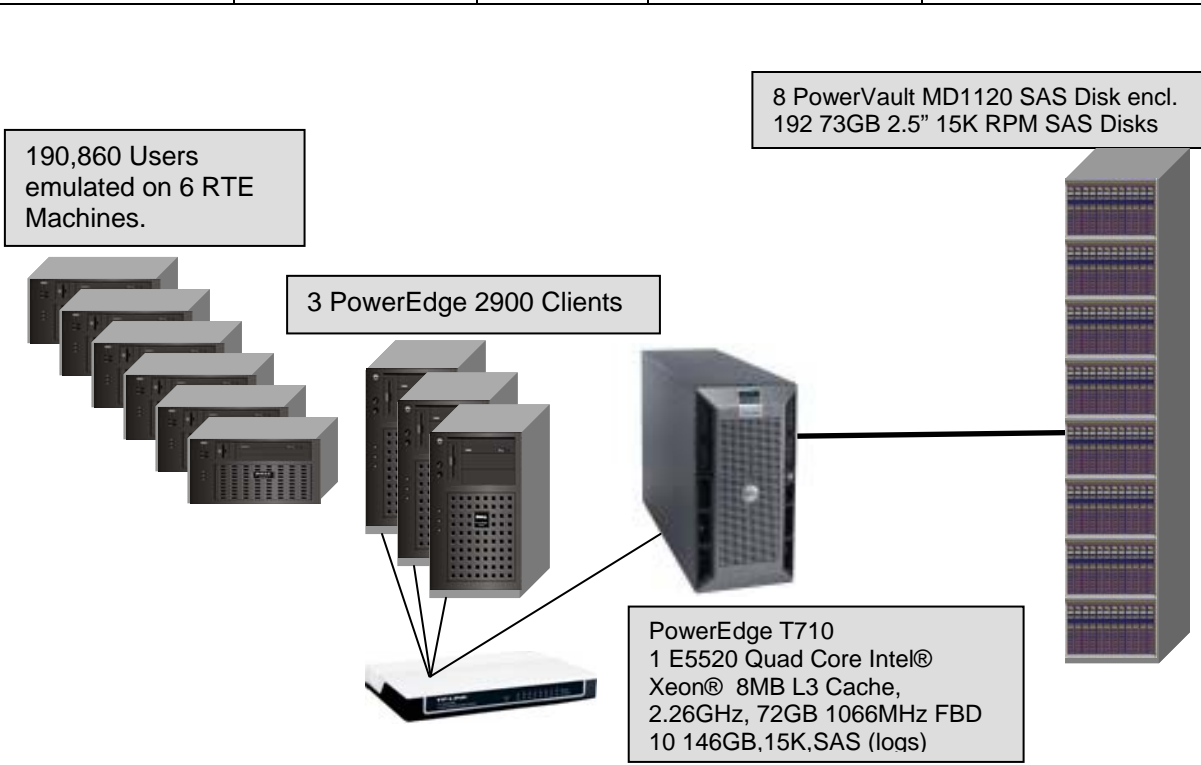




**PowerEdge T710 Server with  
Oracle Database 11g  
Standard Edition One**

TPC-C Rev 5.10.1  
Original Report Date  
**November 18, 2009**

Total System Cost		TPC-C Throughput	Price/Performance	Availability Date
<b>\$119,540</b>		<b>239,392 tpmC</b>	<b>\$.50 / tpmC</b>	November 18, 2009
Processors	Database Manager	OS	Other Software	Number of Users
1/4/4 Quad Core Intel® Xeon® 5520, 8MB Cache, 2.27GHZ 1066MHZ FSB	Oracle Database 11g Standard Edition One	Microsoft Windows Server 2003 Enterprise x64 Edition SP1	Windows Server 2003 Standard Edition w/ COM+ Internet Information Server 6.0 Microsoft Visual C++	190,860



System Component	Server		Each Client	
Processor/Core/Cache	1	1/4/4 Quad Core Intel® Xeon® E5520, 8MB Cache, 2.26GHz, 1066Mhz FSB	1	1/4/4 Intel® Xeon® E5405 w/ 2x6MB L2, 2.0GHz
Memory		72GB 1066 FB-DIMM		4 GB
Disk Controllers	4 1	Dell PERC6/E RAID Integrated PERC6i RAID	1	Onboard SATA
Disk Drives	192 2 10	73GB 2.5" 15K SAS 73GB 2.5" 15K SAS (OS) 146GB 3.5" 15K SAS	1	250GB 7.2K SATA
Total Storage	204	13,824 GB SAS	1	250GB SATA
Other	2  1	Broadcom NetXtreme II GigE ports  CD-ROM	2  1 1	Broadcom on-board ports Dual port Intel Pro 1000 NIC CD-ROM



# PowerEdge T710

## TPC-C 5.10.1 TPC Pricing 1.2

Report Date  
November 18, 2009  
Revision Date  
November 18, 2009  
Availability Date  
November 18, 2009

Description	Part Number	Price Source	Unit Price	Qty	Extended Price	3 yr. Maint. Price
<b>Server Hardware</b>						
T710 Tower Chassis with up to 16 2.5" HDD & 2 Broadcom NICs	224-5945	1	730.00	1	\$730.00	\$540.00
E5520, 2.26Ghz,8M,1066Mhz	317-0259	1	\$579.00	1	\$579.00	
24GB 1066MHz(3x8GB),2R	317-1656	1	2,552.00	1	\$2,552.00	
48GB 1066MHz(6x8GB),2R	317-1655	1	4,992.00	1	\$4,992.00	
73GB,SAS,2.5-inch,10K RPM HD	341-8713	1	239.00	2	\$478.00	
SAS6/i,Integrated	341-9154	1	\$299.00	1	\$299.00	
PERC6/E SAS RAID, 2X4 EXTERNAL	341-5842	1	\$799.00	4	\$3,196.00	
DELL E1705,17 IN,17.0 VIS	320-8083	1	\$168.00	1	\$168.00	
				<b>Subtotal</b>	<b>\$12,994.00</b>	<b>\$540.00</b>
<b>Server Storage</b>						
PV MD1120,RACK,2U,24 BAY,LBZL	223-6716	1	\$3,443.00	8	\$27,544.00	\$13,264.00
Enclosure Management Modules, PowerVault MD1120	341-6492	1	\$0.00	8	\$0.00	
SAS Cable, 1M, MD11200	310-7082	1	\$30.00	8	\$240.00	
146GB,3GBPS,SAS,2.5IN,15K	341-9157	1	\$479.00	10	\$4,790.00	
73GB,SAS,2.5-inch,15K RPM HD	341-6498	1	\$329.00	192	\$63,168.00	
RACK-42U, CUST	900-9997	1	\$541.00	1	\$541.00	
				<b>Subtotal</b>	<b>\$96,283.00</b>	<b>\$13,264.00</b>
<b>Server Software</b>						
Oracle Database 11g Standard Ed One, Per Processor, Unlimited Users, 3 years		2	\$2,900.00	1	\$2,900.00	
Oracle Premium Support, 3 years		2	\$1,276.00	3		\$3,828.00
Windows Server 2003 Enterprise x64 Ed	421-0044	1	\$3,699.00	1	\$3,699.00	
				<b>Subtotal</b>	<b>\$6,599.00</b>	<b>\$3,828.00</b>
<b>Client Hardware</b>						
Dell PowerEdge 2900 E5405,2x6MB,2.00GHz,1333FSB Additional processor	223-4719	1s	553.00	3	\$1,659.00	\$1,476.00
4GB 667MHz(2x2GB),2R	311-7168	1	403.00	3	\$1,209.00	
250G 7K SATA2,3G,3.5,HP	341-3037	1	\$129.00	3	\$387.00	
DUAL,OnBoard,Broadcom,GB,ENET NICs	430-1764	1	\$0.00	3	\$0.00	
				<b>Subtotal</b>	<b>\$3,255.00</b>	<b>\$1,476.00</b>
<b>Client Software</b>						
Windows Server 2003 Standard x64 Server	P73-01675	3	\$999.00	3	\$2,997.00	
Microsoft Visual Studio Standard 2005	127-00012	3	\$250.00	1	\$250.00	
Microsoft Problem Resolution Services		3	\$245.00	1		\$245.00
				<b>Subtotal</b>	<b>\$3,247.00</b>	<b>\$245.00</b>
<b>User Connectivity</b>						
TP-Link 8port 10Base-T, 100Base-T,1000Base-T Switch	B000N9B688	4	\$35.95	3	\$107.85	
4port KVM switch	B001P9C24Y	4	\$17.99	3	\$53.97	
3 ft patch cable	3c5egrnrb	4	\$0.68	6	\$4.08	
				<b>Subtotal</b>	<b>\$165.90</b>	<b>\$0.00</b>
					<b>(\$19,759.27)</b>	<b>(\$2,597.60)</b>

Notes:	<b>Total</b>	<b>\$102,784.63</b>	<b>\$16,755.40</b>
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1S - One or more components of the measured configuration have been substituted in the Priced Configuration. See the FDR for details. *All items from Dell(1) are discounted 17% based on total dollar volume of this config.	<b>Three-Year Cost of Ownership:</b>	<b>\$119,540</b>	<b>USD</b>
Price Source: 1=Dell, 2=Oracle, 3=Microsoft, 4=Amazon.com, NIO = Not Immediately Orderable Pricing may be verified by calling 1-800-BUY-DELL and referencing quote # 515860890 as a complex quote.	<b>TPC-C Throughput:</b>	<b>239,392</b>	<b>tpmC</b>
<b>Audited by Lorna Livingtree, Performance Metrics Inc.</b>	<b>Price/Performance:</b>	<b>\$0.50</b>	<b>tpmC/USD</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 items, please inform the TPC at [pricing@tpc.org](mailto:pricing@tpc.org).

**MQTh**, computed Maximum Qualified Throughput

239,392 tpmC

**Response Times** (in seconds)

	Average	90 <sup>th</sup>	Max
- New order	0.27	0.60	3.92
- Payment	0.24	0.50	2.76
- OrderStatus	0.27	0.60	2.06
- Delivery (Interactive)	0.20	0.44	1.86
- Stocklevel	0.81	1.20	2.69
- Delivery (deferred portion)	0.06	0.11	2.78
- Menu	0.20	0.44	3.53

Response time delay added for emulated components

Menu 0.1

Resp 0.1

**Transaction Mix**, in percent of total transactions

- New-Order	44.92%
- Payment	43.01%
- OrderStatus	4.02%
- Delivery	4.01%
- StockLevel	4.01%

**Keying/Think Times** (in seconds),

	Min		Average		Max	
- New-Order	18.00	0.0	18.01	12.03	18.03	120.32
- Payment	3.00	0.0	3.01	12.03	3.03	120.32
- OrderStatus	2.00	0.0	2.01	10.03	2.02	100.32
- Delivery	2.00	0.0	2.01	5.04	2.02	50.31
- Stocklevel	2.00	0.0	2.01	5.03	2.03	50.31

**Test Duration**

- Ramp-up time	38 minutes
- Measurement interval	120 minutes
- Number of checkpoints	4
- Checkpoint interval	26.03 minutes
- Number of transactions (all types)	63,939,338