
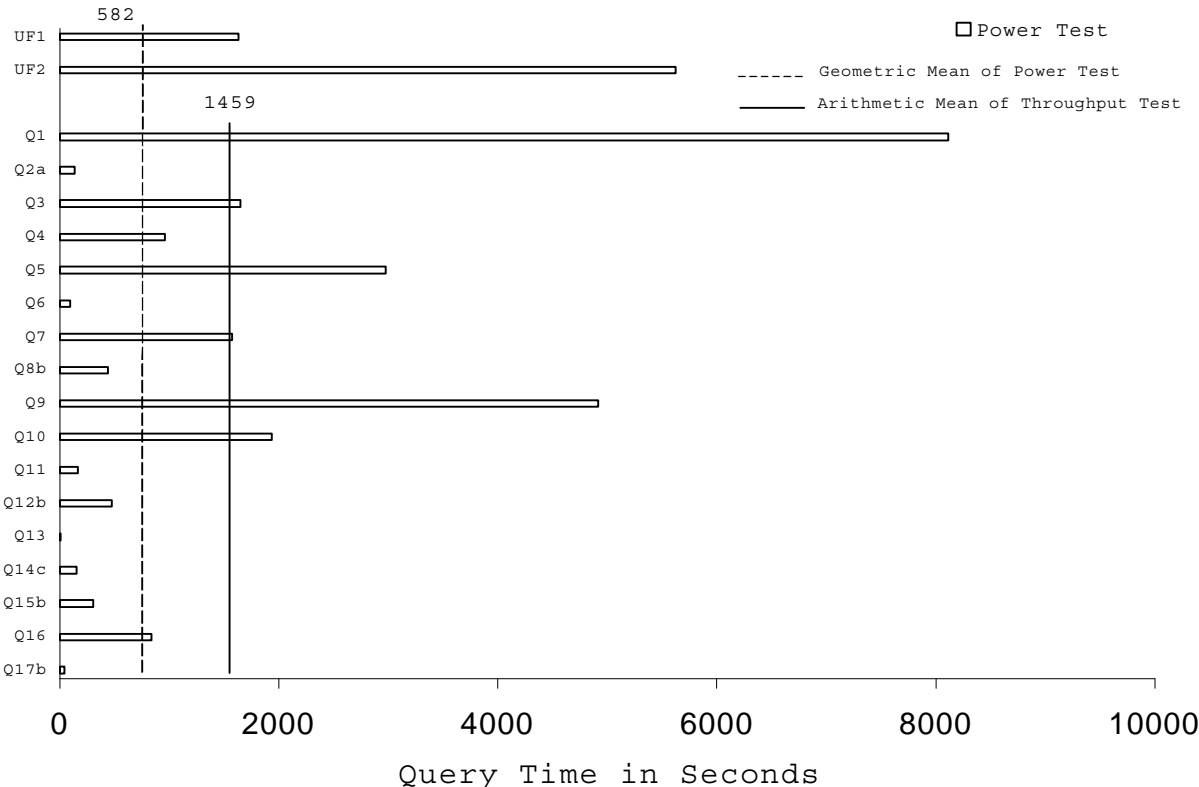



Executive Summary

		NUMA-Q 2000 using Oracle8		TPC-D™ 1.2.3					
				REPORT DATE: December 9, 1997					
TOTAL SYSTEM COST		TPC-D POWER		TPC-D THROUGHPUT		PRICE/PERFORMANCE			
\$4,120,992		1854.4 QppD@300GB		572.7 QthD@300GB		\$3,999 \$/QphD@300GB			
DATABASE SIZE		DATABASE MANAGER		OPERATING SYSTEM		OTHER SOFTWARE		AVAILABILITY DATE	
300GB		Oracle8 v8.0.4		DYNIX/ptx 4.4.1		Sequent Volume Manager 2.0		February 27, 1997 (see note next page)	
 <p>Legend: □ Power Test - - - - Geometric Mean of Power Test — Arithmetic Mean of Throughput Test</p>									
DATABASE LOAD TIME = 33 HOURS, 36 MINUTES, 0 SECONDS					DISK SIZE/DATABASE SIZE = 10.24			RAID: Y	
SYSTEM CONFIGURATION									
<ul style="list-style-type: none"> • 16 180Mhz Intel Pentium Pro Processors with 1MB Cache • 8 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: December 9, 1997	
Product Description	Model Number	Qty	Unit Price	Extended Price	
Enterprise (large) NUMA-Q cabinet	CABE-0000-00	9	13,000	117,000	
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	4	223,600	894,400	
IQ Plus-IQ Link Interconnect Cables	CBL-PLUS-05	4	1,375	5,500	
4GB Memory bundle	MEM-4000	1	212,940	212,940	
Single Port Ethernet Adapter	COM-0041-50	1	374	374	
Fibre Channel Bridges	FCB-1000-01	6	17,550	105,300	
Fibre Channel HUBs	FCL-LKIT-01	3	10,400	31,200	
Fibre Channel PCI Host Adapters	IOC-0110-51	12	3,250	39,000	
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	48	179	8,592	
20M, Multi Mode Fibre Channel Cables with duplex SC connector	CBL-2000-F1	12	125	1,500	
NON STORAGE HARDWARE SUBTOTAL				1,432,024	
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)	PTX-C440-00	1	-	-	
Includes:ptx/TCP.IP, ptx/LAN, ptx/SYNC, ptx/Windows					
Sequent Volume Manager for the Base Quad	SVM-4100-001	1	5,000	5,000	
Sequent Volume Manager for Additional Quads	SVM-4100-ADD	3	4,857	14,571	
Oracle8 Server—Enterprise Edition (v8.0.4) w/Partitioning Opt.	A22684	1	200640	200,640	
SOFTWARE SUBTOTAL				220,211	
HARDWARE AND SOFTWARE SUBTOTAL				3,258,432	
Five Year Sequent Customer Support for NUMA-Q 2000				596,000	
Five Year Oracle Customer Support for Oracle8				266,560	
CUSTOMER SUPPORT SUBTOTAL				862,560	
Five Year Cost of Ownership				4,120,992	
Audited by: Francois Raab, Information Paradigm, Inc.					
Notes:					
<ul style="list-style-type: none"> • 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:
December 9, 1997

Measurement Results:

Database Scaling (SF/Size)	=	300
Total Data Storage/Database Size	=	10.24
Database Load Time	=	33 Hrs, 36 M, 0 S
Query Streams for Throughput Test (S)	=	0
TPC-D Power Metric (QppD@300GB)	=	1854.4
TPC-D Throughput Metric (QthD@300GB)	=	572.7
TPC-D Composite Metric (QphD@300GB)	=	1030.6
Total System Price Over five years	=	\$4,120,992
TPC-D Power Throughput Metric (\$/QphD@300GB)	=	\$3,999

Measurement Intervals:

Measurement Interval in Throughput Test (T_s) 32,057 Seconds

Duration of Stream Execution:

Stream ID	Seed	Start Date	Start Time	End Date	End Time	Total Time
Stream 00	2127447133	12/7/97	13:03:33	12/7/97	21:57:50	08:54:17
UF1		12/7/97	13:03:33	12/7/97	13:30:47	00:27:14
UF2		12/7/97	20:24:05	12/7/97	21:57:50	01:33:45

TPC-D Timing Intervals (in seconds):

Q1	Q2a	Q3	Q4	Q5	Q6	Q7	Q8b	Q9
8114.5	137.6	1650.9	960.2	2980.3	95.8	1572.4	441.2	4916.9

Q10	Q11	Q12b	Q13	Q14c	Q15b	Q16	Q17b	UF1	UF2
1938.3	167.0	476.8	6.3	153.1	304.3	836.7	44.8	1634.4	5624.9