



# hp server rx2600 Client/Server

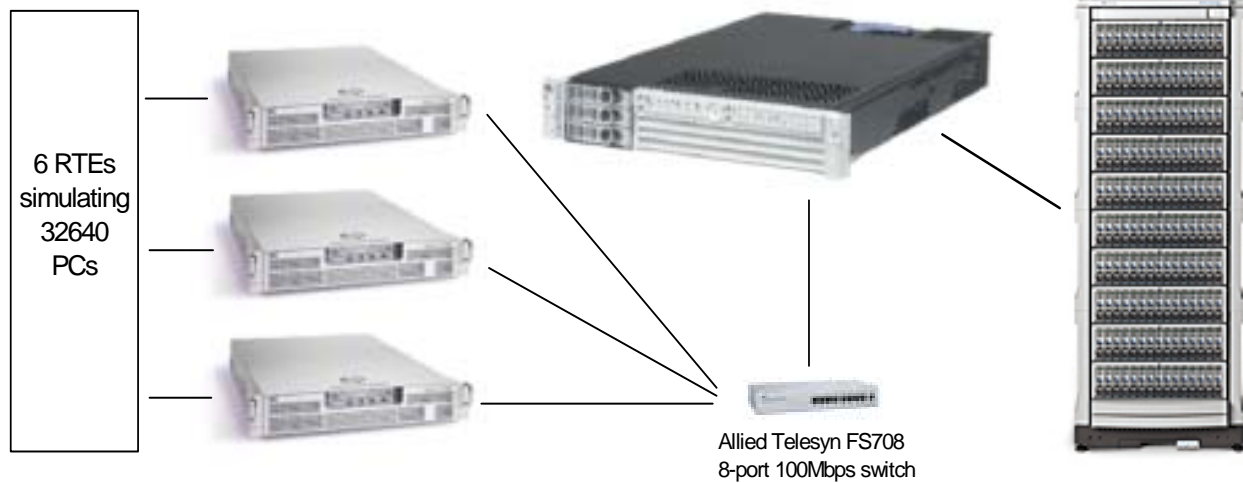
TPC-C Revision 5.0

<b>Total System Cost</b>	<b>TPC Throughput</b>	<b>Price/Performance</b>	<b>Report Date</b>	<b>Availability Date</b>
\$236,336	40621.26 tpmC	\$5.82 per tpmC	August 1, 2002	December 31, 2002
<b>Processors</b>	<b>Database Manager</b>	<b>Operating System</b>	<b>Other Software</b>	<b>Number of Users</b>
2 Intel Itanium 2 CPUs @ 1 GHz 3 MB iL3 Cache	Microsoft SQL Server 2000 Enterprise Edition 64-bit	Microsoft Windows Advanced Server LE 1.2	Microsoft Visual C++ Microsoft COM+ Transaction Monitor	32,640


**3 X hp netserver LP2000r**  
2 x Intel Pentium III at 1.26GHz  
512 MB RAM

**hp server rx2600**  
2 x Itanium 2 CPUs @ 1GHz/3MB  
12 GB RAM  
4 x Mylex externeRAID2000

**13 X hp disk system 2300**



System Components	Server		Each Client	
	Qty	Type	Qty	Type
<b>Processors</b>	2	Intel Itanium 2 CPUs @ 1GHz	2	1.26GHz Intel Pentium III
<b>Cache Memory</b>	each	3 MB iL3 Cache		512kbyte L2 Cache
<b>Memory</b>	12	1 Gbyte	1	512 Mbyte
<b>Disk Controllers</b>	4	Mylex eXtremeRAID 2000	1	HP SCSI-2 Controller
<b>Disk Drives</b>	168	HP Hot-swap 18GB 15KRPM SCSI	1	18 Gbyte disk
	6	HP Hot-swap 36GB 10KRPM SCSI		
	1	HP 36GB 15krpm Ultra320 Wide		
<b>Total Storage</b>		3058.9 Gbyte		16.8 Gbyte
<b>Tape Drives</b>	1	HP Surestore DAT40x6		
<b>Terminals</b>	1	Console Terminal	1	Console Terminal

 Hewlett Packard Company		<b>hp server rx2600</b> client/server			TPC-C Rev. 5.0 Report Date: 1 August 2002		
Description	Price Key	Part Number	Unit Price	Qty	Extended Price	3 Yr Maint Price	
hp server rx2600 Windows Bundle with:							
1 Itanium 2 processor 1GHz w/3MB iL3 cache	1	A7054A	\$23,456	1	\$23,456		
CPU upgrade Itanium 2 1GHz w/3MB iL3 cache	1	A6958A	\$8,250	1	\$8,250		
4GB PC2100 DDR-SDRAM (4x1GB DIMMs)	1	A6834A	\$8,000	3	\$24,000		
HP 36GB, 15krpm Ultra320 Wide Hot swap	1	A6981A	\$996	1	\$996		
HP Field Rackmount Kit	1	A6939A	\$75	1	\$75		
HP USB keyboard and mouse	1	A7861A	\$32	1	\$32		
Mylex eXtreme 2000 RAID controller (Mylex *)	3	e2000-4-32bd	\$1,280	4	\$5,120		
15" color monitor Proview PS-508M	2	311706	\$107	1	\$107		
HP Rack System/E33	3	J1501B	\$1,690	2	\$3,380		
HP Power Distribution Unit 120-240V	2	E7671A	\$146	3	\$438		
APC Smart-UPS 700 XL (APC *)	2	SU700XLNET	\$497	1	\$497		
HP Hardware Support Pack 3 yr 24x7 4 hr	1	U3405E	\$2,865	1		\$2,865	
<b>Subtotal Server Hardware:</b>					<b>\$66,351</b>	<b>\$2,865</b>	
MS SQL Server 2000 Enterprise Edition 64-bit per processor license							
	4		\$16,541	2	\$33,082		
HP Support for Windows Limited Edition (1 yr)	1	H1942E	\$2,100	3		\$6,300	
MS Software Support (3 yr) (incl client OS)	4		\$5,850	1		\$5,850	
<b>Subtotal Server Software:</b>					<b>\$33,082</b>	<b>\$12,150</b>	
HP disk system 2300							
HP 36.4GB, 15krpm Ultra3 disk	1	A6490AE	\$3,940	13	\$51,220		
HP 18.2GB, 15krpm Ultra3 disk	1	A6541A	\$1,525	6	\$9,150		
HP Support 3 yr, 24x7, 4h DS2300	1	A6540A	\$800	168	\$134,400		
HP scsi cable, vhdts68, m/m 2m	1	H4405Y#8AY	\$1,578	13		\$20,514	
	1	C2373A	\$175	14	\$2,450		
<b>Subtotal Storage:</b>					<b>\$197,220</b>	<b>\$20,514</b>	
HP NetServer Ip2000r Intel Pentium III 1.26Gz, w/18GB disk							
	1	P4638A	\$3,711	3	\$11,133		
Intel Pentium III 1.26GHz 512KB L2	1	P4643A	\$1,248	3	\$3,744		
512MB ECC SDRAM for Ip2000r	1	D8267A	\$724	3	\$2,172		
HP 18.2GB 10K Ultra3 Wide SCSI-3 HS HD	1	P2473A	\$517	3	\$1,551		
15" monitor Proview PS-508M	2	311706	\$107	3	\$321		
Spacesaver 104 key keyboard	2	KFK-EA4XT	\$15	3	\$45		
3 button PS/2 mouse PC concepts	2	98209	\$7	3	\$21		
HP Ip2000r Support 3 yr, 24x7, 4 hr	1	H5514E	\$1,450	3		\$4,350	
<b>Subtotal Client Hardware:</b>					<b>\$18,987</b>	<b>\$4,350</b>	
Microsoft Windows .NET Server							
	4		\$899	3	\$2,697		
Microsoft Visual C++ Professional 6.0	4	716856	\$549	1	\$549		
<b>Subtotal Client Software:</b>					<b>\$3,246</b>		
Allied AT-FS708LE 8 port 10/100 Switch							
	2	AT-FS708LE-10	\$78	3	\$234		
<b>Subtotal Connectivity:</b>					<b>\$234.00</b>		
<b>* Discounts:</b>					<b>-\$109,051.60</b>	<b>-\$13,612</b>	
<b>Total:</b>					<b>\$210,068.40</b>	<b>\$26,267</b>	
Price Keys: 1-HP, 2-CDW, 3-Software House International, 4-Microsoft		<b>3 year cost of ownership:</b>				<b>\$236,336</b>	
* All discounts are based on US list prices and for similar quantities and configurations		<b>tpmC Rating:</b>				<b>40621.26</b>	
		<b>\$/tpmC:</b>				<b>\$5.82</b>	
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 specifications. If you find that the stated prices are not available according to these terms, please inform the TPC at <a href="mailto:pricing@tpc.org">pricing@tpc.org</a> . Thank you.							

## Numerical Quantities Summary for hp server rx2600

**MQTH, Computed Maximum Qualified Throughput**

**40621.26 tpmC**

### Response Times (in seconds)

	90th %-ile	Maximum	Average
New-Order	0.84s	8.30s	0.52s
Payment	0.77s	3.99s	0.46s
Order-Status	0.79s	8.72s	0.48s
Delivery (interactive portion)	0.14s	1.19s	0.12s
Delivery (deferred portion)	0.32s	1.39s	0.20s
Stock-Level	1.57s	3.23s	1.12s
Menu	0.15s	3.16s	0.12s

Response time delay added for emulated components 0.1 seconds

### Transaction Mix, in percent of total transactions

New-Order	44.95%
Payment	43.02%
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	18s	18.02s	18.02s	0s	12.06s	120.5s
Payment	3s	3.02s	3.02s	0s	12.05s	120.5s
Order-Status	2s	2.02s	2.02s	0s	10.02s	100.5s
Delivery (interactive)	2s	2.02s	2.02s	0s	5.05s	50.5s
Stock-Level	2s	2.02s	2.02s	0s	5.07s	50.5s

### Test Duration

Ramp up time	39 minutes
Measurement interval	120 minutes
Transactions during measurement interval	11280686
Ramp down time	1 minutes

### Checkpointing

Number of checkpoints in measurement interval	4
Checkpoint Interval	30 minutes