

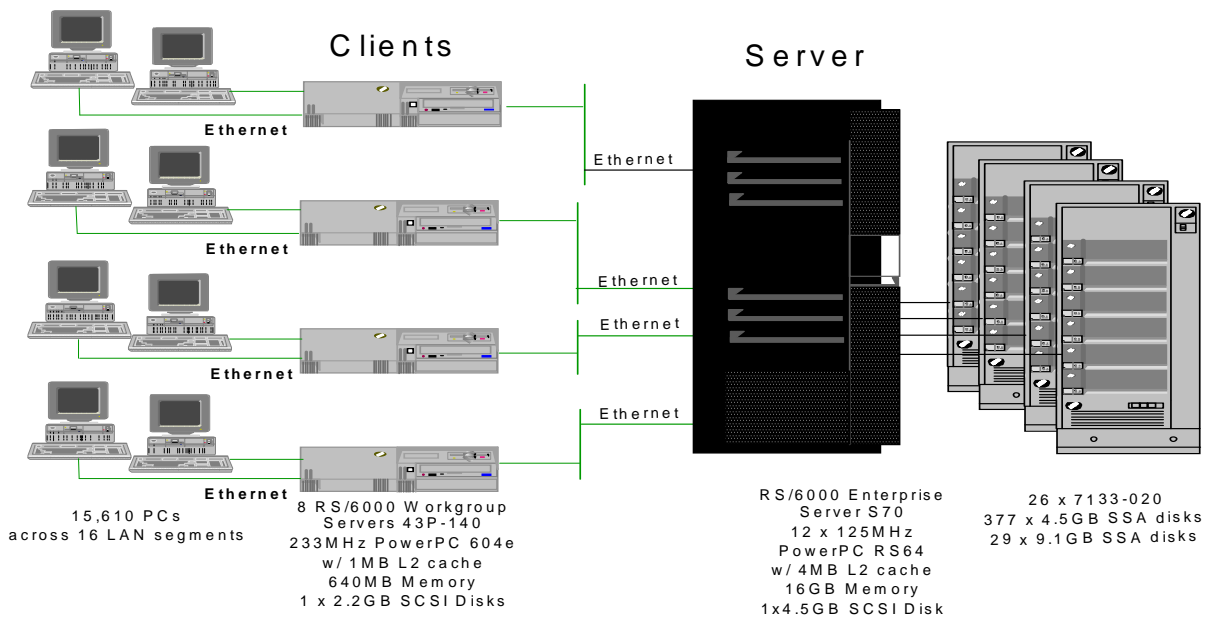


# IBM RS/6000 Enterprise Server S70 c/s

TPC-C Rev. 3.3  
Report Date: March 3, 1998

<b>Total System Cost</b>	<b>TPC-C Throughput</b>	<b>Price/Performance</b>	<b>Availability Date</b>	
<b>\$2,027,566</b>	<b>18,666.73 tpmC</b>	<b>\$108.62/tpmC</b>	<b>September 2, 1998*</b>	
<b>Processors</b>	<b>Database Manager</b>	<b>Operating System</b>	<b>Other Software</b>	<b>Number of Users</b>
<b>12 x 125MHz IBM PowerPC RS64</b>	<b>Oracle8 Enterprise Edition 8.0</b>	<b>AIX 4.3.0.0</b>	<b>IBM TXSeries 4.2 for AIX</b>	<b>15,610</b>

## RS/6000 Enterprise Server S70



\*Oracle8 Enterprise Edition available September 2, 1998. All other components available today.

System Components	Clients		Server	
	Quantity	Description	Quantity	Description
<b>Processor</b>	<b>8</b>	<b>233MHz PowerPC 604e w/ 1MB L2 cache</b>	<b>12</b>	<b>125MHz PowerPC RS64 w/ 4MB L2 cache</b>
<b>Memory</b>		<b>640MB each</b>		<b>16 GB</b>
<b>Disk Controllers</b>	<b>8</b>	<b>SCSI-2 Adapters</b>	<b>3</b>	<b>SCSI-2 Adapters</b>
			<b>5</b>	<b>SSA Adapters</b>
<b>Disk Drives</b>	<b>8</b>	<b>2.2GB SCSI</b>	<b>377</b>	<b>4.5GB SSA Disks</b>
			<b>29</b>	<b>9.1 SCSI F/W Disks</b>
<b>Total Storage</b>		<b>2.2 GB each client</b>		<b>1,598.57 GB</b>
<b>Terminals</b>	<b>3</b>	<b>System Console</b>	<b>1</b>	<b>System Console</b>
<b>Term. Connect</b>	<b>722</b>	<b>CentreCOM 24 Port Ethernet Hubs + 10% spares</b>		



# IBM RS/6000

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Description	Part Number	Third Party Pricing	Unit Price	Qty	Extended Price	5 yr. Maint Price
<b>Server Hardware</b>						
RS/6000 Server Model S70	7017-S70		125,000	1	125,000	69,120
4 RS64 proc, 4.5gb SCSI, I/O Rack, I/O Drawer						
2-SCSI Adapter, 1.44 MB Diskette, CDROM						
9.1 GB Ultra SCSI F/W Disk	2911		3,000	2	6,000	0
Async/Terminal Cable	2934		45	1	45	0
Ethernet PCI Adapter	2985		195	9	1,755	0
Remote I/O Cable - Drawer to Drawer	3126		595	1	595	0
4096 MB R1 Memory (4x1024MB cards)	4177		102,400	3	307,200	0
4096 MB R1 Memory (4x1024MB cards) Sel	4178		81,920	1	81,920	0
4-way 125 MHz RS64 Proc Card, 4MB L2 e	5310		35,000	1	35,000	20,160
4-way 125 MHz RS64 Proc Card, 4MB L2 e	5311		35,000	1	35,000	20,160
Drawer to Drawer Power Control Cable	6006		60	1	60	0
SCSI-2 Fast/Wide PCI Adapter	6208		360	1	360	0
SSA RAID PCI Adapter	6215		3,000	5	15,000	0
I/O Drawer in Base Rack	6220		14,900	1	14,900	0
System Rack Model R00	7015-R00		3,110	4	12,440	5,952
SSA Disk Subsystem w/ 4 4.5GB Disk	7133-020		19,350	26	503,100	249,600
4.5 GB Disk Drive Modules	3401		2,100	272	571,200	0
9.1 GB Disk Drive Modules	3901		3,300	21	69,300	0
9.1 GB Disk Drive Modules Select	3904		2,700	8	21,600	0
SSA Cables	5006		45	26	1,170	0
<b>Subtotal</b>					<b>1,801,645</b>	<b>364,992</b>
<b>Server Software</b>						
AIX 4.3 for S70	5765-C34		240	1	240	0
AIX C compiler	5756-423		615	1	615	0
Performance Toolbox	5765-654		450	1	450	0
Oracle8 Version 8.0		Oracle		2	222,954	222,954
<b>Subtotal</b>					<b>224,259</b>	<b>222,954</b>
<b>Client Hardware</b>						
RS/6000 Model 43P-140, 233 MHz	7043-140		8,000	8	64,000	26,880
2.1gb Disk, Intg SCSI-2 FW, Intg Enet, 1MB L2 cache						
128MB DIMM Memory	4106		1,280	8	10,240	0
128MB DIMM Memory Expansion	4115		2,560	32	81,920	0
Async Terminal/Printer Cable	2934		45	8	360	0
Ethernet Adapter, PCI	2985		195	8	1,560	0
3Com Fast Ethernet XL	2986		275	8	2,200	0
IBM ASCII Terminal, Keyboard	3153-BG3		577	9	5,193	5,940
<b>Subtotal</b>					<b>165,473</b>	<b>32,820</b>
<b>Client Software</b>						
AIX 4.2.1 Unlimited Users	5756-C34		3,660	8	29,280	0
IBM TXSeries 4.2 for AIX with 25% Discount	5697-D17		3,034	8	18,206	34,355
<b>Subtotal</b>					<b>47,486</b>	<b>34,355</b>
<b>User Connectivity</b>						
Ethernet Hub (24port) + 10% Spares	AT3024TR		215.95	722	155,830	0
<b>Subtotal</b>					<b>155,830</b>	<b>0</b>
<b>Discounts</b>					<b>(898,487)</b>	<b>(123,759)</b>
<b>Total</b>					<b>1,496,205</b>	<b>531,361</b>

**Notes:**

Pricing Sources:

1=Dickens Data Systems, 2=Oracle, 3=Data Comm Warehouse

Audited by: Francois Raab, Information Paradigm

**Five-Year Cost of Ownership:**

**2,027,566**

**tpmC**

**18,666.73**

**\$/tpmC**

**108.62**

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 pricing@tpc.org. Thank you.

# Numerical Quantities Summary for the IBM RS/6000 S70

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**MQTH**, computed Maximum Qualified Throughput: 18,666.73 tpmC

Repeatability Run: 18,580.40 tpmC 0.5% difference

<u>Response Times (in seconds)</u>	<u>90th Percentile</u>	<u>Average</u>
New Order	3.57	1.56
Payment	3.23	1.31
Order-Status	3.24	1.31
Delivery (interactive)	0.2	0.12
Delivery (deferred)	4.99	2.02
Stock-Level	3.04	1.16
Menu	0.02	0.01

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<u>Transaction Mix, in percent of total transactions</u>	<u>Percent</u>
New Order	44.69%
Payment	43.17%
Order-Status	4.06%
Delivery	4.05%
Stock-Level	4.0%

<u>Keying/Think Times (in seconds)</u>	<u>Min.</u>	<u>Average</u>	<u>Max.</u>
New Order	18.00/0.01	18.01/12.09	18.11/121.01
Payment	3.00/0.01	3.01/12.12	3.12/121.02
Order-Status	2.00/0.01	2.01/10.11	2.10/101.00
Delivery	2.00/0.01	2.01/5.12	2.10/51.01
Stock-Level	2.00/0.01	2.01/15.12	2.10/51.00

## Test Duration

Ramp-up Time	42 min 45 sec
Measurement interval	30 minutes
Transactions during measurement interval (all types)	1,253,044
Ramp-down time	10 minutes

## Checkpointing

Number of checkpoints	1
Checkpoint interval	30

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