

Hewlett-Packard Company	ProLiant DL380-G3-1P	TPC-C Rev. 5.0
	C/S with 1 ProLiant DL360R	Report Date: Nov 19, 2002

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
\$60,965	18051.65	\$3.38	Feb 1, 2003 *

Processors	Database Manager	Operating System	Other Software	Number of Users
1 Intel Xeon processor 2.4 GHz – Server 2 Pentium III 1.4 GHz – Clients	Microsoft SQL Server 2000 SP3	Windows .NET Server	Microsoft Visual C++ Microsoft COM+	14700

1 Intel Xeon 2.4 GHz Processor
2 GB Memory
SMART 5i Integrated Controller
2 SMART 5302 Controllers
1 SMART Array 642 Controller
1x 18.2 GB 10k rpm drive
4x 36.4 GB 10k rpm drives

DL360 with 2x 1.4GHz

ProLiant DL380-G3

4X 4314T Drive Enclosures with 56 18.2 GB 15k rpm drives

Note* All hardware except the SMART 642 controller is now available

	Server		Each Client	
System Components	Quantity	Description	Quantity	Description
Processor	1	2.4 GHz Intel Xeon w/ 512MB Cache	2	1.4GHz Pentium III w/ 512K cache
Memory	2	1 GB DDR	2	512MB
Disk Controllers	2	HP SMART 5302 Array Controller	1	Integrated SMART 5i Array Controller
	1	Integrated SMART 5i Array Controller		
	1	HP SMART 642 Array Controller		
Disk Drives	56	18.2 GB SCSI Drive 15k	1	18.2 GB SCSI Drive
	4	36.4 GB SCSI Drive 10k		
	1	18.2 GB SCSI Drive 10k		
Total Storage		1183 GB		18.2 GB
Tape Drives	1	12/24 GB DAT		

Hewlett-Packard		ProLiant DL380R03 1P		TPC-C Rev. 5.0		
Company		Client/Server		Report Date:		19-Nov-02
Description	Part Number	Third Party	Unit Price	Qty	Extended Price	3 yr. Maint. Price
Server Hardware						
Brand Pricing						
ProLiant DL380R03 P2.40GHz-512KB	257917-001	1	3,399	1	3,399	
2GB PC2100 DDR (2x1GB)	300680-B21	1	1,430	1	1,430	
StorageWorks Enclosure Model 4314T- Tower	190210-001	1	3,182	4	12,728	
Smart Array 5302 Controller	124992-B21	1	1,399	2	2,798	
Smart Array 642 Controller	291967-B21	1	799	1	799	
S5500 15 carbon / silver monitor	261602-001	1	139	1	139	
3-Button Mouse-Carbon	231946-B21	1	5	1	5	
PS/2 Easy Access Internet Keyboard	265977-001	1	12	1	12	
12/24-Gigabyte DAT Drive (Internal)	295513-B22	1	682	1	682	
UPS T700	204015-001	1	333	1	333	
18.2-GB Pluggable 1" Universal WideUltra3 15K HDD	188122-B22	1	399	56	22,344	
18.2GB Pluggable Ultra3 SCSI 15K 1" Universal HDD (10% spares)	188122-B22	1	399	6		2,394
18.2GB Pluggable Ultra3 SCSI 10K 1" Universal HDD	142673-B22	1	319	1	319	
36.4-GB Pluggable 1" Universal WideUltra3 10K HDD	176496-B22	1	379	4	1,516	
CarePaq Service - 300 Series Servers 3Yr,7x24,4hr	162657-002	1	1,450	1		1,450
FM-4E724-36 3YR 24X7/4HR EMPTY DISK ENCL	171242-002	1	157	4		628
Subtotal					46,504	4,472
Server Software						
Database Server Support Package	PRO-PRORS-16U-01	Microsoft	2	1,950	3	5,850
SQL Server 2000 Standard Edition 32-bit	228-01079	Microsoft	2	4,999	1	4,999 Incl Above
Microsoft Visual C++ 6.0	048-00317	Microsoft	2	549	1	549 Incl Above
.Net Standard Server 2003 32-bit		Microsoft	2	815	1	815 Incl Above
Subtotal					6,363	5,850
Client Hardware						
ProLiant DL360R02 P1.4/133-512K 256MB	233271-001	1	2,229	1	2,229	
Two integrated Gigabit NIC, Integrated Smart Array Controller						
1.40GHz PIII Processor Option Kit (DL360 G2)	233273-B21	1	734	1	734	
1GB 133MHz SDRAM DIMM Memory (2x512MB)	201694-B21	1	659	1	659	
S5500 15 carbon / silver monitor	261602-001	1	139	1	139	
3-Button Mouse-Carbon	231946-B21	1	5	1	5	
PS/2 Easy Access Internet Keyboard	265977-001	1	12	1	12	
18.2GB Pluggable Ultra3 SCSI 10K 1" Universal HDD	142673-B22	1	319	1	319	
FM-EL724-36 3YR 24X7 4HR ENTRY 300 SVR	162675-002	1	750	1		750
Subtotal					4,097	750
Client Software						
Windows 2000 Server 32-bit	C11-00821	Microsoft	2	738	1	738 Incl. Above
Subtotal					738	0
User Connectivity						
15 ft. CAT5e Patch cable	CBLC515	LanAdapters	3	2	3	6
Subtotal					6	0
Large Purchase and Net 30 discount (See Note 1)	14.0%		1			
Total					\$50,624	\$10,341
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: \$60,965	
					tpmC Rating: 18051.65	
					\$ / tpmC: \$3.38	
Pricing: 1=HP 2=Microsoft 3=LanAdapters.com						
Note 1 = Discount based on HP Direct guidance with large purchase and Net 30 discount.						
Note: The benchmark results and test methodology were audited by Lorna Livingtree of Performance Metrics, Inc.						

Numerical Quantities Summary

MQTH, Computed Maximum Qualified Throughput

18,051.65 tpmC

Response Times (in seconds)	Average	90%	Maximum
New-Order	0.56	0.90	9.73
Payment	0.34	0.61	12.48
Order-Status	0.41	0.69	9.29
Delivery (interactive portion)	0.11	0.11	5.19
Delivery (deferred portion)	0.69	1.00	5.45
Stock-Level	3.77	4.93	12.50
Menu	0.11	0.11	6.39

Transaction Mix, in percent of total transaction

New-Order	44.88%
Payment	43.01%
Order-Status	4.03%
Delivery	4.04%
Stock-Level	4.03%

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	18.00/0.00	18.02/12.29	18.03/122.91
Payment	3.00/0.00	3.02/12.28	3.03/122.91
Order-Status	2.00/0.00	2.02/10.24	2.02/102.50
Delivery (interactive)	2.00/0.00	2.02/5.17	2.03/51.50
Stock-Level	2.00/0.00	2.02/5.13	2.02/51.50

Test Duration

Ramp-up time	17 minutes
Measurement interval	120 minutes
Transactions (all types) completed during measurement interval	4,826,626
Ramp down time	10 minutes

Checkpointing

Number of checkpoints	4
Checkpoint interval	30 minutes