

Numerical Quantities Summary for SPARCcenter 2000E

MQTH, Computed Maximum Qualified Throughput **5124.21 tpmC**
% throughput difference, reported & reproducibility runs < 1%

| Response Times (in secs) | 90th Percentile | Average | Maximum |
|---------------------------------|------------------------|----------------|----------------|
| Menu | 0.25 | 0.02 | 6.37 |
| New-Order | 1.00 | 0.63 | 37.44 |
| Payment | 1.00 | 0.46 | 11.36 |
| Order-Status | 0.60 | 0.30 | 4.63 |
| Delivery(interactive) | 0.02 | 0.01 | 1.35 |
| Delivery(deferred) | 3.00 | 1.35 | 12.00 |
| Stock-level | 3.00 | 1.02 | 9.50 |

Transaction Mix, in percent of total transactions

| | |
|--------------|--------|
| New-Order | 44.48% |
| Payment | 43.33% |
| Order-Status | 4.07% |
| Delivery | 4.12% |
| Stock-level | 4.01% |

| Keying/Think Times (in secs) | Average. | Min. | Maximum |
|-------------------------------------|-----------------|-------------|----------------|
| New-Order | 18.02/12.24 | 18.0/0 | 24.76/122.0 |
| Payment | 3.02/12.19 | 3.0/0 | 9.73/122.0 |
| Order-Status | 2.01/10.28 | 2.0/0 | 8.74/102.0 |
| Delivery | 2.02/5.27 | 2.0/0 | 8.50/52.0 |
| Stock-level | 2.02/5.15 | 2.0/0 | 8.63/50.77 |

Test Duration

| | |
|---|------------|
| Ramp-up time | 20 minutes |
| Measurement Interval | 28 minutes |
| Number of checkpoints | 1 |
| Checkpoint Interval | 28 minutes |
| Number of transactions (all types) completed in measurement interval | 322586 |

Sun Microsystems

SPARCcenter 2000E C/S w/5 Front-Ends

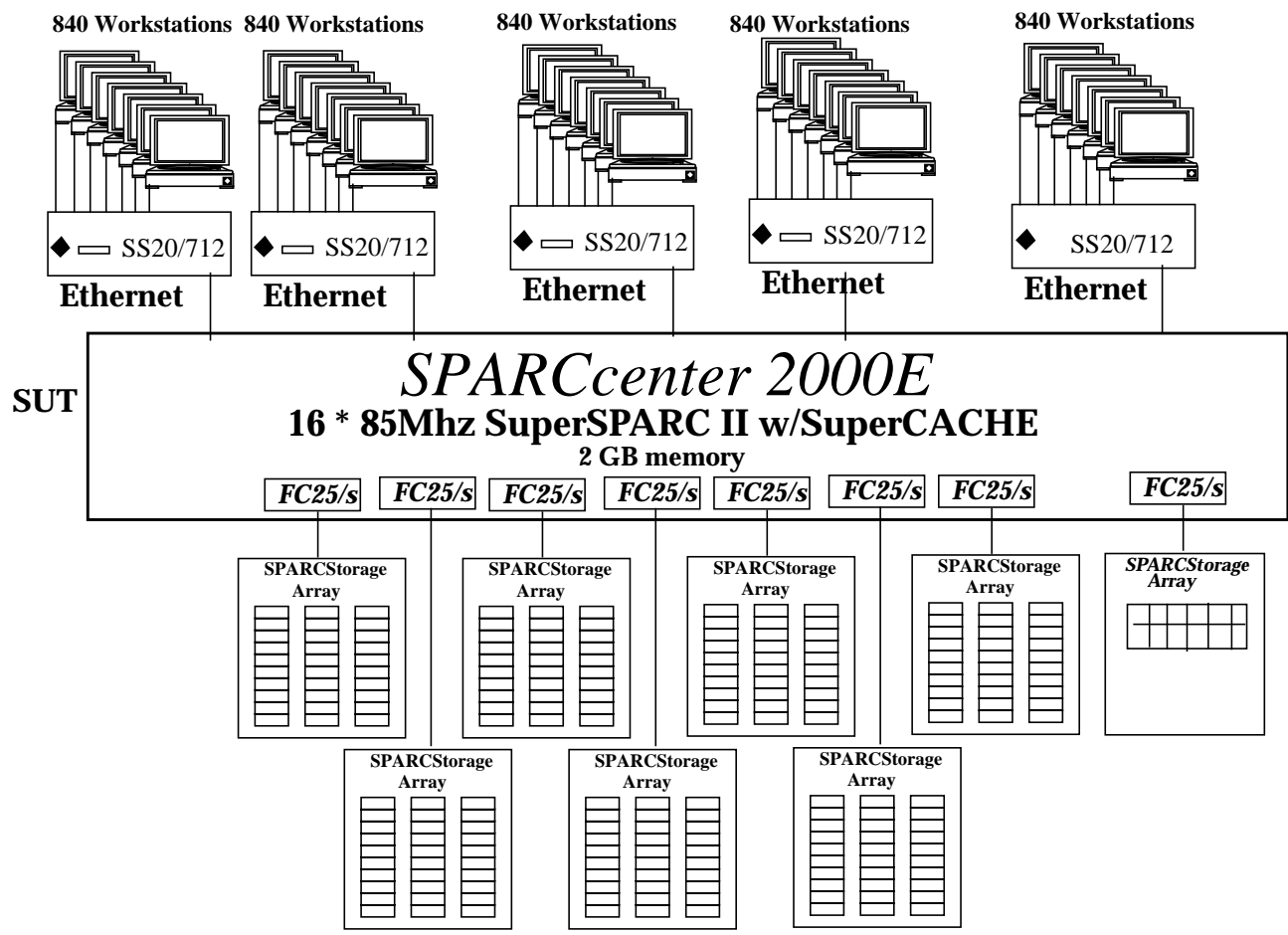
TPC-C

Report Date: 12/13/95

| Order Number | Description | Quantity | Unit Price | Extended Price | Maint. rate/unit | 5 yr total Maint. |
|---|--|----------|------------|-------------------|------------------|---------------------|
| Hardware | | | | | | |
| S2000E2V3 | SparcServer 2000E | 1 | 34992.00 | 34992.00 | 1120 | 60480 |
| X2322A | Sys board 2*85Mhz SuperSPARC | 8 | 35640.00 | 285120.00 | 80 | 34560 |
| X173A | 256MB memory Option | 8 | 10368.00 | 82944.00 | | |
| X1058A | SBus Quad Ethernet Controller | 2 | 644.76 | 1289.52 | | |
| X834A | 10 GB Tape Backup | 1 | 1699.00 | 1699.00 | | |
| X770A | SSA Model 102 w/ 30 2.1 GB Disks | 7 | 37389.60 | 261727.20 | 120 | 45360 |
| X1057A | FibreChannel/SBus Host Adapter | 8 | 1036.80 | 8294.40 | | |
| X768A | SSA Model 102 w/6 2.1GB Disks | 1 | 15616.80 | 15616.80 | 120 | 6480 |
| X766A | 6 SSA 2.1GB Disks | 1 | 5313.60 | 5313.60 | | |
| SPARCcenter 2000E Total: | | | | 696,996.52 | | 146,880.00 |
| Front-End System #1 - #5 | | | | | | |
| S20S-712-64-P98 | SparcServer 20 Model 712 (64MB RAM + 2 x 2.1GB SCSI Disk) | 5 | 16196.76 | 80983.80 | 120 | 32400 |
| X1058A | SBus Quad Ethernet Controler | 5 | 644.76 | 3223.80 | | |
| X164P | 64 MB memory expansion SIMM | 35 | 2527.20 | 88452.00 | | |
| SPARCserver 20 Total: | | | | 172,659.60 | | 32,400.00 |
| Terminals and Connectivity | | | | | | |
| SX-WY35-G-G35 | Wyse 35 terminal for console | 6 | 295.00 | 1770.00 | | |
| DEH1477 | Ultra Slimline 24 port Hub | 194 | 274.00 | 53156.00 | | |
| Terminals and Connectivity Total: | | | | 54,926.00 | | 0.00 |
| ALL HARDWARE SUBTOTALS: | | | | 924,582.12 | | 179,280.00 |
| Software | | | | | | |
| Sun | | | | | | |
| SOLS-C | Solaris Software on CD-ROM | 1 | 100 | 100 | | |
| CC-3.0.1-S | SPARCCompiler Single User License | 1 | 995 | 995 | 20 | 1,140.00 |
| Sun Software Total: | | | | 1,095.00 | | 1,140.00 |
| Oracle | | | | | | |
| | Oracle RDBMS & SQL*Net | 1 | 201600 | 201600 | 36288 | 181440.00 |
| DBMS Software Totals: | | | | 201,600.00 | | 181,440.00 |
| Independent Technologies Inc. | | | | | | |
| SPARCserver 20's | Tuxedo 4.2.1 | 5 | 15000 | 75000 | 2250 | 56,250.00 |
| ALL SOFTWARE SUBTOTALS: | | | | 277,695.00 | | 238,830.00 |
| Sun maintenance rate/unit is monthly rate and Oracle & Tuxedo maintenance rate/unit is yearly rate H/W Maintenance SPARCcentre 2000E 1 YR warranty (maintenance at 50%) & 4 YR Maintenance | | | | | | |
| Discount | | | | | | |
| Sun Prepaid Maintenance Discount (Hardware) | | 15% | | | | -26,892.00 |
| Tuxedo Volume Disoucnt | | 5% | | | | -6562.50 |
| Oracle Dollar Volume Discount | | 28% | | | | -76608.00 |
| TOTAL HARDWARE AND SOFTWARE COST (5 YR) | | | | | | 1,510,324.62 |
| Price Per TpmC | | | | | | 294.74 |

| | | | |
|-------------------------|---------------------------|-----------------------|----------------------|
| Sun Microsystems | SPARCcenter 2000E | | TPC-C Rev 3.0 |
| Oracle Corp. | C/S w/5 Front-Ends | | Report Date:12/13/95 |
| Total System Cost | TPC-C Throughput | Price/Performance | Availability Date |
| \$1,510,324.62 | 5124.21tpmC | \$295 per tpmC | 28 Feb 1996 |

| | | | | |
|----------------------------|------------------------------------|-------------------------|-----------------------|------------------------|
| Processors | Database Manager | Operating System | Other Software | Number of Users |
| 16 SuperSPARC II 85 MHz | Oracle7 Server V 7.3.2 RDBMS | Solaris 2.5 | Tuxedo Ver. 4.2.1 | 4200 |



| System Components | Server System | Front End Systems |
|--------------------------|------------------------------|-----------------------------------|
| Database Nodes: | 1 SPARCcenter 2000E | 5 SPARCserver 20 Model 712's |
| Processors | 16x85 MHz SuperSPARC II RISC | 2x75 MHz SuperSPARC II each |
| Cache memory | 16KB D, 20KB I, 2MB External | 16KB D, 20KB I, 1MB External each |
| Main memory | 2 GB | 512 MB each |
| Disk controllers | 8 FC25/S | 1xSCSI-2 each |
| Disk Drives | 222 x 2.1 GB SCSI | 2x2.1 GB each |
| Total Disk Storage | 466 GB | 4.2 GB |
| Terminals | 1 Console | 5 Consoles |
| 10 BaseT Hubs | None | 194 x 24-Port each |