

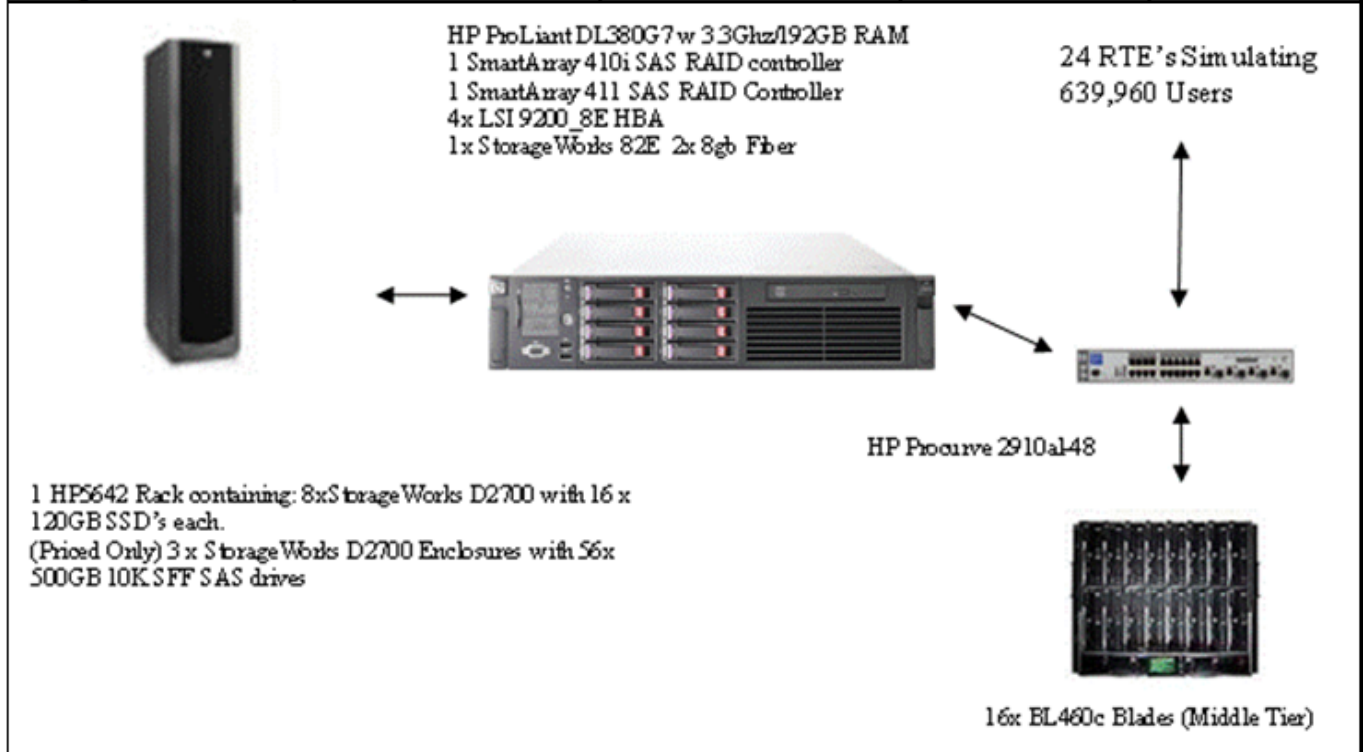


HP ProLiant DL380 G7

TPC-C Rev 5.11

Pricing Rev 1.5

Total System Cost	TPC Throughput	Price/Performance	Report Date	Availability Date
\$544,967 USD	803,068 tpmC	\$0.68 USD per tpmC	May 11, 2010	Sept 1, 2010
Procs/Cores/Threads	DataBase Manager	Operating System	Other Software	Number of Users
Srvr - 2/12/24 Intel X5680 Hex Core Processors @ 3.3 GHz Client - 16 x 2/8/8 Intel Xeon E5520 @ 2.26 GHz	Microsoft SQL Server 2005 Enterprise X64 Edition SP3	Microsoft Windows Server 2008 R2 Enterprise Edition for X64-Based Systems	Microsoft Visual C++ Microsoft COM+ Transaction Monitor	639,960



System Components	Server		Each Client	
	Qty	Type	Qty	Type
Procs/Cores/Thrds	2/12/24	3.3 GHz	2/8/8	2.26 GHz Intel Xeon E5520
Cache Memory		12 MB L3 cache		8 Mbyte L3 Cache
Memory	12	16 Gbyte	1	8196 MB
Disk Controllers	4	LSI 9200_8e SAS Controller	1	SA 410i
	1	Smart Array P410i		
	1	Smart Array P411		
	1	StorageWorks 82E 2x8gb fiber		
Disk Drives	128	HP 120GB 2.5" SSD (data)	2	146 Gbyte disk
	12	HP 500GB DP 2.5" 7.2K RPM SAS (Log)		
	56	HP 500GB DP 2.5" 7.2K RPM SAS(60Day)		
	2	HP 72GB 15K SAS drives (OS)		
Total Storage		46810.00		146 Gbyte
Terminals	1	Console Terminal	1	Console Terminal

Hewlett-Packard Company	HP ProLiant DL380G7			TPC-C Rev. 5.11			
	Description	Part Number	Price Key	Unit Price	Qty	Extended Price	3 yr. Maint
Server Hardware							
HP DL380G7 SFF CTO Chassis, HP NC382i nic, Smart Array P410i Controller	583914-B21	1	1,591	1	1,591		
Intel Xeon X5680 3.33Ghz Hex Core 12MB L3 Cache Opt	587498-L21	1	2,299	2	4,598		
HP 16GB 4Rx4 PC3-8500R-7 Kit	500666-B21	1	1,549	12	18,588		
HP 750W CS HE Power Supply Kit	512327-B21	1	299	2	598		
HP DL380G6/G7 PCI-E 1x8 2x4 Riser Kit	500579-B21	1	99	1	99		
1GB Flash Backed Write Cache for P410i internal Disk Controller	534562-B21	1	529	1	529		
HP Smart Array P411/256 Controller	462830-B21	1	499	1	499		
HP 72GB 3G SAS 15K SFF (2.5-inch) Dual Port Enterprise 3yr Warranty Hard Drive	418371-B21	1	349	2	698		
HP 3y 4h 24x7 ProLiant DL380 HW Support ,ProLiant Server DL380	U4545E	1	837	1			837
HP LE1851w 18.5-Inch wide Monitor	NK033AA#ABA	1	159	1	159		
HP PS/2 Keyboard And Mouse Bundle	RC464AA#ABA	1	39	1	39		
HP 5642 Pallet Unassembled Rack	358254-B21	1	865	1	865		
HP R1.5 kVA 1U NA UPS	AF419A	1	739	1	739		
HP StorageWorks 82E Dual Channel 8Gb PCI-e HBA	AJ763A	1	2,250	1	2,250		
2 m LC-LC Multi-Mode Fibre Channel Cable	221692-B21	1	75	2	150		
HP 500GB 6G SAS 7.2K SFF (2.5-inch) Dual Port Midline Hard Dr (Log)	507610-B21	1	419	12	5,028		
HP StorageWorks 2324fc G2 Dual Controller Modular Smart Array (SFF)	AJ797A	1	8,900	1	8,900		
HP 3y 4h 24x7 MSA2000 Array HWSupp ,MSA2000 Dual Controller	UJ675E	1	1,513	1			1,513
HP 120GB 3G SATA 2.5in MDL SSD (Data)	572073-B21	1	2,799	128	358,272		
HP StorageWorks D2700 Disk Enclosure	AJ941A	1*	3,399	11	37,389		
HP 3y SupportPlus24 D2000 Enclosures, 4h 24x7 onsite response	UQ105E	1	2,147	11			23,617
HP 500GB 6G SAS 7.2K SFF (2.5-inch) Dual Port Midline Hard Dr (Backup/60Day Space)	507610-B21	1	419	56	23,464		
LSI 9200_8e SAS HBA	LSI00188	4	328	4	1,312		
LSI 9200_8e SAS HBA (10% Spares)	LSI00188	4	328	2			656
					Subtotal	465,767	26,623
Server Software							
Microsoft SQL Server 2005 Enterprise X64 Edition	810-03134	2	23,432	2	46,864		Incl Below
Visual Studio 2008 Standard Edition	127-00116	2	275	1	275		Incl Below
Microsoft Windows Server 2008 R2 Enterprise Edition	P72-04217	2	2,280	1	2,280		Incl Below
Microsoft Problem Resolution Services		2	259	1			259
					Subtotal	49,419	259
Client Hardware							
HP BLc7000 Blade Enclosure 3 Inch LCD display	507019-B21	1	4,837	1	4,837		
Single Phase Power option for Blade Enclosure	413379-B21	1	175	1	175		
HP BLc 6x Active Cool 200 FIO Fan Option	517520-B21	1	894	1	894		
HP 2400W High Efficiency Power Supply	499243-B21	1	349	6	2,094		
HP BLc 1Gb Enet Pass Thru Mod Opt Kit	406740-B21	1	999	2	1,998		
HP ProLiant BL460C G6 E5520 2.26Ghz Quad Core Blade Server	507782-B21	1	2,489	16	39,824		
HP E5520 BL460c G6 FIO Kit	507799-B21	1	599	16	9,584		
HP 4GB 2Rx4 PC3-10600R-9 Memory Kit	500658-B21	1	230	32	7,360		
HP 146GB 15k 2.5 dual Port HP SAS Drive	418367-B21	1	269	32	8,608		
HP LE1851w 18.5-Inch wide Monitor	NK033AA#ABA	1	159	1	159		
HP PS/2 Keyboard And Mouse Bundle	RC464AA#ABA	1	39	1	39		
HP 1year 4h 24x7 B Series Blades HW Support 16 Blades	UB329E	1	612	3			1,836
					Subtotal	75,572	1,836
Client Software							
Windows Server 2008 Standard Edition (X64)	P73-04165	2	711	16	11,376		Incl. Above
					Subtotal	11,376	0
User Connectivity							
HP ProCurve Switch 2910al-48	J9147A	1	4,569	1	4,569		
3-year, 4-hour onsite, 24x7 Stack48 support	U2893E	1	1,307	1			1,307
CAT 6 7 Foot Gray Patch Cable	CB242-7GY	3	2	18	28		
CAT 6 7 Foot Gray Patch Cable (Spares)	CB242-7GY	3	2	2			3
					Subtotal	4,597	1,310
Large Purchase and Net 30 discount (See Note 1)	16.0%	1				(\$87,135)	(\$4,658)
					Total	\$519,596	\$25,371
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	\$544,967
						tpmC Rating:	803,068
						\$/tpmC: USD	\$0.68
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 * SSD drive support in this enclosure will be available Sept 1 2010 see appendix F							
Note 2 = The benchmark results were audited by Lorna Livingtree of Performance Metrics							

Numerical Quantities Summary for HP ProLiant DL380 G7

MQTH, Computed Maximum Qualified Throughput

803,068 tpmC

Response Times (in seconds)

	90th %-ile	Maximum	Average
New-Order	0.56s	15.69s	0.30s
Payment	0.50s	14.82s	0.25s
Order-Status	0.56s	12.64s	0.30s
Delivery (interactive portion)	0.24s	14.17s	0.14s
Delivery (deferred portion)	0.33s	5.24s	0.18s
Stock-Level	1.59s	10.42s	1.08s
Menu	0.24s	16.64s	0.14s

Response time delay added for emulated components 0.1 seconds

Transaction Mix, in percent of total transactions

New-Order	44.95%
Payment	43.01%
Delivery	4.01%
Stock-Level	4.01%
Order-Status	4.01%

Keying/Think Times

	Keying Time			Think Time		
	Min	Avg	Max	Min	Avg	Max
New-Order	18.00s	18.02s	18.03s	0.00s	12.06s	120.52s
Payment	3.00s	3.02s	3.03s	0.00s	12.06s	120.52s
Order-Status	2.00s	2.02s	2.03s	0.00s	10.06s	100.52s
Delivery (interactive)	2.00s	2.02s	2.03s	0.00s	5.07s	50.52s
Stock-Level	2.00s	2.02s	2.03s	0.00s	5.06s	50.52s

Test Duration

Ramp up time	121 minutes
Measurement interval	120 minutes
Transactions during measurement interval	214375459
Ramp down time	5 minutes

Checkpointing

Number of checkpoints in measurement interval	4
Checkpoint Interval	29.17 minutes