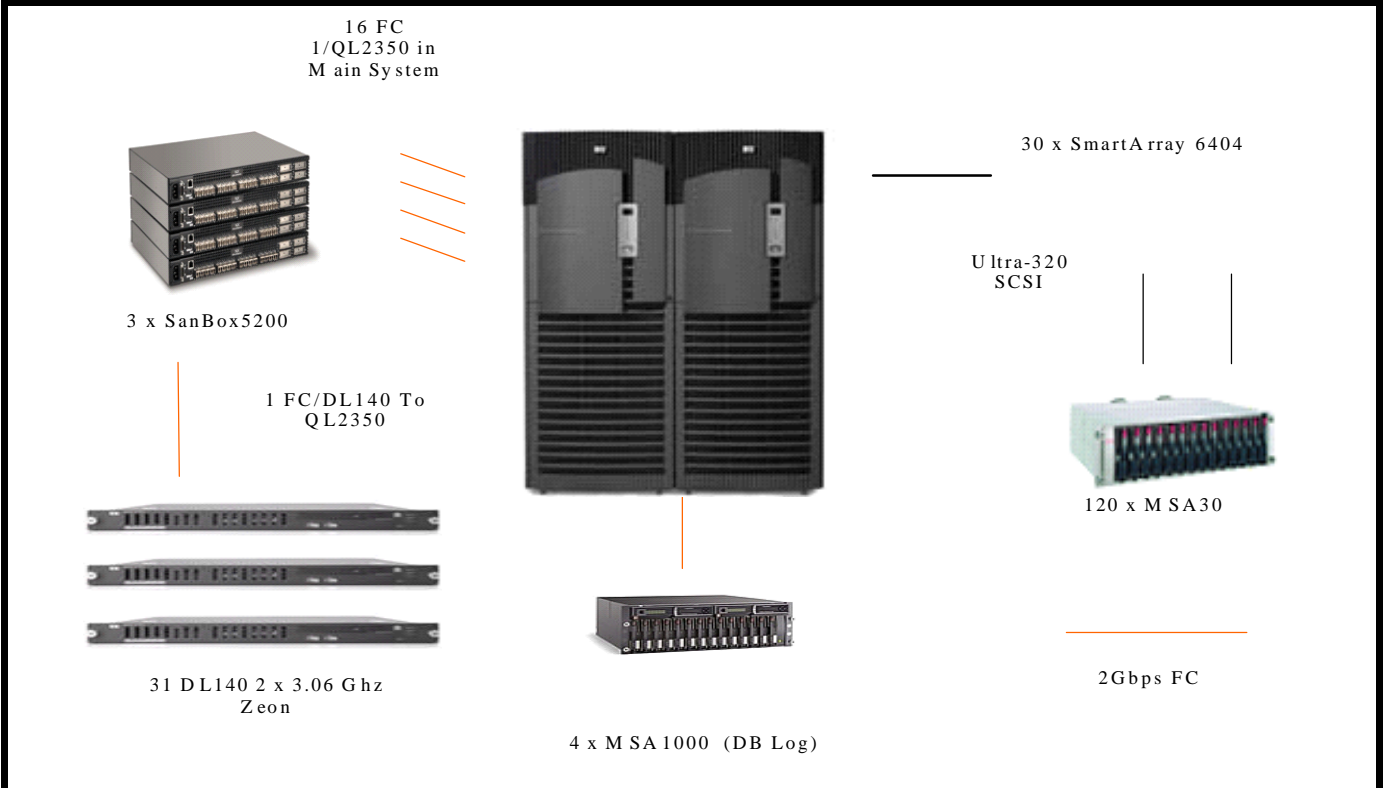





# HP Integrity Superdome

TPC-C Revision  
5.5

<b>Total System Cost</b>	<b>TPC Throughput</b>	<b>Price/Performance</b>	<b>Report Date</b>	<b>Availability Date</b>
\$5,931,555 USD	1,231,433 tpmC	\$4.82 USD per tpmC	November 29, 2005	May 5, 2006
<b>Processors</b>	<b>DataBase Manager</b>	<b>Operating System</b>	<b>Other Software</b>	<b>Number of Users</b>
64 Intel Itanium2 1.6 GHz 9M - Server 62 x Intel Xeon 3.06GHz - Client	Microsoft SQL Server 2005 Enterprise Edition 64-bit Service Pack 1	Microsoft Windows Server 2003, Datacenter Edition (64- bit) SP1	Microsoft Visual C++ Microsoft COM+ Transaction Monitor	993,500



System Components	Server		Each Client	
	Qty	Type	Qty	Type
<b>Processors</b>	64	Intel Itanium 2 9M CPUs at 1.6GHz	2	3.06 GHz Intel Xeon
<b>Cache Memory</b>		9 MB L3 cache		512kbyte L2 Cache
<b>Memory</b>	512	2 Gbyte	2	1048 Mbytes
<b>Disk Controllers</b>	30 1	HP Smart Array 6404 HP Smart Array 6402 (Boot)	1	ATA
<b>Disk Drives</b>	1064 616 56 2 4	HP 36GB 15KRPM HP 18GB 15KRPM HP 146GB, 10krpm U320 HP 36 GB 15KRPM drive for Boot HP 18GB 15KRPM for Utility	1	80 Gbyte disk
<b>Total Storage</b>		54863.28 Gbyte		80 Gbyte
<b>Tape Drives</b>	1	HP TA5300		
<b>Terminals</b>	1	Console Terminal	1	Console Terminal

 <b>Hewlett Packard Company</b>		<b>HP Integrity Superdome Enterprise Server</b>		TPCC Rev 5.5 October 2005 Report Date November 29 2005		
Description	Price Key	Part Numbr	Unit Price	0	Extended Price	3 Yr Maint Price
Superdome left cabinet	1	A5201A, Opt. 429	\$236,716	1	\$236,716	
Superdome right cabinet	1	A5202A, Opt. 429	\$251,200	1	\$251,200	
IPF Superdome Cell Board (sx1000)	1	A6866A	\$19,200	16	\$307,200	
3 Year Svc & Support Price (Hardware and Software)						\$888,659
HP Superdome Itanium2 1.6 GHz 9M 2 CPU	1	AD003A	\$41,800	32	\$1,337,600	
Superdome 128GB Memory Pack	1	AB547A	\$282,880	8	\$2,263,040	
PCI-x I/O chassis	1	A6864A	\$16,805	8	\$134,440	
Core I/O card	1	A6865A	\$1,045	1	\$1,045	
Gig E - TX Adapter	1	A7061A	\$270	1	\$270	
Graphics USB Card	1	A6869A	\$299	1	\$299	
FC-HBA 2GB, 1 Channel (LP1050)	1	AB467A	\$1,520	4	\$6,080	
Qlogic QLA-2350 Fibre-Channel VI Adapter	1	A390975	\$1,256	16	\$20,096	
HP Smart Array Controller 6402 (boot)	1	A9890A	\$1,669	1	\$1,669	
HP Smart Array Controller 6404 (incl boot)	1	A9891A	\$2,549	30	\$76,470	
36GB, 15krpm Ultra3 Wide disk (Incl Boot)	1	286776-B22	\$299	1686	\$504,114	
36GB, 15krpm Ultra3 Wide disk (10% Spares)	1	286776-B22	\$299	169	\$50,531	
Storageworks MSA30 SB (incl boot)	1	302969-B21	\$2,829	121	\$342,309	
Storageworks MSA30 SB (10% Spares)	1	302969-B21	\$2,829	13	\$36,777	
HP9000 Standard Rack System E41	1	A4902A	\$1,910	14	\$26,740	
HP Power Distribution Unit 120-240V	1	A5137AZ	\$145	27	\$3,915	
Modular Storage Array 1000	1	201723-B22	\$6,995	4	\$27,980	
MSA1000 controller	1	218231-B22	\$4,290	4	\$17,160	
Storage MSA1000 Support 3yrs 24x7 4hr incl disks	1	HA110A3 #6FG	\$3,222	4		\$12,888
146GB, 10krpm disk	1	286716-B22	\$499	56	\$27,944	
5M LC to LC Cable Kit	1	221692-B22	\$82	4	\$328	
TA5300 Enclosure for DAT tape	1	C7508AZ	\$729	1	\$729	
DVD Rom drive	1	Q1592A	\$649	1	\$649	
DAT Tape	1	C7497B	\$1,049	1	\$1,049	
sx1000 Superdome SMS, rack	1	A9802B	\$6,500	1	\$6,500	
<b>Server Subtotal</b>					<b>\$5,682,850</b>	<b>\$901,547</b>
Microsoft Windows Server 2003, Datacenter Edition (64-bit)						
SP1	1	T2372A opt064	\$128,000	1	\$128,000	
Microsoft SQL Server 2005 Enterprise Edition 64-bit Service Pack 2	2	810-03134	\$23,432	64	\$1,499,648	\$245
<b>Server Software Subtotal</b>					<b>\$1,627,648</b>	<b>\$245</b>
DL140 Dual 3.06GHz Xeon 1GB 80GB ATA	1	356533-B21	\$1,799	31	\$55,769	
HP 3 Yr. 4h 24x7 ProLiant DL140 Hardware Support	1	U9510E	\$419	12		\$5,028
1GB PC2100 ECC DDR	1	351109-B21	\$419	31	\$12,989	
HP Mouse	1	P5304M	\$28	1	\$28	
HP Enhanced Keyboard (USB/PS2)	1	DC852A#ABA	\$29	1	\$29	
S7540 17in CRT Monitor	1	PF997AA	\$149	1	\$149	
Startech 32port KVM switch	4	5150	\$1,599	1	\$1,599	
KVM Cable	4	5250	\$9	31	\$279	
Qlogic QLA-2350 FC VI Adapter (incl 10% spares)	1	A390975	\$1,256	35	\$43,960	
5M LC to LC Cable Kit	1	221692-B22	\$82	48	\$3,936	
<b>Client Subtotal</b>					<b>\$118,738</b>	<b>\$5,028</b>
Microsoft Windows 2003 Server	2	P73-00295	\$719	31	\$22,289	
Microsoft Visual C++ Standard	2	254-00170	\$109	1	\$109	
Microsoft Problem Resolution	2		\$245	1		\$245
<b>Client Software Subtotal</b>					<b>\$22,398</b>	<b>\$245</b>
Qlogic SANBox 5200 16 2GB Port (incl spares)	3	SB5200-16A	\$4,371	3	\$13,113	
SANbox 5200 Prime 7x24x4 Maint. Upgrade, 1-Year	3	Prime-SB5200	\$1,327	9		\$11,943
Finisar 2GB SFP (incl 10% spares)	3	FTRJ8519P1BNL	\$84	52	\$4,368	
<b>Connectivity Subtotal</b>					<b>\$17,481</b>	<b>\$11,943</b>
HP's Large Configuration Discount *	<b>* Discounts:</b>				<b>-\$2,098,024</b>	<b>-\$358,544</b>
<b>Total:</b>					<b>\$5,371,091</b>	<b>\$560,464</b>
Price Key: 1-HP, 2-Microsoft, 3-SANMarketplace.com 4 - KVMs.com		<b>3 year cost of ownership:</b>			<b>\$5,931,555</b>	
		tpmC:			1,231,433	
* A 35.94% discount was based on the overall value of the specific components from HP (Price Key 1) in this single quotation. Discounts for similarly sized configurations will be similar to those quoted here, but may vary based on the components in the configuration		<b>\$/tpmC:</b>			<b>\$4.82</b>	

## Numerical Quantities Summary for HP Integrity Superdome

**MQTH, Computed Maximum Qualified Throughput**

**1231433 tpmC**

### Response Times (in seconds)

	90th %-ile	Maximum	Average
New-Order	0.92s	13.29s	0.40s
Payment	0.89s	12.23s	0.37s
Order-Status	0.95s	11.79s	0.42s
Delivery (interactive portion)	0.42s	10.65s	0.20s
Delivery (deferred portion)	0.19s	10.72s	0.14s
Stock-Level	1.07s	12.04s	0.52s
Menu	0.42s	10.65s	0.20s

Response time delay added for emulated components 0.1 seconds

### Transaction Mix, in percent of total transactions

New-Order	44.97%
Payment	43.01%
Delivery	4.01%
Stock-Level	4.01%
Order-Status	4.01%

### Keying/Think Times

	Keying Time			Think Time		
	Min	Avg	Max	Min	Avg	Max
New-Order	18.00s	18.01s	20.78s	0.00s	12.07s	121.28s
Payment	3.00s	3.02s	5.28s	0.00s	12.06s	120.91s
Order-Status	3.00s	3.02s	5.23s	0.00s	10.06s	100.53s
Delivery (interactive)	3.00s	3.02s	5.17s	0.00s	5.07s	50.53s
Stock-Level	3.00s	3.02s	5.27s	0.00s	5.06s	50.53s

### Test Duration

Ramp up time	110 minutes
Measurement interval	120 minutes
Transactions during measurement interval	341819601
Ramp down time	5 minutes

### Checkpointing

Number of checkpoints in measurement interval	4
Checkpoint Interval	28 minutes