16	49,216
600GB 10K RPM 2.5" SAS HDD w/ bracket	RA-SS2CF-600G10K2		1	615	32	19,680
Intel® Xeon® E5-2690 8 core 2.9GHz Processor	7100599		1	3,422	32	109,504
Sun Storage 6Gb/s SAS PCI-E HBA, Internal: 8 port	SG-SAS6-INT-Z		1	419	16	6,704
Four 2.5" drive slots and 1 DVD-RW disk cage	7102740		1	676	16	10,816
Twinax Passive Copper Cable: 3 Meters	X2130A-3M-N		1	212	16	3,392
Heatsink (for factory installation)	7101758		1	20	32	640
PCI-E filler panel (for factory installation)	7102748		1	2	48	96
Power Cord North America and Asia, 2.5M, 5-15P plug	333A-25-15-NEMA		1	13	32	416
8GB DDR3-1600 DIMM	7100730		1	152	128	19,456
Sub-Total					219,920	0
Client Software						
Oracle Solaris 11.1 Preinstall	7100734		1	0	16	0
Oracle Solaris Development Tools Support	B59320		1	1,200	3	3,600
Oracle Web Tier 1, per Processor for 3 years (for 128 processors)			1	2,500	128	320,000
Oracle Premier Software Support for Oracle Web Tier 1 (for 128 processors)			1	140,800	3	422,400
Oracle Tuxedo CFSR, per Processor for 3 years (for 128 processors)			1*	1,800	128	230,400
Oracle Premier Support for Oracle Tuxedo CFSR (for 128 processors)			1	50,688	3	152,064
Sub-Total					550,400	578,064
Other Hardware						
Brocade 6510 FC Switch w/ 24 ports activated	7103553		1	26,046	2	52,092
Rack Jmpr Cbl, Straight 2.0M,C14,15A,C13	X333V-20-15-C14-N		1	25	4	100
Brocade 6510 ActivationPermit for 12 8Gb/s SFPs	7103555		1	12,741	4	50,964
Brocade 16Gb/s SFP short wave optic module	7103543		1	780	48	37,440
Rack rail kit	7103770		1	282	2	564

Description	Part Number	Price Source	Unit Price	Qty	Extended Price	3 yr Maint. Price	
SUT Mgmt system and Svc Processor Control Workstation							
Sun Server X3-2; base chassis	7102735		1	3,076	1	3,076	
Oracle Solaris 11.1 Preinstall	7100734		1	0	1	0	
US PC Peripheral Kit (Keyboard / Mouse)	X3701A-PC		1	50	1	50	
8GB DDR3-1600 DIMM	7100730		1	152	2	304	
Sun Storage 6Gb/s SAS PCI-E HBA, internal: 8 port	SG-SAS6-INT-Z		1	419	1	419	
Four 2.5" drive slots and 1 DVD-RW disk cage	7102740		1	676	1	676	
Heatsink (for factory installation)	7102758		1	20	1	20	
PCI-E filler panel (for factory installation)	7102748		1	2	3	6	
Single processor I/O cover kit (for factory installation)	7104900		1	10	1	10	
Power Cord North America and Asia, 2.5M,5-15P plug	333A-25-15-NEMA		1	13	2	26	
Intel@Xeon@E5-2609 2.4GHz (for factory installation)	7100604		1	516	1	516	
300GB 10K RPM 2.5" SAS HDD w/ bracket	RB-SS2CF-300G10K2		1	345	1	345	
Sun Rack II 42U	SR-1242E-N		1	2,849	4	11,396	
PDU 15kVA, Single Phase, LV	SR-15K-L630-N		1	1,200	8	9,600	
Jumper Cable Kit SunRack II	SF-JUMPKIT-N		1	198	4	792	
2M LC to LC FC Optical Cable	X9732A-Z-N		1	65	1	65	
Acer V183HVAb 18" LCD	2553463		2	86	3	258	
Extreme Networks Summit X650-24t	2244434		2	18,144	1	18,144	11,316
Netgear ProSafe Plus JGS524E 24 port (+10%)	2352401		2	241	8	1,928	
C2G 25' Red Cat5e cable (+10%)	1924442		2	5	165	825	
				Sub-Total		189,616	11,316
Oracle Premier Hardware Support	Q-PREM-SPRT-SYS		1	333,706	3		1,001,118
				Totals		5,240,436	1,597,398
Total Oracle Hardware, Software and Maintenance Discount			1			(2,204,761)	
Pricing Sources:				Three-Year Cost of Ownership:		\$4,663,073	
1. Oracle						tpmC 8,552,523	
2. CDW						\$/tpmC 0.55 USD	
Audited by Francois Raab of InfoSizing, Inc.		Notes: * These components are not immediately orderable. See the FDR for more information.					
<p>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 specifications. If you find that stated prices are not available according to these terms, please inform the TPC at pricing@tpc.org. Thank you.</p>							



SPARC T5-8 Server

TPC-C 5.11.0
TPC-Pricing 1.7.0

Report Date
March 26, 2013

Numerical Quantities Summary:

MQTh, computed Maximum Qualified Throughput 8,552,523

Response Time in Seconds	90th %	Avg.	Max.
New-Order	0.41	0.234	4.111
Payment	0.40	0.228	4.233
Order-Status	0.39	0.227	4.070
Delivery (Interactive)	0.33	0.195	3.983
Delivery (Deferred)	0.02	0.014	0.972
Stock-Level	0.41	0.254	4.007
Menu	0.34	0.198	4.130

Response Time delay added for emulated components 0.1

Transaction Mix, in percent of total transactions

New-Order	44.96%
Payment	43.01%
Order-Status	4.01%
Delivery	4.01%
Stock-Level	4.01%

Keying / Think Times (in seconds)

	Min.		Avg.		Max.	
New-Order	18.001	0.001	18.002	12.021	20.074	120.918
Payment	3.001	0.001	3.002	12.021	5.078	120.785
Order-Status	2.001	0.001	2.002	10.028	4.056	100.767
Delivery	2.001	0.001	2.002	5.037	4.072	50.524
Stock-Level	2.001	0.001	2.002	5.039	4.057	50.585

Test Duration

Ramp-up Time	3,804 seconds
Measurement Interval	7,200 seconds
Number of Checkpoints	4
Checkpoint Interval	Minimum 1,722 seconds
Number of transactions (all types) completed in Measurement Interval	2,282,717,001