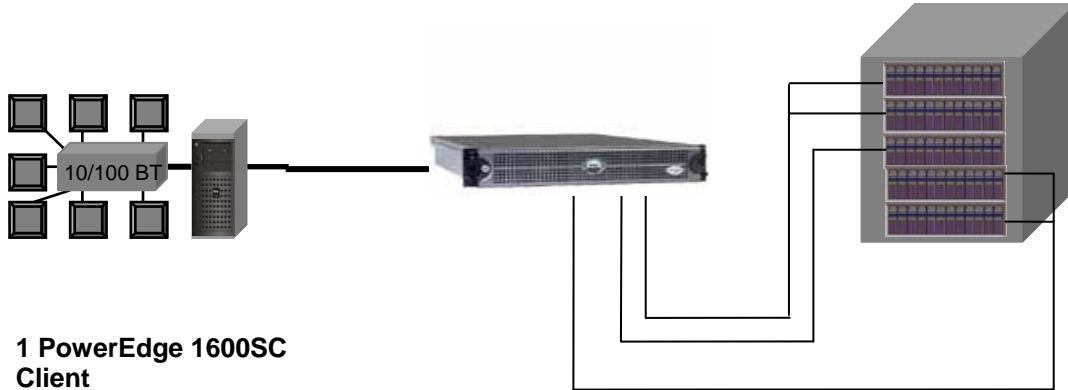| **DELL**	**PowerEdge 2850** **Client/Server w/1 PE1600SC Front End**	TPC-C Rev 5.6 Report Date **December 10, 2004** Revised Date **April 14, 2006**

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
$40,170	**26,410 tpmC**	**$1.53 / tpmC**	DEC 10, 2004

Processors	Database Manager	OS	Other Software	Number of Users
1 x Intel Xeon™ Processors 1 Core, 2 Threads 3.4 GHz 1MB L2 Cache	Microsoft SQL Server 2000 Standard Edition	Microsoft Windows 2003 Server	Windows 2003 Server w/ COM+ Internet Information Server 5.0 Microsoft Visual C++	21,000

PE2850

w/ 1 3.4 GHz Intel Xeon 1 Core, 2 Threads CPUs
w/ 1MB L2 cache,
2.5GB RAM,
3 LSI MegaRAID Elite 1650 DC Controllers
6 36GB 10K RPM U320 SCSI disks
2 Gigabit Ethernet adapters

5 PV220S Disk Pods
70 18GB 15K RPM U320 SCSI Disks

10/100 BT

1 PowerEdge 1600SC Client

System Component		Server		Each Client
Processors Cache	1	Intel Xeon 1 Core, 2 Threads @ 3.4GHz 1MB cache	2	Intel Xeon 2 Core, 4 Threads w/ 512 KB L2 Client @ 2.4 GHz
Memory		2560 MB		1024 MB
Disk Controllers	3	LSI MegaRAID Elite 1650 DC Controller	1	Adaptec On-Board
Disk Drives	70 6	18 GB SCSI 36 GB SCSI	1	36 GB
Total Storage		1400 GB		36 GB
Other	2 1	2GB NIC CD-ROM	2	10/100MB BT NIC

		Client/Server		Report Date: 10-December-04 Revised April 14, 2006			
Description	**Part Number**	**Third Party**		**Unit Price**	**Qty**	**Extended Price**	**3 yr. Maint. Price**
Server Hardware		**Brand**	**Pricing**				
Dell PowerEdge 2800 3.6GHz XEON w/2MB L2 cache,	221-5965			$1,715.00	1	$1,715.00	$290.00
800MHZ FSB, 2 onboard Gigabit NICs							
2GB DDR2 400MHz(4X512MB),1R	311-3591			$849.00	1	$849.00	
512MB DDR2 400MHz(2X256MB),1R	311-3585			$299.00	1	$299.00	
Dell E773,17 in Gray (16.0 VIS)	320-2907			$135.00	1	$135.00	
				Subtotal		$2,998.00	$290.00
3rd Party Raid Controllers							
LSI MegaRAID Elite 1650 2-ch SCSI	4942510264A	LSI	3	$999.00	5	$4,995.00	
PowerVault Disk Subsystem							
PV220S, U3, PS, Tower	220-4477, etc.			$955.00	5	$4,775.00	$2,005.00
ZEMM,U320,PV22XS,SINGLE	340-9324			$399.00	5	$1,995.00	
600W,PWR SPLY,PV22XS	310-0677			$0.00	5	$0.00	
600W,PWR SPLY,PV22XS	310-0683			$89.00	5	$445.00	
36GB U320M SCSI 15K RPM Hard Drive	340-9472			$249.00	70	$17,430.00	
36GB U320M SCSI 15K RPM Hard Drive (OS+LOG)	340-9370			$249.00	6	$1,494.00	
				Subtotal		$26,139.00	$2,005.00
Server Software							
SQL Workgroup, Per processor licensing **	228-01079	Microsoft	1	$4,999.00	1	$4,999.00	
Windows 2003 Standard Server **	P73-00295	Microsoft	1	$738.00	1	$738.00	
Professional Support (1 Incident)		Microsoft	1	$245.00	1		$245.00
				Subtotal		$5,737.00	$245.00
Client Hardware							
Dell PowerEdge 1600SC, 2.4 GHz / 512KB L2/400 FSB	221-2207			$227.00	1	$227.00	$290.00
Additional processor , 2.4 GHz / 512KB	311-2456			$599.00	1	$599.00	
1025MB RAM, 2 DIMMs	311-1940			$548.00	1	$548.00	
36GB U160M SCSI 10K RPM Hard Drive	340-7087			$249.00	1	$249.00	
Non-Redundant Power	310-1866			$199.00	1	$199.00	
IntelPro 100S	430-0369			$59.00	1	$59.00	
Dell E773,17 in Gray (16.0 VIS)	320-2907			$135.00	1	$135.00	
				Subtotal		$2,016.00	$290.00
Client Software							
Windows 2003 Standard Server **	P73-00295	Microsoft	1	$738.00	1	$738.00	
Visual C++ ** .NET	254-00170	Microsoft	1	$109.00	1	$109.00	
				Subtotal		$847.00	
User Connectivity							
7ft Crossover cable	CBLC5C7	LanAdapter	2	$2.00	3	$6.00	
				Subtotal		$6.00	
All hardware and maintenance components from Dell are discounted 16% based on total dollar volume of this configuration. **Other Discounts**						$5,398.08	
					Total USD	**$37,340**	**$2,830**
Notes: * Maint. included in PowerVault 220S disk pod or PV650F/630F fibre channel disk pod				**Three-Year Cost of Ownership USD:**			**$40,170**
** All Microsoft maintenance is covered by the maintenance costs of Microsoft SQL Server							
*** 10% or minimum 2 spares are added in place of onsite service (products have a five year				**tpmC Rating:**			**26410**
return-to-vendor warranty) Pricing: 1 - Microsoft 2 - LanAdapter 3 - LSI							
Pricing may be verified by calling 1-800-BUY-DELL and referencing quote # 190341430 as a complex quote.							
Audited by Lorna Livingtree, Performance Metrics Inc.				**USD$ / tpmC:**			**1.53**

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 items, please inform the TPC at pricing@tpc.org.

MQTh, computed Maximum Qualified Throughput	26,410 tpmC

Response Times (in seconds)	Average	90th	Max
- Neworder	0.32	0.43	4.62
- Payment	0.15	0.19	1.85
- Delivery (interactive portion)	0.11	0.11	1.15
- Stock-Level	1.34	2.87	7.59
- Order Status	0.23	0.30	4.60
- Delivery (deferred portion)	0.70	0.96	2.84
- Menu	0.11	0.11	1.16

Response time delay added for emulated components   Menu 0.1
Resp 0.1

Transaction Mix, in percent of total transactions

- New-Order	44.91%
- Payment	43.02%
- Delivery	4.04%
- Stock-Level	4.02%
- Order-Status	4.01%

Keying/Think Times (in seconds),	Min		Average		Max	
- New-Order	18.02	0.0	18.03	12.05	18.91	120.41
- Payment	3.01	0.0	3.03	12.04	3.91	120.41
- Delivery	2.02	0.0	2.03	5.04	2.91	50.40
- Stock-Level	2.02	0.0	2.03	5.05	2.91	50.41
- Order-Status	2.02	0.0	2.03	10.03	2.91	100.40

Test Duration
- Ramp-up time	10 minutes
- Measurement interval	120 minutes
- Number of checkpoints	4
- Checkpoint interval	30 minutes
- Number of transactions (all types)	
completed in measurement interval	7,341,150