

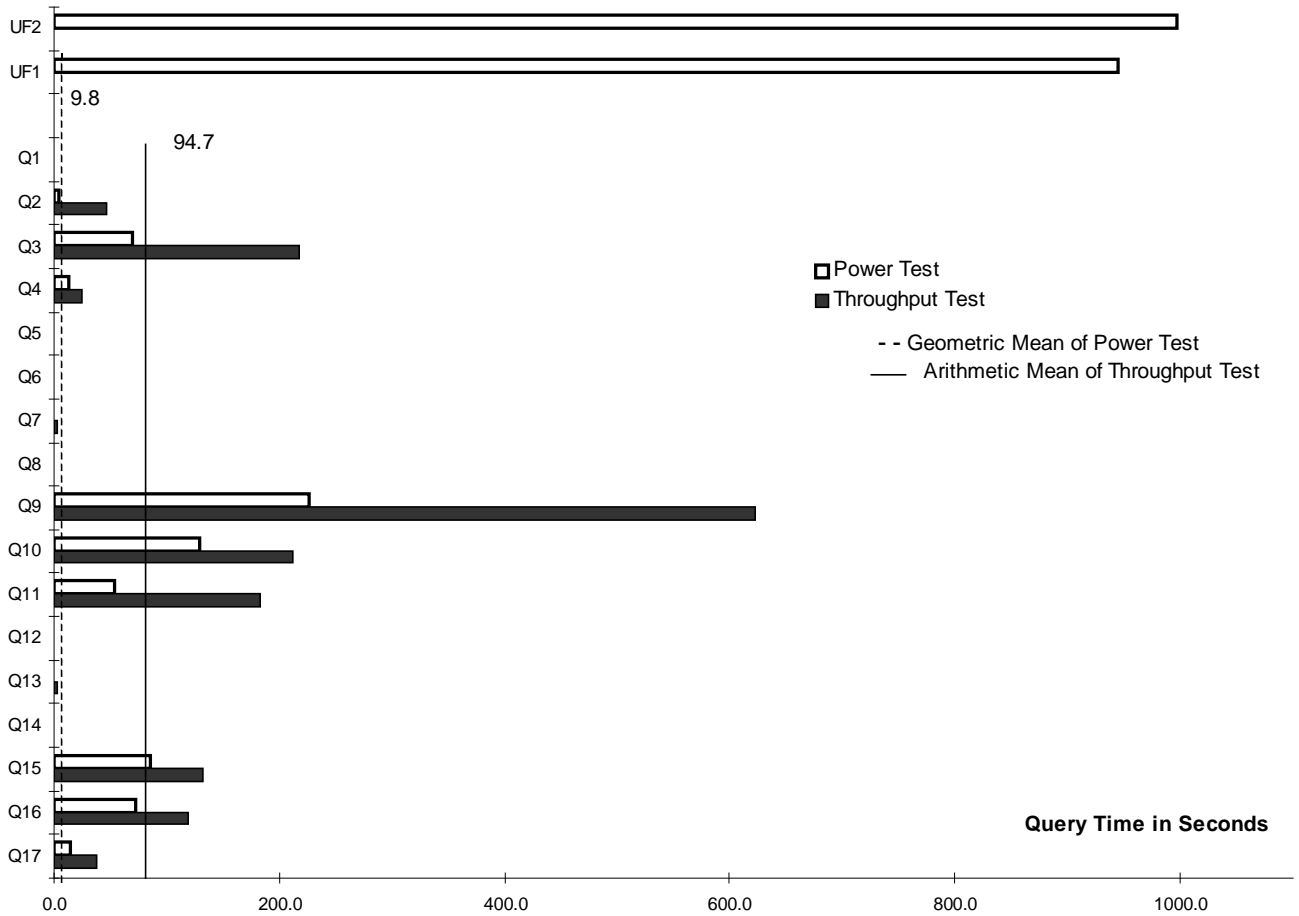


# WorldMark 5200 Using Teradata V2R3.0

TPC-D Rev 1.3.1

**Report Date:  
June 18, 1999**

Total System Cost	TPC-D Power	TPC-D Throughput	Price/Performance
<b>\$25,658,321</b>	<b>366,509.5</b> QppD@1000GB	<b>24,142.0</b> QthD@1000GB	<b>\$273</b> per QphD@1000GB
Database Size	Database Manager	Operating System	Other Software
<b>1000GB</b>	<b>Teradata V2R3.0</b>	<b>UNIX SVR4</b> <b>MP-RAS 03.02.00</b>	<b>None</b>
			Availability Date
			<b>HW: 4-16-99</b> <b>SW: 8-10-99</b>



**Database Load Time = 13 Hrs 47 Mins    Total Data Storage / Database Size = 15.96    RAID = Y**

**44 5200 Nodes:**

- 4 Intel Pentium II Xeon 450 MHz CPUs 1 MB Cache
- 2 GB Memory
- 2 Ultra SCSI Adapters
- 1 CD-ROM Unit, Floppy Drive & Tape Drive
- 1 Network card
- 3 9GB internal drives
- 2 Modularized arrays, each with  
20 x 9 GB drives

**Total GB of Storage = 15,964.52**



# WorldMark 5200 Teradata DBS V2R3.0

TPC-D Rev. 1.3.1

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PRODUCT ID	DESCRIPTION	QTY	UNIT PRICE	EXT PRICE	5 - YR MAINT
9100-5200-8090	WM 5200 Dual Node Expansion Cabinet	22	\$371,250	\$ 8,167,500	\$1,881,792
9101-5201-8090	BYNET V2 64 Node Switch Cabinet	2	\$420,000	\$ 840,000	\$282,240
9100-F118	Memory DIMM 1 GB	44	\$8,250	\$ 363,000	\$0
9100-F281	PQS - Shared Adapter Board w/Cable Assembly	88	\$2,096	\$ 184,470	\$0
3426-9004-8090	AWS Console/4 (6+ Nodes)	1	\$10,500	\$ 10,500	\$3,300
3498-2293-8090	21" Color Monitor [AWS]	1	\$1,388	\$ 1,388	\$1,256
3426-F147	Ethernet Adapter, Fast PCI	2	\$94	\$ 188	\$0
6000-K930	NSC Accessories Kit	6	\$0	\$ -	\$0
9100-F936	Side Panels, Stabilizers, Manuals	6	\$1,125	\$ 6,750	\$0
<b>Server Hardware</b>				<b>\$ 9,573,795</b>	<b>\$2,168,588</b>
6000-9000-8090	NCR Storage Cabinet	<b>30</b>	\$22,608	\$678,240	\$0
6285-1220-8900	Modular Array (MA) 1220	88	\$10,650	\$937,200	\$532,224
6285-F101	MA Single Controller 32MB Cache	176	\$6,408	\$1,127,808	\$0
6285-F409	MA (4) 9GB 7200K RPM disk drive	440	\$3,420	\$1,504,800	\$0
6000-F900	Raid Manager for UNIX	30	\$0	\$0	\$0
9100-K931-	NSC Cables & Terminators Kit	30	\$738	\$22,140	\$0
<b>Storage Devices</b>				<b>\$4,270,188</b>	<b>\$532,224</b>
F601-7730-0000	EOE/MPP 8 nodes	6	\$18,750	\$112,500	\$90,668
F601-7811-0000	S40 AWS Operating Environment [AWS]	1	\$3,000	\$3,000	\$15,051
F784-5030-0000	Teradata CLI for MPP Node	1	\$3,000	\$3,000	\$5,332
F784-5031-0000	Teradata BTEQ for MPP Node	1	\$375	\$375	\$0
F784-5032-0000	Teradata FastLoad for MPP Node	1	\$3,000	\$3,000	\$0
F784-1425-0000	Teradata V2R3.0 4800/5200	1	\$37,500	\$37,500	\$51,050
F784-1426-0000	Teradata V2R3.0 4800/5200 Nodes (nodes 2-4)	3	\$112,500	\$337,500	\$153,151
F784-1427-0000	Teradata V2R3.0 4800/5200 nodes 5+	40	\$146,250	\$5,850,000	\$2,451,398
<b>Software</b>				<b>\$6,346,875</b>	<b>\$2,766,651</b>
<b>TOTAL</b>				<b>\$ 20,190,858</b>	<b>\$5,467,463</b>
<b>FIVE YEAR COST OF OWNERSHIP</b>					<b>\$25,658,321</b>

(1) Each cabinet contains 2 nodes ( 4 x 450 MHz CPU and 1 GB memory per node)

"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](mailto:pricing@tpc.org). Thank you."

Audited by: Francois Raab  
Information Paradigm



# WorldMark 5200 Teradata DBS V2R3.0

TPC-D Rev. 1.3.1

Report Date:  
June 18, 1999

## Numerical Quantity Summary

### Measurement Results:

Scale Factor	=	1000
Total Data Storage / Database Size	=	15.96
Database Load Time	=	13 hrs 47 min
Query Streams for Throughput Test	=	3
Geometric Mean of Power Test	=	9.8
TPC-D Power Metric (QppD@1000GB)	=	366,509.5
TPC-D Throughput Metric (QthD@1000GB)	=	24,142.0
Composite QphD@1000GB	=	94,065.3
Total System Price Over 5 Years	=	\$25,658,321
TPC-D Price/Performance Metric	=	\$273

### Measurement Intervals:

Measurement Interval in Throughput Test (Ts) =7,605 seconds

### Duration of stream execution:

Stream ID	Seed	Start-Date	Start-Time	End-Date	End-Time	Total Time
Stream00	679785911	2/7/99	10:57:22	2/7/99	11:40:59	2,617
Stream01	679785912	2/7/99	11:40:59	2/7/99	12:08:55	1,676
Stream02	679785913	2/7/99	11:40:59	2/7/99	12:08:11	1,632
Stream03	679785914	2/7/99	11:40:59	2/7/99	12:06:21	1,522
Updates		2/7/99	11:40:59	2/7/99	13:47:44	7,605

### TPC-D Timing Intervals (in seconds):

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
<b>Stream0</b>	0.7	4.4	69.4	12.9	0.6	0.4	0.8	0.8	226.9	129.7
<b>Stream01</b>	0.7	115.1	214.5	23.1	0.6	3.6	0.7	4.5	633.4	253.8
<b>Stream02</b>	1.6	5.2	147.8	32.9	0.7	1.8	2.4	0.8	631.1	199.0
<b>Stream03</b>	0.7	18.5	290.5	18.6	0.7	0.5	4.3	1.0	602.0	183.7
<b>Minimum</b>	0.7	5.2	147.8	18.6	0.6	0.5	0.7	0.8	602.0	183.7
<b>Average</b>	1.0	46.3	217.6	24.9	0.7	2.0	2.5	2.1	622.2	212.2
<b>Maximum</b>	1.6	115.1	290.5	32.9	0.7	3.6	4.3	4.5	633.4	253.8

	Q11	Q12	Q13	Q14	Q15	Q16	Q17	UF1	UF2
<b>Stream0</b>	53.9	0.4	0.8	0.4	86.0	72.9	14.0	945.4	997.0
<b>Stream01</b>	131.5	1.3	5.8	1.9	103.9	114.4	67.4	2631.5	1025.9
<b>Stream02</b>	260.3	1.2	3.5	1.3	202.1	112.4	28.0	959.2	1013.5
<b>Stream03</b>	156.9	1.2	0.8	1.3	90.9	131.5	19.0	962.0	1013.4
<b>Minimum</b>	131.5	1.2	0.8	1.3	90.9	112.4	19.0	959.2	1013.4
<b>Average</b>	182.9	1.2	3.4	1.5	132.3	119.4	38.1	1517.6	1017.6
<b>Maximum</b>	260.3	1.3	5.8	1.9	202.1	131.5	67.4	2631.5	1025.9