
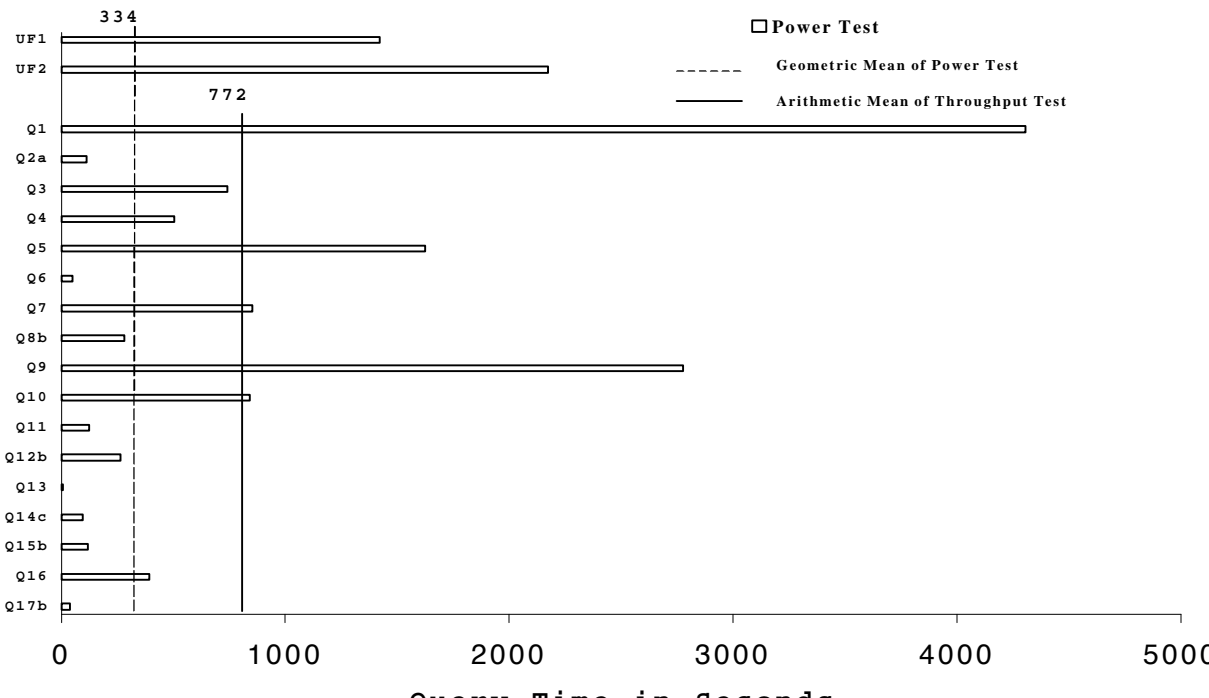


Executive Summary

		NUMA-Q 2000 using Oracle8		TPC-D™ 1.2.3	
				REPORT DATE: November 20, 1997	
TOTAL SYSTEM COST		TPC-D POWER		TPC-D THROUGHPUT	
\$6,183,980		3,232.3 QppD@300GB		1,097.8 QthD@300GB	
PRICE/PERFORMANCE					
\$3,283 \$/QphD@300GB					
DATABASE SIZE		DATABASE MANAGER		OPERATING SYSTEM	
300GB		Oracle8 v8.0.4		DYNIX/ptx 4.4.1	
				OTHER SOFTWARE	
				Sequent Volume Manager 2.0	
				AVAILABILITY DATE	
				February 27, 1998 (see note next page)	
					
DATABASE LOAD TIME = 22 HOURS, 18 MINUTES, 0 SECONDS			DISK SIZE/DATABASE SIZE = 10.24		RAID: Y
SYSTEM CONFIGURATION <ul style="list-style-type: none"> • 32 180Mhz Intel Pentium Pro Processors with 1MB Cache • 16 GB Memory • 12 CLARiiON DASS (20 Slot W/20 4G Drives) • 12 CLARiiON DASS (20 Slot W/20 9G Drives) • 21 4.5 GB Disk Drives 					



NUMA-Q 2000 using Oracle8

TPC-D™ 1.2.3

**Report Date:
November 20, 1997**

Product Description	Model Number	Qty	Unit Price	Extended Price
Enterprise (large) NUMA-Q cabinet	CABE-0000-00	10	13,000	130,000
3.5" Pbays with N+1 Redundant Power	EXP-PBAY-04	2	3,900	7,800
Boot Pbay SCSI cable	CBL-0300-RL	3	91	273
PCI - SCSI Controller for VLM	IOC-0120-51	3	715	2,145
Quad with IQ Link-VLM 1GB Mem (P6 1M Procs)	QUAD-0200	8	223,600	1,788,800
IQ Plus-IQ Link Interconnect Cables	CBL-PLUS-05	8	1,375	11,000
8GB Memory bundle	MEM-8000	1	425,880	425,880
Single Port Ethernet Adapter	COM-0041-50	1	374	374
Fibre Channel Bridges	FCB-1000-01	12	17,550	210,600
Fibre Channel HUBs	FCL-LKIT-01	6	10,400	62,400
Fibre Channel PCI Host Adapters	IOC-0110-51	24	3,250	78,000
NUMA-Q Console with ethernet	CON-0000	1	6,000	6,000
7.5M Terminated SCSI Cable Bridge to wide SCSI device	CBL-0750-B3	96	179	17,184
20M, Multi Mode Fibre Channel Cables with duplex SC connector	CBL-2000-F1	24	125	3,000
NON STORAGE HARDWARE SUBTOTAL				2,743,456
4.5 GB Disks in 3.5" Pbay Carrier	DSK-4000-33	21	1,457	30,597
CLARiiON DASS (20 Slot W/20 4G Drives)	DSK-0500-20	12	52,000	624,000
CLARiiON DASS (20 Slot W/20 9G Drives)	DSK-0500-30	12	79,300	951,600
STORAGE SUBTOTAL				1,606,197
DYNIX/ptx V4.4 CD-ROM Media (NAO) Includes:ptx/TCP.IP, ptx/LAN, ptx/SYNC, ptx/Windows	PTX-C440-00	1	-	-
Sequent Volume Manager for the Base Quad	SVM-4100-001	1	5,000	5,000
Sequent Volume Manager for Additional Quads	SVM-4100-ADD	7	4,857	33,999
Oracle8 Server—Enterprise Edition (v8.0.4) w/Partitioning Opt.	A22684	1	401,280	401,280
SOFTWARE SUBTOTAL				440,279
HARDWARE AND SOFTWARE SUBTOTAL				4,789,932
Five Year Sequent Customer Support for NUMA-Q 2000				860,928
Five Year Oracle Customer Support for Oracle8				533,120
CUSTOMER SUPPORT SUBTOTAL				1,394,048
Five Year Cost of Ownership				6,183,980

Audited by: Francois Raab, Information Paradigm, Inc.

Notes:

- Hardware and Sequent Software is available immediately.
- Oracle8 v8.0.4 available February 27, 1998.

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.



Numerical Quantities

TPC-D™ Rev. 1.2.3

Report Date:
November 20, 1997

Measurement Results:

Database Scaling (SF/Size)	=	300
Total Data Storage/Database Size	=	10.24
Database Load Time	=	22 Hrs, 18 M, 0 S
Query Streams for Throughput Test (S)	=	0
TPC-D Power Metric (QppD@300GB)	=	3,232.3
TPC-D Throughput Metric (QthD@300GB)	=	1,097.8
TPC-D Composite Metric (QphD@300GB)	=	1,883.9
Total System Price Over five years	=	\$6,183,980
TPC-D Power Throughput Metric (\$/QphD@300GB)	=	\$3,283

Measurement Intervals:

Measurement Interval in Throughput Test (Ts) = 16,724 Seconds

Duration of Stream Execution:

Stream ID	Seed	Start Date	Start Time	End Date	End Time	Total Time
Stream 00	2127447133	11/20/97	8:10:03	11/20/97	12:48:47	04:38:44
UF1		11/20/97	8:10:03	11/20/97	8:33:46	00:23:43
UF2		11/20/97	12:12:34	11/20/97	12:48:47	00:36:13

TPC-D Timing Intervals (in seconds):

Q1	Q2a	Q3	Q4	Q5	Q6	Q7	Q8b	Q9
4307.0	112.2	740.3	504.9	1623.9	51.2	852.4	281.9	2774.9

Q10	Q11	Q12b	Q13	Q14c	Q15b	Q16	Q17b	UF1	UF2
841.3	124.2	262.5	6.2	96.6	117.3	391.8	38.5	1423.2	2173.3