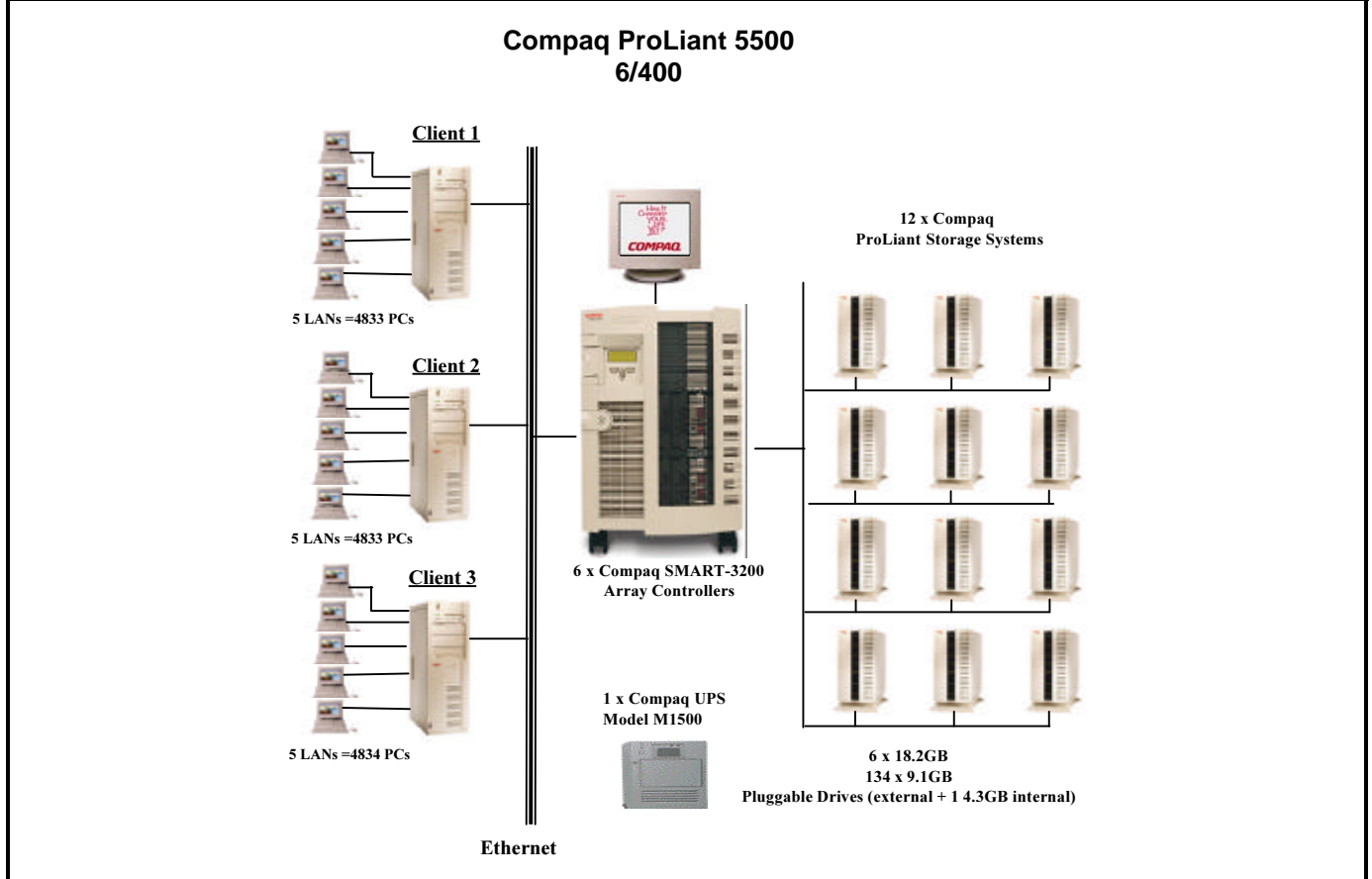


|                             |  |   |  |  |  |   |  |              |  |
|-----------------------------|--|---|--|--|--|---|--|--------------|--|
| Compaq Computer Corporation |  | ProLiant 5500-6/400<br>C/S with 3 ProLiant 1600 |  | TPC-C Rev. 3.3<br>Report Date: Sep 11,1998 |  |   |  |              |  |
| Total System Cost           |  | TPC-C Throughput                                |  | Price/Performance                          |  | Availability Date   |  |              |  |
| <b>\$384,727</b>            |  | <b>17715.90</b>                                 |  | <b>\$21.71</b>                             |  | <b>Dec 26, 1998</b>   |  |              |  |
| Processors                  |  | Database  |  | Operating System                           |  | Other Software  |  | Number Users |  |
| 4 Pentium II Xeon 400 MHz   |  | Microsoft SQL Server 7.0 Enterprise Ed.         |  | Windows NT 4.0 Enterprise Edition          |  | NonStopTuxedo 1.3<br>Microsoft Visual C++<br>MKS Toolkit for NT |  | <b>14500</b> |  |



| System Components | Server   |                                     | Each Client |                                  |
|-------------------|----------|-------------------------------------|-------------|----------------------------------|
|                   | Quantity | Description                         | Quantity    | Description                      |
| Processor         | 4        | 400MHz Pentium II Xeon w/ 1MB Cache | 2           | 400MhzPentium II w/ 512K cache   |
| Memory            | 3        | 1024MB                              | 1           | 256MB                            |
|                   | 4        | 32MB                                |             |                                  |
| Disk Controllers  | 6        | SMART SCSI Array Controller 3200    | 1           | Integrated Ultra SCSI Controller |
| Disk Drives       | 134      | 9.1GB SCSI Drive                    | 1           | 4.3GB SCSI Drive                 |
|                   | 6        | 18.2GB SCSI Drive                   |             |                                  |
|                   | 1        | 4.3GB SCSI Drive                    |             |                                  |
| Total Storage     |          | 1.162 TeraBytes                     |             |                                  |
| Tape Drives       | 1        | 4/16 TurboDAT                       |             |                                  |

| Compaq Computer Corporation  | ProLiant 5500- 6/400 |             | TPC - C REV 3.3.3 |      |   |                    |
|--|----------------------|-------------|-------------------|------|---|--------------------|
|  | Client/ Server       |             | Report Date :     |      | 11-Sep-98                                     |                    |
| Description  | Part Number          | Third Party | Unit Price        | Qty  | Extended Price                                | 5 yr. Maint. Price |
| <b>Server Hardware</b>   |                      |             |                   |      |   |                    |
| <b>Brand Pricing</b>   |                      |             |                   |      |   |                    |
| Pro Liant 5500-6/400-M 1, 128MB RAM<br>Pentium II Xeon/400MHz - 512KB Cache<br>10/100 Ethernet Controller<br>2 x Integrated Fast-SC SI-2 Controller<br>CD-ROM  | 352300-001           |             | 7,935             | 1    | 7,935   |                    |
| Pro Liant Warranty Upgrade   | 276535-000           |             | 1,150             | 1    |   | 1,150              |
| On site 5x8 4hr Service Upgrade  |                      |             |                   |      |   | 10,959             |
| ProLiant 6/400-1024K Processor   | 312286-B21           |             | 4,830             | 4    | 19,320  |                    |
| 1024-MB Memory Expansion Kit   | 241774-B21           |             | 6,254             | 3    | 18,761  |                    |
| Compaq SMART Array Controller 3200   | 295643-B21           |             | 2,250             | 6    | 13,500  |                    |
| Pro Liant Storage System -UE   | 348700-001           |             | 2,475             | 12   | 29,700  |                    |
| Pro Liant Storage Warranty Upgrade   | 276537-001           |             | 430               | 12   |   | 5,160              |
| 4.3 GB Pluggable Fast-SC SI-2 Drive  | 146742-005           |             | 574               | 1    | 574   |                    |
| 9.1 GB Pluggable SC SI-3 Drive - 7.2K RPM  | 313706-B21           |             | 976               | 110  | 107,399                                       |                    |
| 9.1 GB Pluggable SC SI-3 Drive - 10K RPM   | 336357-B21           |             | 1,172             | 24   | 28,124  |                    |
| 18.2 GB Pluggable SC SI-3 Drive - 10K RPM  | 336358-B21           |             | 2,483             | 6    | 14,897  |                    |
| Compaq VGA V55 - 15" Color Monitor   | 308006-001           |             | 246               | 1    | 246   |                    |
| 4/8GB DAT Drive  | 295353-B21           |             | 803               | 1    | 803   |                    |
| Compaq Rack Mount UPS M1500  | 242704-001           |             | 1,058             | 1    | 1,058   |                    |
| <b>Subtotal</b>  |                      |             |                   |      | <b>242,317</b>                                | <b>17,269</b>      |
| <b>Server Software</b>   |                      |             |                   |      |   |                    |
| Microsoft SQL Server 7.0 Enterprise  |                      | Microsoft   | 28,999            | 1    | 28,999  | 10,475             |
| MKS Toolkit for NT   |                      |             | 499               | 1    | 499   | 5 Yr WTY           |
| Microsoft Windows NT Enterprise v. 4.0   |                      | Microsoft   | 3,999             | 1    | 3,999   | Incl Above         |
| <b>Subtotal</b>  |                      |             |                   |      | <b>33,497</b>                                 | <b>10,475</b>      |
| <b>Client Hardware</b>   |                      |             |                   |      |   |                    |
| Pro Liant 1600 6/400 - 64MB,100TX Nic , 4.3G   | 315570-001           |             | 2,961             | 3    | 8,884   |                    |
| Pro Liant Warranty Upgrade   | 276535-000           |             | 1,150             | 3    |   | 3,450              |
| Onsite 5x8 4 Hr Response Maintenance   |                      |             |                   |      |   | 2,477              |
| Pro Liant 1600 6/400 Processor Option Kit  | 313612-B21           |             | 1,725             | 3    | 5,175   |                    |
| 64-Megabyte SD DIMM Kit  | 313614-B21           |             | 419               | 1    | 419   |                    |
| 128-Megabyte SD DIMM Kit   | 313615-B21           |             | 889               | 4    | 3,556   |                    |
| Netelligent Dual Port 10/100 PC INIC   | 242559-001           |             | 270               | 6    | 1,622   |                    |
| Netelligent 10/100 UTP PC INIC   | 169845-001           |             | 83                | 3    | 248   |                    |
| Compaq VGA V55 - 15" Color Monitor   | 308006-001           |             | 246               | 3    | 738   |                    |
| <b>Subtotal</b>  |                      |             |                   |      | <b>20,641</b>                                 | <b>5,927</b>       |
| <b>Client Software</b>   |                      |             |                   |      |   |                    |
| Microsoft Windows NT Server v. 4.0   |                      | Microsoft   | 809               | 3    | 2,427   | Incl. Above        |
| Microsoft Visual C++   |                      | Microsoft   | 499               | 1    | 499   | Incl. Above        |
| Compaq Non-Stop Tuxedo CS for NT- 1.3  |                      |             | 1,950             | 3    | 5,850   | 480                |
| <b>Subtotal</b>  |                      |             |                   |      | <b>8,776</b>                                  | <b>480</b>         |
| <b>User Connectivity</b>   |                      |             |                   |      |   |                    |
| Compaq 100Base-T Workgroup Hub - 4-Pc<br>8-port 10Base T hub   | 348450-001           |             | 190               | 3    | 569   | See Note 4         |
|  |                      |             | 34.00             | 2013 | 68,442  | See Note 4         |
| <b>Subtotal</b>  |                      |             |                   |      | <b>69,011</b>                                 | <b>0</b>           |
| <b>Large Purchase and Cash discount</b>  |                      |             |                   |      | <b>9.0%</b>                                   | <b>(\$23,666)</b>  |
| <b>Total</b>   |                      |             |                   |      | <b>\$350,576</b>                              | <b>\$34,151</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 |                      |             |                   |      | <b>Five-Year Cost of Ownership: \$384,727</b> |                    |
|  |                      |             |                   |      | <b>tpm C Rating: 17715.90</b>                 |                    |

## Numerical Quantities Summary

**MQTH, Computed Maximum Qualified Throughput**

**17715.90 tpmC**

% throughput difference, reported & reproducibility runs

0.99%

### Response Times (in seconds)

|                                | Average | 90%  | Maximum |
|--------------------------------|---------|------|---------|
| New-Order                      | 0.70    | 1.22 | 21.02   |
| Payment                        | 0.54    | 1.05 | 20.21   |
| Order-Status                   | 0.59    | 1.11 | 17.77   |
| Delivery (interactive portion) | 0.11    | 0.12 | 15.58   |
| Delivery (deferred portion)    | 0.50    | 0.75 | 3.34    |
| Stock-Level                    | 2.74    | 3.47 | 16.17   |
| Menu                           | 0.11    | 0.12 | 3.87    |

### Transaction Mix, in percent of total transaction

|              |        |
|--------------|--------|
| New-Order    | 44.75% |
| Payment      | 43.05% |
| Order-Status | 4.07%  |
| Delivery     | 4.08%  |
| Stock-Level  | 4.04%  |

### Emulation Delay (in seconds)

|                        | Resp.Time | Menu |
|------------------------|-----------|------|
| New-Order              | N/A       | N/A  |
| Payment                | N/A       | N/A  |
| Order-Status           | N/A       | N/A  |
| Delivery (interactive) | N/A       | N/A  |
| Stock-Level            | N/A       | N/A  |

### Keying/Think Times (in seconds)

|                        | Min.       | Average     | Max.         |
|------------------------|------------|-------------|--------------|
| New-Order              | 18.00/0.00 | 18.00/12.21 | 18.23/122.31 |
| Payment                | 3.00/0.00  | 3.00/12.22  | 3.14/122.30  |
| Order-Status           | 2.00/0.00  | 2.01/10.20  | 2.11/101.9   |
| Delivery (interactive) | 2.0/0.00   | 2.01/5.16   | 2.10/50.90   |
| Stock-Level            | 2.00/0.00  | 2.01/5.15   | 2.10/50.90   |

### Test Duration

|  |            |
|--|------------|
| Ramp-up time   | 37 minutes |
| Measurement interval   | 30 minutes |
| Transactions (all types) completed during measurement interval | 1181947    |
| Ramp down time   | 19 minutes |

### Checkpointing

|                       |            |
|-----------------------|------------|
| Number of checkpoints | 1          |
| Checkpoint interval   | 30 minutes |