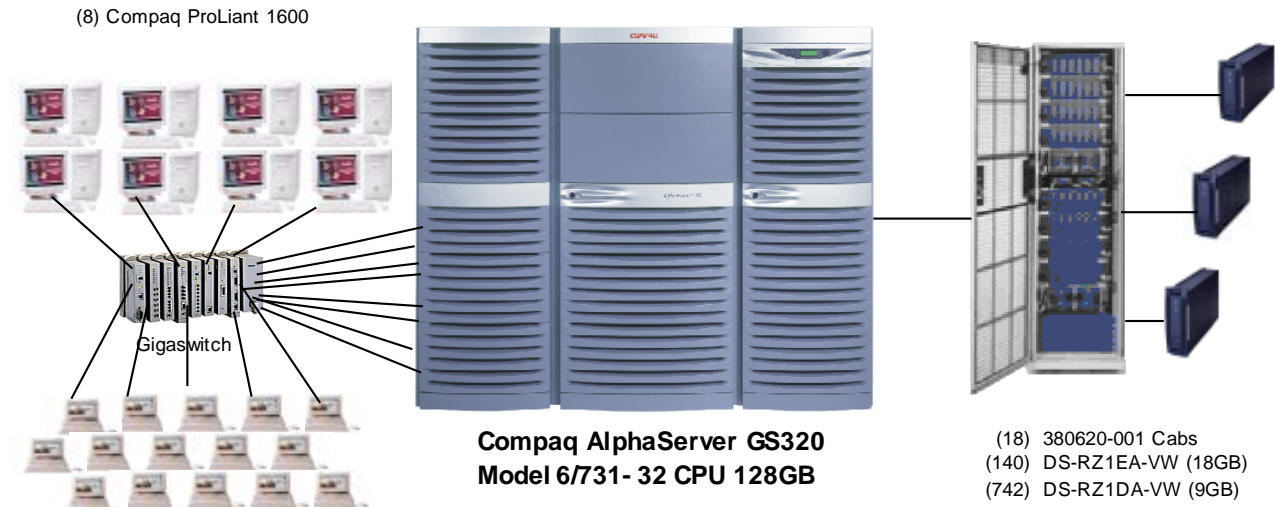
	Compaq AlphaServer GS320 Model 6/731	TPC-C Rev. 3.5
	32 CPU Client/Server System	Report Date: September 7, 2000

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date	
\$8,263,128	144,331	\$57.25	September 22, 2000	
Processors	Database	Operating System	Other Software	Number of Users
(32) 731MHz Alphachip 21264A	Oracle v8.1.7 Enterprise Edition for TRU64 UNIX	Compaq Tru64 UNIX V5.1	Compaq DB Web Connector V1.1	135,040

(8) Compaq ProLiant 1600



**Compaq AlphaServer GS320
Model 6/731 - 32 CPU 128GB**

(18) 380620-001 Cabs
(140) DS-RZ1EA-VW (18GB)
(742) DS-RZ1DA-VW (9GB)

133 Ethernet Segments
on 10/100 Mbps
Fast Ethernet
1,016 Users per Segment
Total PC's - 135,040

	System Components Database Server, Compaq AlphaServer GS320 Model 6/731		Client Components (Each of 8) Compaq ProLiant 1600	
	Qty	Type	Qty	Type
Processors	32	6/731 MHz Alphachip 21264A	2	600 MHz Intel Pentium III
Cache Memory		4MB Cache	1	512KB Cache
Memory	32	4 GB Memory	1	128MB Memory
Total Memory	128	GB Memory	2	256MB Memory
Disk Controllers	52	Fiber Storage Controllers		640 Total
Disks	742	9.1GB Disks	1	18GB Disk
	140	18.1GB Disks		
Total Disk Storage	9286.2	GB		



**AlphaServer GS320
Model 6/731
32 CPU C/S System**

**TPC-C REV 3.5 EXECUTIVE
SUMMARY
PAGE 2 OF 2**

Report Date: Sept. 7, 2000

Description	Part Number	Third Party Brand	Unit Pricing	Qty	Extended	5 yr. Maint.
Server Hardware						
Compaq AlphaServer GS 320 6/731 Model 32	DA-320EC-AA		1 666,000	1	666,000	476,962
GS 160/320 CPU SMP Upgrade	3X-KN8AA-AA		1 23,000	1	23,000	Inc.
GS 160/320 ADD-on CPU UNIX SMP	3X-KN8AA-SA		1 40,000	15	600,000	Inc.
GS 160/320 4GB Memory Module	3X-MS8AA-SA		1 42,000	32	1,344,000	Inc.
PCI Fibre Adapter	DS-KGPSA-CA		1 4,000	52	208,000	Inc.
PCI to Ultra SCSI Adapter	KZPBA-CA		1 460	2	920	Inc.
Dshf 180W Dif Blw Mtrc blue	DS-B A356-JF		1 1,464	2	2,928	Inc.
16Bit SCSI for KZPSC/B A356	B N31S-1E		1 116	2	232	Inc.
1600 Watt Bulk Power Converter	H7506-AA		1 10,000	4	40,000	Inc.
GS 160/320 PCI Expansion Box	3X-DWWP-A-SA		1 15,000	8	120,000	Inc.
GS 80/160/320 Expansion Cab	H9A20-AA		1 5,000	2	10,000	Inc.
15M Fibre Op Cable 50/125	234457-B 23		1 227	52	11,804	Inc.
PCI to gbE SX Adapter	DEGP A-S A		1 1,949	8	15,592	Inc.
PCOMempru Channel Two Controller	CCMAB-AA		1 2,995	1	2,995	Inc.
SC-SC DUAL FOCbl, MM, P.P., 4.5M	B N34B-4E		1 96	8	768	0
ESA 12000 Storage Array	380620-001		1 88,629	18	1,595,322	285,642
15M Fibre Op Cable 50/125	234457-B 23		1 227	144	32,688	0
9.1GB 7200rpm UWS CSI Disk**	DS-RZ 1DA-VW		1 650	817	531,050	Spared
18.2GB 7200rpm UWS CSI Disk**	DS-RZ 1EA-VW		1 1,945.45	154	299,599	Spared
16 port Fibre Switch	DS-DS GGA-AB		1 38,333	13	498,329	175,448
Short Wave Optical GBIC	3380561-B 21		1 492	196	96,432	Inc.
12/24gb 4MM DAT Tape	TLZ 10-LB		1 1,135	1	1,135	1,274
GS-Router 16 Slot Chassis	DGSR A-B A		1 9,995	2	19,990	5,736
GS -R 64MB Switch Control Pro	DGSR C-B A		1 8,995	2	17,990	5,736
GS/Rtr 2-P Geeth SX 16mB Line Card	DGSR S-AB		1 7,995	8	63,960	22,944
GS/R 16-Slot Switching Fabric Module	DGSR D-AA		1 4,995	4	19,980	5,400
GS/Rtr 8-P Fast Ethernet 16mb Line Card	DGSR T-AB		1 5,995	17	101,915	34,408
VT 510, WHITE, NORTH AMER, NO KEY	VT 510-AA		1 395	1	395	0
US & Canada/English KB	P CXLA-NA		1 25	1	25	0
Subtotal					6,325,049	1,013,550
Server Software						
5YR Tru64 UNIX BRZ 9x5	F M-W16U9-60		1 34,074	1	34,074	34,074
5YR GS 160/320 Tru64 UNIX SMP	F M-W16S M-60		1 2,592	31	80,352	80,352
5YR Tru64 Unix O/S & LP	F M-CDDST -60		1 13,624	1	13,624	13,624
HS G80 SW U/A LIC/MCD/DOC	380553-001		1 750	72	54,000	
GIGAs w/Rtr All Lic/MCD Pkg	QB-64P AA-WA		1 3,995	1	3,995	
5YR 5x9 HS *80 SW Dual Controller	F M-DB AL3-60		1 13,937	36	501,732	501,732
5YR 5x9 HS *90 P Platform SW	F M-PB AT 1-60		1 1,514	36	54,504	54,504
Compaq Tru64 UNIX Alpha CDRM	QA-MT 4AA-H8		1 395	1	395	
Oracle v8.1.7 Enterprise Edition for TRU64 UNIX with Parallel Server & Partitioning Options	Oracle		2 1,129,400	1	1,129,400	1,129,400
Subtotal					1,187,790	1,813,686
Client Hardware						
Compaq Proliant 1600	153552-001		1 4,450	8	35,600	21,920
Processor 600Mhz	153555-B 21		1 1,837	8	14,696	Inc.
256MB SDRAM DIMM Memory	313616-B 21		1 1,675	16	26,800	Inc.
Ethernet Dual Channel	338456-B 21		1 482	8	3,856	Inc.
Gigabit Daughter CD Upgrade	338456-B 23		1 918	8	7,344	Inc.
18GB Drive	388144-B 22		1 1,271	8	10,168	Inc.
SC-SC DUAL FOCbl, MM, P.P., 4.5M	B N34B-4E		1 96	8	768	Inc.
V700 15" Color Monitor**	325900-001		1 205	10	2,050	Spared
Subtotal					101,282	21,920
Client Software						
Application Optimizer WNT Server Edition	QB-641AA-SA		1 450	8	3,600	2,880
Subtotal					3,600	2,880
User Connectivity						
Complex Micro Hub/8-8 Port Hub***	DEH2924		3 32.50	18568	603,460	Spared
Subtotal					603,460	
Notes:** 10% Spares						
ICS Discount: 38% on Server Hardware/Software based on volume.					(\$2,465,562)	
ICS Discount: 20% on FM and FR numbers based on volume.						(\$344,527)
Five Year Cost of Ownership						\$8,263,128
1=IC System Solutions, 2=Oracle, 3= MicroWarehouse					tpmC Rating:	144,331.95
Audited by InfoSizing (www.info sizing.com)					\$ / tpmC:	\$57.25
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.						

Numeric Quantities Summary
AlphaServer GS320 6/731 Client Server

MQTH

MQTH, computed Maximum Qualified Throughput	144331
% throughput difference, reported and reproducibility runs	.004

Response Times in seconds

Transaction	90th percentile	Average	Maximum
New-Order	2.283	1.506	10.520
Payment	2.185	1.482	8.346
Order-Status	2.109	1.382	8.119
Delivery (interactive)	1.588	0.988	5.774
Delivery (deferred)	1.672	0.879	9.422
Stock-Level	2.785	1.866	8.373
Menu	1.593	0.971	5.791

Transaction Mix in percent of total transactions

Transaction	Total Occurrences	Percentage
New-Order	17319834	44.974%
Payment	16564117	43.012%
Order-Status	1541624	4.003%
Delivery (interactive)	1542910	4.006%
Stock-Level	1541964	4.004%

Keying/Think Times in seconds

Transaction	Minimum	Average	Maximum
New-Order	18.000/0.000	18.001/16.002	18.504/159.986
Payment	3.000/0.000	3.001/12.003	3.418/120.002
Order-Status	2.000/0.000	2.001/10.001	2.184/ 99.799
Delivery (interactive)	2.000/0.000	2.001/ 5.003	2.186/ 49.977
Stock-Level	2.000/0.000	2.001/ 5.003	2.399/ 49.998

Emulation Delay in seconds

Transaction	Response Time	Menu Response Time
New-Order	0.10	0.10
Payment	0.10	0.10
Order-Status	0.10	0.10
Delivery (interactive)	0.10	0.10
Stock-Level	0.10	0.10

Test Duration

Ramp up time	60 minutes
Measurement interval	120:00.00 minutes
Number of checkpoints	4
Number of New Order transactions	17319834
Number of transactions (all types) completed in measurement interval	38510449