# IBM @server xSeries 370 with Microsoft SQL Server 2000

## System Component

<table>
<thead>
<tr>
<th>System Component</th>
<th>Qty</th>
<th>Database Servers</th>
<th>Qty</th>
<th>DTC Servers</th>
<th>Qty</th>
<th>Database Servers</th>
<th>Qty</th>
<th>DTC Servers</th>
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<td>xSeries 370</td>
<td>8</td>
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<tr>
<td>Memory</td>
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<td>4</td>
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</table>

## System Details

- **Processors**: Intel® Pentium® III Xeon™ 900MHz, 2MB L2 Cache
- **Memory**: 512MB ECC SDRAM, 16GB (10000 rpm)
- **Disk Drives**: 9.1GB (10000 rpm)
- **Total Storage**: 116TB (57.99TB online)
- **Interconnect**: Giganet cLAN-1000 Host Adapter

## Other Components

- **Operating System**: Microsoft Windows® 2000 Datacenter Server
- **Database Server**: Microsoft SQL Server 2000
- **Microsoft COM+**: Microsoft COM+
- **Microsoft Visual C++**: Microsoft Visual C++
- **Microsoft SQL Server 2000**: Microsoft SQL Server 2000
- **xSeries 370**: IBM xSeries 370
- **Netfinity 5100**: IBM Netfinity 5100
- **EXP300 Storage**: IBM EXP300 Storage
- **Giganet cLAN-5300 Switch**: Giganet cLAN-5300 Switch
- **Cisco Catalyst 6500 10/100 Ethernet Switch**: Cisco Catalyst 6500 10/100 Ethernet Switch
- **Giganet cLAN-1000 Host Adapter**: Giganet cLAN-1000 Host Adapter
- **Giganet cLAN-5300 Switch**: Giganet cLAN-5300 Switch

## Report Details

- **Date**: April 10, 2001
- **Availability Date**: May 31, 2001
- **TPC-C Rev. 5.0**: Upgrade from Rev. 3.5
- **TPC-C Throughput**: 688,220.90 tpmC
- **Price/Performance**: $22.58/tpmC
- **Total System Cost**: $15,543,346

## TPC-C Throughput

<table>
<thead>
<tr>
<th>Report Date: April 10, 2001</th>
<th>(Original: March 23, 2001)</th>
<th>Number of Users</th>
<th>System Component</th>
<th>Qty</th>
<th>Availability Date</th>
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<tr>
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<td>w/2MB L2 Cache</td>
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<td>128MB</td>
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<td>18.2GB (10000 rpm)</td>
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<td>116TB (57.99TB online)</td>
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## Conclusion

The IBM @server xSeries 370 with Microsoft SQL Server 2000 system is designed to handle a high workload of 1,000 users per LAN segment, ensuring smooth operation even under heavy load conditions.
The document contains a detailed list of hardware and software components, along with their prices and specifications. It includes descriptions of various server hardware, client hardware, storage hardware, server software, client software, and user connectivity. The report dates to April 10, 2001, and is associated with the TPC-C Rev. 5.0 benchmark, which has been upgraded from TPC-C Rev. 3.5.

The pricing includes discounts and notes about the standard 3-year warranty upgrades to 7x24, 4-hour response. The total cost for the components is $14,856,741, with a discount of $87,325 applied. The five-year cost of ownership is $15,543,346. The tpmC rating is 688,220.90, with a net price of $22.58 per tpmC.

Notes include additional details such as large volume discounts and changes to the standard 3-year warranty. The document also provides a subtotal for various categories such as server hardware, client hardware, storage hardware, server software, client software, and user connectivity. The report is attributed to Brad Askins of InfoSizing, Inc.

Price policies reflect actual prices a customer would pay for a one-time purchase of the stated components, with no individual negotiated discounts or special prices based on past or future purchases. All discounts are standard pricing policies for the listed components. The complete details can be found in the pricing sections of the TPC benchmark specification, and if any stated prices are not available, the customer should inform the TPC at pricing@tpc.org.
<table>
<thead>
<tr>
<th>Numerical Quantities Summary</th>
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<tbody>
<tr>
<td>MQTh, Computed Maximum Qualified Throughput:</td>
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<tr>
<td>% throughput difference, reported and reproducibility runs: 688,220.90 tpmC 0.1108 %</td>
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</table>

<table>
<thead>
<tr>
<th>Response Times (in seconds)</th>
<th>90%</th>
<th>Average</th>
<th>Maximum</th>
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<tbody>
<tr>
<td>New-Order</td>
<td>1.79</td>
<td>1.03</td>
<td>438.85</td>
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<td>Payment</td>
<td>2.58</td>
<td>1.16</td>
<td>147.16</td>
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<td>Delivery (Interactive)</td>
<td>1.01</td>
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<td>Menu</td>
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<table>
<thead>
<tr>
<th>Transaction Mix (in percent of total transactions)</th>
<th>Total Occurrences</th>
<th>Percent</th>
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<table>
<thead>
<tr>
<th>Emulation Delay (in seconds)</th>
<th>Response Time</th>
<th>Menu</th>
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<tr>
<td>Payment</td>
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<td>Delivery</td>
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<tr>
<td>Stock-Level</td>
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</table>

<table>
<thead>
<tr>
<th>Keying/Think Times (in seconds)</th>
<th>Minimum</th>
<th>Average</th>
<th>Maximum</th>
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</thead>
<tbody>
<tr>
<td>New-Order</td>
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<td>18.14 / 120.61</td>
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<td>Payment</td>
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<tr>
<td>Delivery</td>
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<td>2.13 / 50.50</td>
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<td>Stock Level</td>
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<td>Order Status</td>
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<td>2.01 / 10.04</td>
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<table>
<thead>
<tr>
<th>Test Duration</th>
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<tr>
<td>Ramp-up time</td>
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<td>Measurement interval</td>
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<tr>
<td>Number of transactions (all types) completed in measurement interval</td>
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<td>Ramp-down time</td>
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<tr>
<td>Number of checkpoints in measurement interval</td>
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<td>Checkpoint interval</td>
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