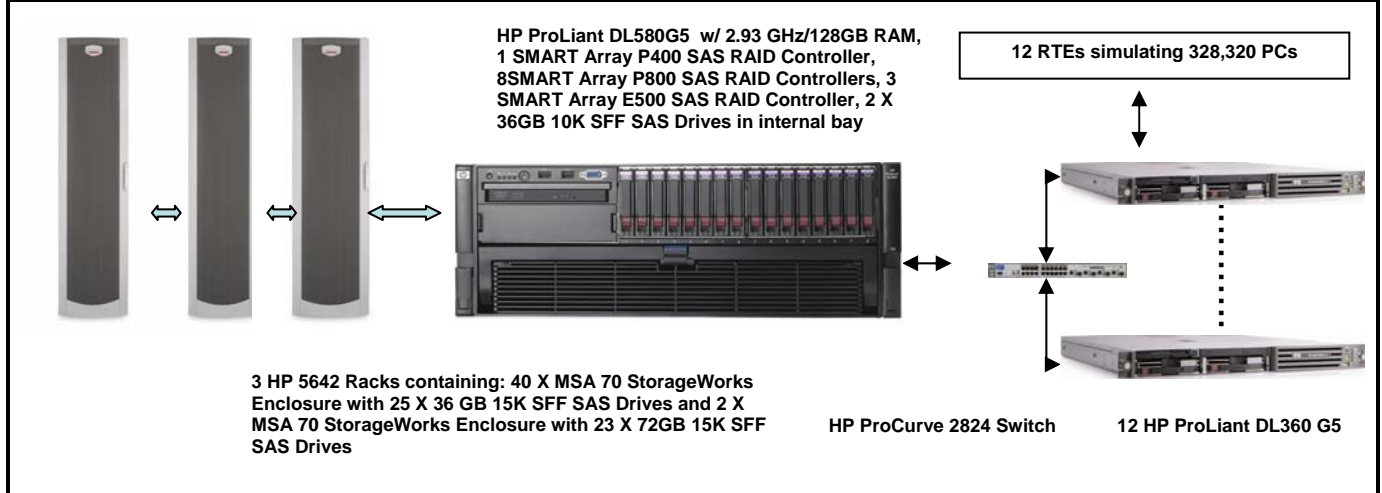


Hewlett-Packard Company	HP ProLiant DL580 G5 2.93GHz 2x4MB L2	TPC-C Rev. 5.9
	C/S with 12 HP ProLiant DL360 G5	Report Date: Sept 5, 2007

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
USD \$694,335	407,079	USD \$1.71	Sept 5, 2007

Database Server Processors /Cores/Threads	Database Manager	Operating System	Other Software	Number of Users
4/16/16 Intel Xeon 2.93GHz 2x4MB L2 cache QC	Microsoft SQL Server 2005 Enterprise x64 Edition SP2	Windows Server 2003 Enterprise x64 Edition R2	Microsoft Visual C++ Microsoft COM+	328,320



	Server		Each Client	
System Components	Quantity	Description	Quantity	Description
Processors/Cores/Threads	4/16/16	Intel Xeon QC 2.93GHz 2x4MB L2 cache	1/2/2	2.0 GHz Intel Xeon w/ 4MB L2 cache
Memory	128GB	(32x 4GB) GB FBD	1GB	1024 MB
Disk Controllers	1 8 3	Smart P400 Controller Smart P800 Controller Smart E500 Controller	1	Integrated Smart Array 200i Controller
Disk Drives	46 1000 2	72GB 15K SFF SAS 36 GB 15K SFF SAS 36 GB 10K SFF SAS	2	36 GB 10K SFF SAS
Total Storage		36,977.20 GB		36 GB

Hewlett-Packard Company	HP ProLiant DL580G5			TPC-C Rev. 5.9		
				Report Date	5-Sep-07	
Description	Part Number	Brand	Unit Price	Qty	Extended Price	3 yr. Maint. Price
Server Hardware						
DL580G5 E7350 2.93 130W 4P 8G (dual port nic, P400 controller)	451993-001	1	20,939	1	20,939	
DL580G5 Memory Board	452179-B21	1	299	1	299	
HP DL580G5 PCI-E IO Option Kit	452181-B21	1	199	1	199	
HP 8GB FBD PC2-5300 2x4GB Kit	397415-B21	1	2,399	16	38,384	
HP Smart Array P800/512MB SAS Controller	381513-B21	1	1,099	8	8,792	
HP Smart Array E500/256 SAS Controller	435129-B21	1	649	3	1,947	
HP s7540 17in. CRT Monitor	PF997AA#ABA	1	139	1	139	
HP PS/2 Keyboard And Mouse Bundle	RC464AA#ABA	1	39	1	39	
HP 5642 Pallet Unassembled Rack	358254-B21	1	865	3	2,595	
HP R1.5 kVA 1U NA UPS	AF419A	1	738	1	738	
HP 36GB 15k 2.5 Single Port HP SAS Drive	431933-B21	1	369	1000	369,000	
HP 36GB 15k 2.5 Single Port HP SAS Drive (10% Spares)	431933-B21	1	369	100		36,900
HP 72GB 15k 2.5 Single Port HP SAS Drive	431935-B21	1	499	46	22,954	
HP 72GB 15k 2.5 Single Port HP SAS Drive (10% Spares)	431935-B21	1	499	5		2,495
HP 36GB 10K SAS 2.5 Hot Plug Hard Drive	375859-B21	1	269	2	538	
HP StorageWorks MSA-70 Storage	418800-B21	1	3,199	42	134,358	
HP StorageWorks MSA-70 Storage (10% Spares)	418408-B21	1	3,199	5		15,995
HP 3y 4h 24x7 ProLiant D58x HW Support ,ProLiant Server DL58x	U4608E	1	1,575	1		1,575
Subtotal					600,921	56,965
Server Software						
Microsoft SQL Server 2005 Enterprise X64 Edition(per processor)	810-03134	2	23,432	4	93,728	Incl Below
Microsoft Visual Studio Standard 2005	127-00012	2	250	1	250	Incl Below
Microsoft Windows 2003 Server, Enterprise Edition X64 R2	P73-02509	2	2,334	1	2,334	Incl Below
Microsoft Problem Resolution Services		2	245	1		245
Subtotal					96,312	245
Client Hardware						
HP DL360G5 5130 1G Entry US Svr	416561-001	1	2,239	12	26,868	
Dual Integrated Gigabit NIC, HP Smart Array E200i/64MB Controller						
HP 36GB 10K SAS 2.5 Hot Plug Hard Drive	375859-B21	1	269	24	6,456	
HP CP 3Y 4H 24x7 HW Entry300 4-Hour 24 Hour x 7 Day Coverage 3 Years	U4497E	1	550	12		6,600
Subtotal					33,324	6,600
Client Software						
Windows Server 2003, Standard Edition R2	P73-01664	2	719	12	8,628	Incl. Above
Subtotal					8,628	0
User Connectivity						
HP ProCurve Switch 2824	J4903A#ABA	1	2,499	1	2,499	
HP CP for HP ProCurve Networking products 3 Yr 4 hr/24x7	U2856E	1	1,000	1		1,000
7 foot Cat5E molded Patch Cables	415-5007	3	2	26	46	
7 foot Cat5E molded Patch Cables	415-5007	3	2	3		5
Subtotal					2,545	1,005
Large Purchase and Net 30 discount (See Note 1)	16.0%	1			(\$101,879)	(\$10,330)
Total					\$639,850	\$54,485
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	\$694,335
					tpmC Rating:	407,079
					\$/tpmC: USD	\$1.71
Pricing: 1=HP Direct 800-203-6748 2= Microsoft 3= graycables.com						
Note 1 = Discount based on HP Direct guidance applies to all lines where pricing = 1						
* = These components are not immediately orderable. See the FDR for more information.						
Note 2 = The benchmark results were audited by Lorna Livingtree of Performance Metrics						

Numerical Quantities Summary

MQTH, Computed Maximum Qualified Throughput

407,079 tpmC

Response Times (in seconds)	Average	90%	Maximum
New-Order	0.57	1.30	10.00
Payment	0.54	1.27	9.95
Order-Status	0.55	1.29	9.95
Delivery (interactive portion)	0.13	0.13	8.61
Delivery (deferred portion)	0.11	0.14	4.97
Stock-Level	0.59	1.34	10.02
Menu	0.13	0.14	8.74

Transaction Mix, in percent of total transaction

New-Order	44.93%
Payment	43.03%
Order-Status	4.01%
Delivery	4.01%
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	18.01/0.00	18.03/12.06	19.15/120.53
Payment	3.02/0.00	3.03/12.06	4.16/120.53
Order-Status	2.02/0.00	2.03/10.07	2.83/100.53
Delivery (interactive)	2.02/0.00	2.03/5.07	2.85/50.53
Stock-Level	2.02/0.00	2.03/5.06	2.82/50.53

Test Duration

Ramp-up time	35 minutes
Measurement interval	120 minutes
Transactions (all types) completed during measurement interval	113,076,590
Ramp down time	10 minutes

Checkpointing

Number of checkpoints	4
Checkpoint interval	30 minutes