

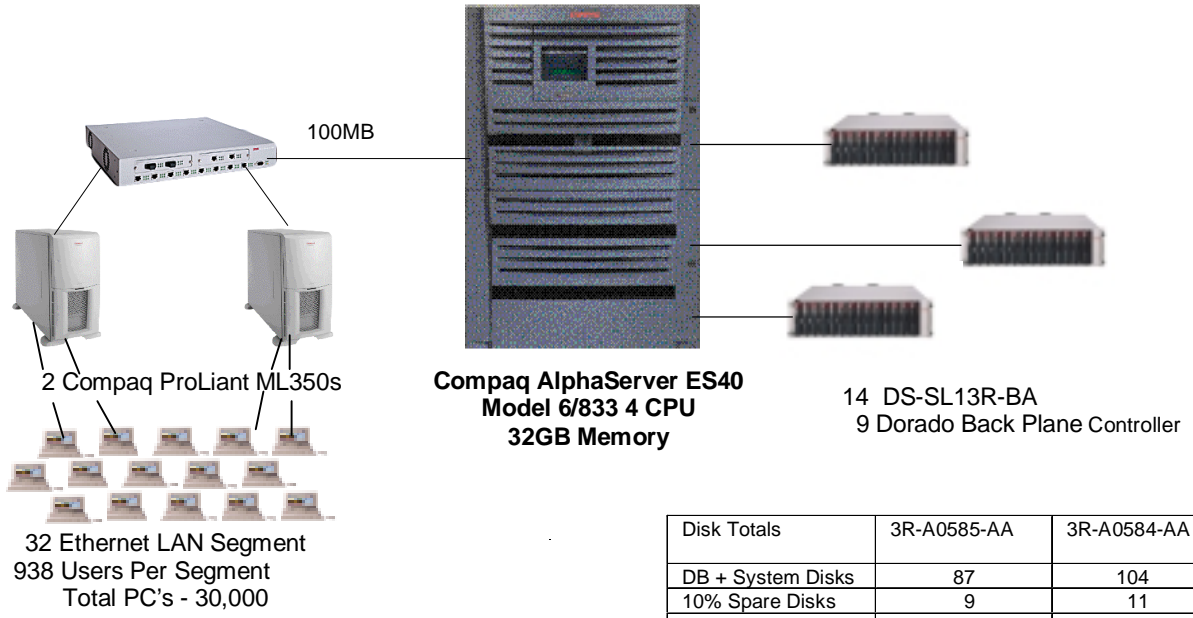


**Compaq AlphaServer ES40  
Model 6/833 4 CPU  
Client Server System**

TPC-C Rev. 5.0 Upgrade from  
TPC-C Rev. 3.5

Report Date: **April 3, 2001**  
Original Date: February 26, 2001

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date	
<b>\$627,144</b>	<b>37,274</b>	<b>\$16.83</b>	<b>May 1, 2001</b>	
Processors	Database	Operating System	Other Software	Number Users
4 833MHz Alphachip 21264	Sybase Adaptive Server Enterprise 12.0.0.3	Compaq Tru64 UNIX V5.1	Compaq DB Web Connector V1.1	30,000



	System Components Database Server, Compaq AlphaServer ES40 Model 6/833		Client Components (Each of 2) Compaq ProLiant ML350	
	Qty	Type	Qty	Type
Processors	4	6/833 MHz Alphachip 21264	1	GHz Intel Pentium III
Cache Memory	8	MB Cache		512KB Cache
Memory	4	8 GB Memory	1	128MB Memory
Total Memory	32	GB Memory	2	256MB Memory
Disk Controllers	9	Back Plane Raid Controller		640 Total
Disks	104	9.1GB Disks	1	18.2GB Disk
	87	18.2GB Disks		
Total Disk Storage	2529.8	GB		



**AlphaServer ES40  
Model 6/833  
4 CPU C/S System**

TPC-C Rev. 5 Upgrade from  
TPC-C Rev. 3.5

Report Date: April 3, 2001  
Original Date: February 26, 2001

Description	Part Number	Third Party Brand	Unit Price Pricing	Qty	Extended Price	3 yr. Maint. Price
<b>Server Hardware</b>						
Compaq AS ES 40 833 Model 2 4MB	DA-64CAA-F A	1	92,016	1	92,016	12,830
ES 40 Tower Enclosure	B A61M-MT	1	500	1	500	Inc.
ES 40 SMP CPU, 833MHZ, Unix	KN610-CB	1	16,500	3	49,500	Inc.
ES 40 4GB Memory Option	MS610-F A	1	51,200	7	358,400	Inc.
ES 40 Power Supply	H7906-A9	1	1,250	2	2,500	Inc.
3 Channel LVD Raid Controller	DS-KZP CC-CE	1	3,731	9	33,579	Inc.
Ultra 68VHD 10M Cable Assembly	B N37A-03	1	140	34	4,760	Inc.
Star Lite Storage Shelf	DS-SL13R-B A	1	3,523	14	49,322	Inc.
12/24GB 4mm Dat 5.25"	T LZ10-LB	1	1,000	1	1,000	Inc.
Dual Port Ultra Wide SCSI PCI Adapt. 10/100	IT I-4280UE	1	822	1	822	Inc.
VT 510, White, North Amer., No Kedy	VT 510-DA	1	610	1	610	
US/Canada Keyboard	P CXLA-NA	1	25	1	25	
17-03212-05 8MP -8MP Patch Cable	B N25G-07	1	9	3	27	
18GB 10K RPM Drive	3R-A0585-AA	1	878	96	84,288	Spared
9.1GB 10K RPM Drive	3R-A0584-AA	1	575	115	66,125	Spared
Etherfast 8 Port 100Base-TX Hub	DEH3552	2	108	3	324	Spared
<b>Subtotal</b>					<b>743,798</b>	<b>12,830</b>
<b>Server Software</b>						
3YR AS ES 40 UNIX BRZ +24X7	FM-62UNS-36	1	3,341	1		3,341
3YR AS ES 40 UNIX SMP	FM-62USM-36	1	837	3		2,511
cVSN MCMG Mul Sys 1Lic	QM-MQDAA-B A	1	995	1	995	
cVSN Mul CDRM Kit	QA-5FVAB-H8	1	99	1	99	
T ru64 UNIX AlphaCDROM	QA-MT 4AA-H8	1	395	1	395	
Sybase ASE Pricing	Sybase	3	34,995	1	34,995	28,000
<b>Subtotal</b>					<b>36,484</b>	<b>33,852</b>
<b>Client Hardware</b>						
Compaq ProLiant ML350 1.0Ghz	160247-001	1	3,142	2	6,284	1,500
Pentium II P 1000-256K Processor	207068-B 21	1	2,570	2	5,140	Inc.
512MB SDRAM DIMM Memory	128279-B 21	1	2,049	2	4,098	Inc.
ProLiant ML350 Hot Plug Drive Cage	161275-B 21	1	656	2	1,312	Inc.
18.2gb Wide Ultra 3 Drive	142673-B 22	1	952	2	1,904	Inc.
Ethernet Dual Channel	338456-B 21	1	427	8	3,416	Inc.
NC3132 Dual 10/100 Module	338456-B 22	1	340	8	2,720	Inc.
256MB SDRAM DIMM Memory Option	313616-B 21	1	986	4	3,944	Inc.
Presario MV740 Monitor	153724-001	1	521	4	2,084	Spared
<b>Subtotal</b>					<b>30,902</b>	<b>1,500</b>
<b>Client Software</b>						
Compaq DB Web Connector V1.1	QB-641AA-SA	1	450	4	1,800	1,440
<b>Subtotal</b>					<b>1,800</b>	<b>1,440</b>

ICS Discount: 30% on Server Hardware/Software based on volume.

(\$ 233,300)

<b>Subtotal</b>	<b>\$ 579,684</b>	<b>\$ 47,460</b>
<b>Three Year Cost of Ownership</b>		<b>\$ 627,144</b>
1=IC System Solutions, 2=MicroWarehouse, 3= Sybase, 4=NetCruiser	<b>tpmC Rating:</b>	<b>37,274</b>
<b>Audited by InfoSizing</b>	<b>\$ / tpmC:</b>	<b>\$ 16.83</b>

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.

**Numeric Quantities Summary**  
**Compaq AlphaServer ES40 Model 6/833 4 CPU C/S System**

**MQTH**

MQTH, computed Maximum Qualified Throughput	37274
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**Response Times** in seconds

Transaction	90th percentile	Average	Maximum
New-Order	0.548	0.368	97.848
Payment	1.200	0.646	98.003
Order-Status	0.603	0.402	8.277
Delivery (interactive)	0.635	0.357	10.215
Delivery (deferred)	0.704	0.486	3.329
Stock-Level	1.098	0.583	42.734
Menu	0.341	0.228	56.016

**Transaction Mix** in percent of total transactions

Transaction	Total Occurrences	Percentage
New-Order	4472909	44.961%
Payment	4279518	43.017%
Order-Status	398619	4.007%
Delivery (interactive)	398647	4.007%
Stock-Level	398810	4.009%

**Keying/Think Times** in seconds

Transaction	Minimum	Average	Maximum
New-Order	18.000/0.000	18.001/12.000	18.041/119.913
Payment	3.000/0.000	3.002/12.004	3.041/119.890
Order-Status	2.000/0.000	2.001/10.001	2.034/ 99.139
Delivery (interactive)	2.000/0.000	2.001/ 5.004	2.033/ 49.771
Stock-Level	2.000/0.000	2.001/ 5.009	2.034/ 49.763

**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**

Ramup up time	30:00 minutes
Measurement interval	120:00.00 minutes
Number of checkpoints	4
Number of New Order transactions	4472909
Number of transactions (all types) completed in measurement interval	9948503