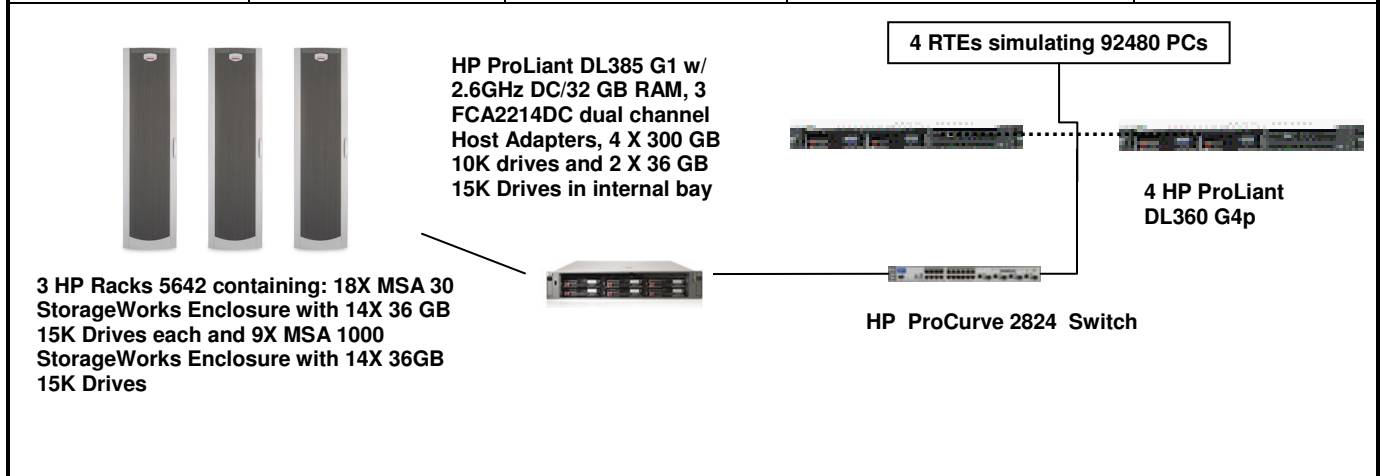


Hewlett-Packard Company	HP ProLiant DL385-G1 2.6GHz Dual Core	TPC-C Rev. 5.6
	C/S with 4 HP ProLiant DL360G4p	Report Date: March 7, 2006

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
USD \$338,730	113,628	USD \$2.99	May 5, 2006

Database Server Processors /Cores/Threads	Database Manager	Operating System	Other Software	Number of Users
2/4/4 AMD Opteron 2.6 GHz DC	Microsoft SQL Server 2005 Enterprise (x86) Edition SP1	Windows Server 2003, Enterprise x86 Edition SP1	Microsoft Visual C++ Microsoft COM+	92480



	Server		Each Client	
System Components	Quantity	Description	Quantity	Description
Processors/Cores/Threads	2/4/4	2.6 GHz DC AMD Opteron w/ 1M Cache	2/2/4	3.6 GHz Intel Xeon w/ 1MB cache
Memory	4	8 GB DDR (2 X 4 GB)	2	512MB
Disk Controllers	1	Integrated Smart 6i Controller	1	Integrated SMART 6i Controller
	3	FCA2214DC dual channel Host Adapter		
Disk Drives	4	300GB SCSI Drive	2	36 GB SCSI Drive
	380	36 GB SCSI Drive		
Total Storage		14,880 GB		72 GB

Hewlett-Packard	HP ProLiant DL385/G1/32GB/2.6GHz		TPC-C Rev. 5.6			
Company	Client/Server		Report Date:	20-Mar-06		
Description	Part Number	Third Party	Unit Price	Qty	Extended Price	3 yr. Maint. Price
Server Hardware						
		Brand	Pricing			
HP DL385G1 2600 DC US Svr/integrated 6i controller/2 gigabit NICs	407613-001	1	3,649	1	3,649	
HP O280 2.6/1000-1M DC DL385G1 Kit	407624-B21	1	1,449	1	1,449	
HP 8GB Reg PC2700 2x4GB Memory	395409-B21	1	7,299	4	29,196	
HP Storageworks MSA 30 SB Storage	302969-B21	1	2,829	18	50,922	
MSA SAN Switch 2/8 (incl. 2x 2 Gb SFP SW Transceiver Kit)	288247-B21	1	4,149	3	12,447	
Modular SAN Array 1000 (incl. 2 Gb SFP SW Transceiver Kit)	201723-B22	1	6,995	9	62,955	
FCA2214DC dual channel Host Adapter	321835-B21	1	2,250	3	6,750	
HP 5642 Unassembled Rack	358254-B21	1	689	3	2,067	
UPS R1500 XR Low Voltage US	204404-001	1	866	1	866	
36GB 15Krpm U320 UNI HDD	286776-B22	1	269	378	101,682	
36GB 15Krpm U320 UNI HDD (10% spares)	286776-B22	1	269	38		10,222
36GB 15Krpm U320 UNI HDD (OS)	286776-B22	1	269	2	538	
HP 300GB 10K U320 Pluggable Hard Drive	350964-B22	1	779	4	3,116	
HP 3y 4h 24x7 ProLiant DL38x HW Support	U4545E	1	949	1		949
MSA SAN Switch 2/8 (2x 2 Gb SFP SW Transceiver Kit) (10% spares)	288247-B21	1	4,149	2		8,298
Modular SAN Array 1000 (2 Gb SFP SW Transceiver Kit) (10% spares)	201723-B22	1	6,995	2		13,990
HP Storageworks MSA 30 SB Storage (10% spares)	302969-B21	1	2,829	2		5,658
Storage Works LC/LC 15m Fibre Cable	221692-B23	1	103	9	927	
Storage Works LC/LC 15m Fibre Cable (10% spares)	221692-B23	1	103	2		206
HP s7540 17in. CRT Monitor	PF997AA#ABA	1	139	1	139	
HP PS/2 Scroll Mouse carbonite	DG169AV	1	5	1	5	
HP Enhanced Keyboard	DG170AV#ABA	1	10	1	10	
				Subtotal	276,718	39,323
Server Software						
SQL Server 2005 Enterprise (x86) Edition	810-03150	Microsoft	23,911	2	47,822	
Visual C++ .Net Standard	254-00170	Microsoft	109	1	109	Incl below
Microsoft Windows Server 2003, Enterprise x86 Edition	P72-00264	Microsoft	2,334	1	2,334	Incl below
Microsoft Problem Resolution Services (1 incident)		Microsoft	245	1		245
				Subtotal	50,265	245
Client Hardware						
HP DL360G4p X3.6GHz/2MB/1GB SCSI US Svr	376236-001	1	2,799	4	11,196	
- Dual Integrated Gigabit NIC, Integrated Smart Array Controller 6i						
HP X3.6/800-2MB DL360 G4p Kit	376242-B21	1	999	4	3,996	
HP s7540 17in. CRT Monitor	PF997AA#ABA	1	139	4	556	
HP PS/2 Scroll Mouse carbonite	DG169AV	1	5	4	20	
HP Enhanced Keyboard	DG170AV#ABA	1	10	4	40	
36GB 15K U320 Pluggable Hard Drive	286776-B22	1	269	8	2,152	
FM-EL724-36 3YR 24X7 4HR ENTRY 300 SVR	162675-002	1	599	4		2,396
				Subtotal	17,960	2,396
Client Software						
Microsoft Windows 2000 Server	C11-00821	Microsoft	738	4	2,952	Incl. Above
				Subtotal	2,952	0
User Connectivity						
HP ProCurve Switch 2824	J4903A#ABA	1	2499	1	2,499	
HP CP for HP ProCurve Networking products 3 Yr 4 hr/24x7	U2856E	1	1000	1		1,000
				Subtotal	2,499	1,000
Large Purchase and Net 30 discount (See Note 1)	16.0%	1			(\$47,548)	(\$6,835)
				Total	\$302,846	\$35,884
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: \$338,730 USD		
				tpmC Rating: 113,628		
				\$ / tpmC: \$2.99 USD		
Pricing: 1=HP Direct: 800-203-6748 2= Microsoft						
Note 1 = Discount based on HP Direct guidance with large purchase and Net 30 discount. Applies to all lines with 1 in pricing column.						
Note: The benchmark results and test methodology were audited by Lorna Livingtree of Performance Metrics, Inc.						

Numerical Quantities Summary

MQTH, Computed Maximum Qualified Throughput

113,628 tpmC

Response Times (in seconds)	Average	90 %	Maximum
New-Order	0.65	0.98	10.79
Payment	0.63	0.96	12.23
Order-Status	0.64	0.96	9.39
Delivery (interactive portion)	0.10	0.11	0.40
Delivery (deferred portion)	0.14	0.18	4.75
Stock-Level	0.64	0.97	9.40
Menu	0.10	0.11	0.46

Transaction Mix, in percent of total transaction

New-Order	44.82%
Payment	43.06%
Order-Status	4.03%
Delivery	4.04%
Stock-Level	4.04%

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	18.03/12.18	18.38/121.73
Payment	3.02/0.00	3.03/12.19	3.38/121.73
Order-Status	2.02/0.00	2.03/10.16	2.38/101.53
Delivery (interactive)	2.02/0.00	2.03/5.12	2.36/51.03
Stock-Level	2.02/0.00	2.03/5.11	2.38/51.03

Test Duration

Ramp-up time	46 minutes
Measurement interval	120 minutes
Transactions (all types) completed during measurement interval	31,516,680
Ramp down time	15 minutes

Checkpointing

Number of checkpoints	4
Checkpoint interval	30 minutes