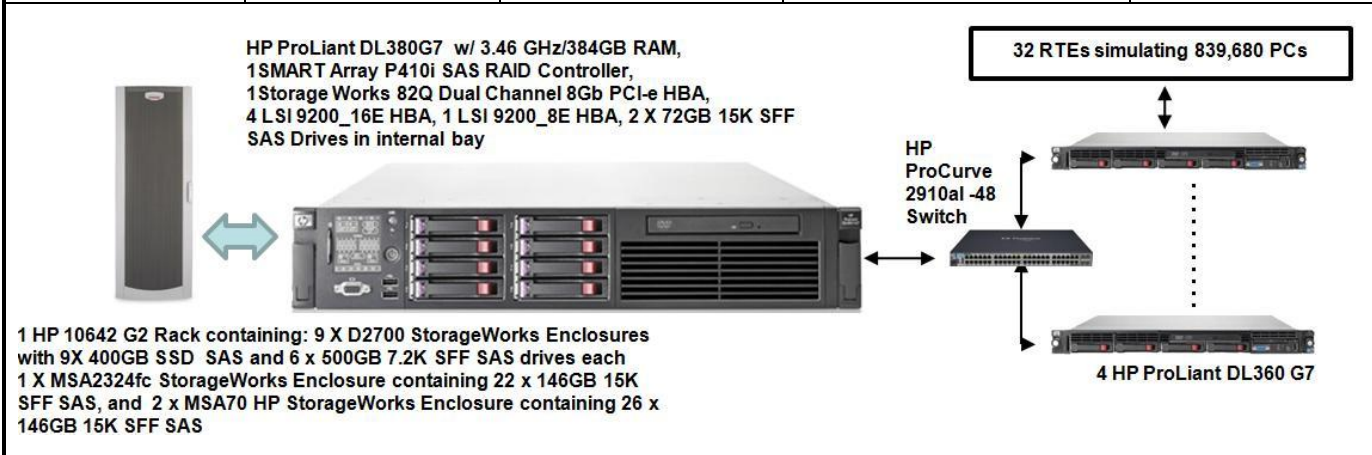


Hewlett-Packard Company	HP ProLiant DL380 G7 3.46 GHz 12 MB Cache		TPC-C Rev. 5.11 TPC-Pricing 1.6.0	
	C/S with 4 HP ProLiant DL360 G7		Report Date: May 4, 2011	

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date	TPC-Energy Metric
USD \$661,902	1,024,380 tpmC	USD \$0.65	June 20, 2011	N/R

Database Server Processors /Cores/Threads	Database Manager	Operating System	Other Software	Number of Users
2/12/24 Intel Xeon X5690 3.46 GHz 12MB cache	Microsoft SQL Server 2005 Enterprise x64 Edition SP3	Windows Server 2008 R2 Enterprise Edition	Microsoft Visual Studio 2008 Microsoft COM+	839,680



	Server		Each Client	
System Components	Quantity	Description	Quantity	Description
Processors/Cores/Threads	2	Intel Xeon X5690 3.46GHz 12MB cache - 6 cores /12 threads	2/6/12	2.93 GHz Intel Xeon X5670 w/ 12MB cache
Memory	384 GB	12 x 16GB DDR3 6 x 32GB DDR3	24GB	12 x 2048 MB
Disk Controllers	1 4 1 1	Smart P410i Controller LSI 9200_16E HBA LSI 9200_8E HBA 82Q 8Gb Dual Channel	1	Integrated Smart Array P410i Controller
Disk Drives	81 54 48 2	400 GB SSD SAS 500 GB 6G SAS 7.2K SFF 146 GB 15K SFF SAS 72 GB 15K SFF SAS	4	300GB 10K SFF SAS
Total Storage		66,552 GB		555.36 GB

Hewlett-Packard Company	HP ProLiant DL380 G7			TPC-C Rev. 5.11		
				Report Date	4-May-11	
Description	Part Number	Brand	Unit Price	Qty	Extended Price	3 yr. Maint. Price
Server Hardware						
HP DL380G7 SFF CTO Chassis	583914-B21	1	1,622	1	1,622	
HP DL380 G7 Intel Xeon X5690 (3.46GHz) Processor Kit	587498-B21	1	2,299	2	4,598	
HP 16GB 2Rx4 PC3L-10600R-9 Kit	627812-B21	1	1,349	12	16,188	
HP 32GB 4Rx4 PC3L-8500R-7 Kit	627814-B21	1	5,999	6	35,994	
HP 72GB 6G SAS 15K SFF DP ENT HDD	512545-B21	1	279	2	558	
HP StorageWorks 82Q 8Gb Dual Port PCI-e Fibre Channel Host Bus Adapter	AJ764A	1	1,999	1	1,999	
HP Compaq LE1711 17-inch LCD Monitor	EM886AA#ABA	1	159	1	159	
HP PS/2 Keyboard And Mouse Bundle	RC464AA#ABA	1	39	1	39	
HP V142 600mm Pallet 100 series Rack	358254-B21	1	789	1	789	
HP 500GB 6G SAS 7.2K SFF DP ENT HDD	507610-B21	1	349	54	18,846	
HP 500GB 6G SAS 7.2K SFF DP ENT HDD (10% Spares)	507610-B21	1	349	6	2,094	
HP 400GB SSD SAS SFF	632430-002	1*	5,999	81	485,919	
HP 146GB 6G SAS 15K SFF DP ENT HDD	512547-B21	1	369	48	17,712	
HP StorageWorks P2000 G3 MSA FC Dual Controller SFF Modular Smart Array	AP846A	1	10,350	1	10,350	
HP StorageWorks D2700 Disk Enclosure (10% Spares)	AJ941A	1	3,399	1	3,399	
HP StorageWorks MSA70 Array	418800-B21	1	3,199	2	6,398	
HP 3y 4h 24x7 D2000 Encl HW Support.MSA 60/70 Enclosures	UF303E	1	1,982	2		3,964
HP 3y 4h 24x7 D2000 Encl HW Support.D2000 Enclosures	UQ540E	1	1,980	9		17,820
HP 3y 4h 24x7 MSA 2000 G3 HWSupp.MSA 2000 G3 Array	UV394E	1	2,079	1		2,079
4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years , DL380	U4608E	1	1,309	1		1,309
LSI 9200_16e	LSI00189	4	528	4	2,112	
LSI 9200_16e (10% spares)	LSI00189	4	528	2		1,056
LSI 9200_8e	LSI00188	4	355	1	355	
LSI 9200_8e (10% spares)	LSI00188	4	355	2		710
Subtotal					609,131	26,938
Server Software						
Microsoft SQL Server 2005 Enterprise X64 Edition(per processor)	810-03134	2	23,432	2	46,864	Incl Below
Visual Studio 2008 Standard Edition	127-00166	2	275	1	275	Incl Below
Microsoft Windows Server 2008 R2 Enterprise Edition	P72-04217	2	2,280	8	18,240	Incl Below
Microsoft Problem Resolution Services		2	259	1		259
Subtotal					65,379	259
Client Hardware						
HP DL360G7 CTO Chassis	579237-B21	1	1,471	4	5,884	
HP X5670 DL360G6/G7 FIO Kit	588062-L21	1	1,999	8	15,992	
HP 460W CS HE Power Supply Kit	503296-B21	1	229	4	916	
HP NC365T 4-port Ethernet Server Adapter	593722-B21	1	439	8	3,512	
HP 2GB 2Rx8 PC3-10600R-9 Kit	500656-B21	1	110	48	5,280	
HP 300GB 6G SAS 10K SFF (2.5-inch) Dual Port Enterprise 3yr Warranty	507127-B21	1	409	16	6,544	
HP Compaq LE1711 17-inch LCD Monitor	EM886AA#ABA	1	159	4	636	
HP PS/2 Keyboard And Mouse Bundle	RC464AA#ABA	1	39	4	156	
HP CP 3Y 4H 24x7 HW Entry300 4-Hour 24 Hour x 7 Day Coverage 3 Years	U4497E	1	750	4		3,000
Subtotal					38,920	3,000
Client Software						
Windows Server 2008 R2 Enterprise Edition	P72-04217	2	2,280	8	18,240	Incl. Above
Windows Server 2008 R2 Standard Edition	P73-04980	2	711	4	2,844	Incl. Above
Subtotal					21,084	0
User Connectivity						
HP ProCurve 2910al-48G Switch	J9147A#ABA	1	4,569	1	4,569	
HP ProCurve3 Yr 4 hr/24x7 Onsite	H2893E	1	1,307	1		1,307
CAT 6 7 Foot White Patch Cable	CB242-TW	3	2	32	50	
CAT 6 7 Foot White Patch Cable (spares)	CB242-TW	3	2	4		6
Subtotal					4,619	1,313
Large Purchase and Net 30 discount (See Note 1)	16.0%	1			(\$104,024)	(\$4,717)
Total					\$635,108	\$26,794
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 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.						
Three-Year Cost of Ownership: USD					\$661,902	
tpmC Rating:					1,024,380	
\$ / tpmC: USD					\$0.65	
Pricing: 1=HP Direct 800-203-6748 2= Microsoft 3= deepsurplus.com 4= Microland Electronics						
Note 1 = Discount based on HP Direct guidance applies to all lines where pricing = 1						
Note 2 = * These components are not immediately orderable. For price verification before order date: e-mail hp.pricing.desk@hp.com						
Note 3 = The benchmark results were audited by Lorna Livingtree of Performance Metrics						

Numerical Quantities Summary

MQTH, Computed Maximum Qualified Throughput

1,024,380 tpmC

Response Times (in seconds)	Average	90%	Maximum
New-Order	0.80	2.60	85.58
Payment	0.80	2.59	85.72
Order-Status	0.79	2.58	60.63
Delivery (interactive portion)	0.22	0.48	74.18
Delivery (deferred portion)	0.05	0.08	4.94
Stock-Level	0.80	2.60	9.01
Menu	0.22	0.48	83.89

Transaction Mix, in percent of total transaction

New-Order	44.95%
Payment	43.02%
Order-Status	4.02%
Delivery	4.00%
Stock-Level	4.01%

Emulation Delay (in seconds)

	Resp.Time	Menu
New-Order	0.10	0.10
Payment	0.10	0.10
Order-Status	0.10	0.10
Delivery (interactive)	0.10	0.10
Stock-Level	0.10	0.10

Keying/Think Times (in seconds)

	Min.	Average	Max.
New-Order	18.02/0.00	18.03/12.11	18.05/120.92
Payment	3.02/0.00	3.03/12.10	3.05/120.93
Order-Status	2.02/0.00	2.03/10.06	2.05/100.83
Delivery (interactive)	2.02/0.00	2.03/5.09	2.05/50.72
Stock-Level	2.02/0.00	2.03/5.07	2.05/50.72

Test Duration

Ramp-up time	62 minutes
Measurement interval	120 minutes
Transactions (all types) completed during measurement interval	273,475,276
Ramp down time	2 minutes

Checkpointing

Number of checkpoints	11
Checkpoint interval	30 minutes