**Machbase 5.7.3**

<table>
<thead>
<tr>
<th>Total System Cost</th>
<th>TPCx-IoT Performance Metric</th>
<th>Price/Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>$344,548 USD</td>
<td>1,043,276.60 IoTps</td>
<td>$0.34 USD/IoTps</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Servers</th>
<th>Operating System</th>
<th>Other Software</th>
<th>Availability Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>KTNF KR580S1</td>
<td>CentOS Linux 7.6.1810</td>
<td>None</td>
<td>Currently Available</td>
</tr>
</tbody>
</table>

**System Under Test Configuration Overview**

**Master Node**
- 1 x KTNF KR580S1
  - 2 x Intel Xeon Gold 6140 2.30GHz
  - 12 x 64GB (768GB) Memory
  - 2 x 600GB SAS HDD
  - 1 x 25Gb 2-Port Ethernet Adaptor

**Data Node**
- 2 x KTNF KR580S1
  - 2 x Intel Xeon Gold 6140 2.30GHz
  - 4 x 64GB (256GB) Memory
  - 2 x 600GB SAS HDD
  - 2 x 1.6TB NVMe SSD
  - 1 x 25Gb 2-Port Ethernet Adaptor

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**Total Servers:** 3x KR580S1  
**Total Processors/Cores/Threads:** 6/108/216

**Server Configuration:**
- **Processor:**
  - Master Node: 1x KR580S1 (Master): 2x Intel® Xeon® Gold 6140 (2.30GHz, 18-core, 24.75 MB L3)
  - Memory: 768 GiB
  - Storage Controller: Broadcom MEGARAID SAS 9361-8i
  - Storage Device: 2x 600 GB 10.5K RPM SAS HDD
  - Network Controller: Mellanox MCX4121A-ACAT 25G
  - Connectivity: Mellanox MSN2010-CB2F 10/25GbE and 100GbE Switch

**Total Rack Units:**
- (3x KTNF KR580S1) + (1x MSN201-CB2F) = (3x2) + (1x1) = 7 RU

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**Report Date:** Nov. 11, 2019

**TPCx-IoT Pricing:** 2.4.0

**TPC Pricing:** 2.0.4
**TPCx-IoT 1.0.4**

**Report Date**  
November 11, 2019

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**EXECUTIVE SUMMARY**

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**Machbase 5.7.3**

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**TPC Pricing**  
2.4.0

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**Three-Year Cost of Ownership:**  
$344,548

**IoTps:**  
1,043,276.60

**USD/IoTps:**  
$0.34

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**Prices used in TPC benchmarks reflect the actual prices a customer would pay for a one-time purchase of the stated Line Items. 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 Line Items. For complete details, see the pricing section of the TPC Benchmark Standard. If you find that the stated prices are not available according to these terms, please inform the TPC at pricing@tpc.org. Thank you."
## Machbase 5.7.3

### Numerical Quantities

<table>
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<tr>
<th>Scale Factor</th>
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### Performance Run (Run2)

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warmup Run Start Time</td>
<td>2019-10-21 11:19:50.000</td>
</tr>
<tr>
<td>Warmup Run End Time</td>
<td>2019-10-21 11:54:10.000</td>
</tr>
<tr>
<td>Warmup Run Elapsed Time</td>
<td>2,059.186</td>
</tr>
<tr>
<td>Measured Run Start Time</td>
<td>2019-10-21 11:54:11.000</td>
</tr>
<tr>
<td>Measured Run End Time</td>
<td>2019-10-21 12:27:45.000</td>
</tr>
<tr>
<td>Measured Run Elapsed Time</td>
<td>2,012.889</td>
</tr>
</tbody>
</table>

| Performance Metric (IoTps)| 1,043,276.60 |

### Repeatability Run (Run1)

<table>
<thead>
<tr>
<th>Description</th>
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<tr>
<td>Warmup Run End Time</td>
<td>2019-10-21 10:45:29.000</td>
</tr>
<tr>
<td>Warmup Run Elapsed Time</td>
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<tr>
<td>Measured Run Start Time</td>
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<tr>
<td>Measured Run End Time</td>
<td>2019-10-21 11:18:32.000</td>
</tr>
<tr>
<td>Measured Run Elapsed Time</td>
<td>1,982.044</td>
</tr>
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</table>

| Performance Metric (IoTps)| 1,059,512.30 |

Performance Run Report (Run2)

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TPCx-IoT Performance Metric (IoTps) Report
Test Run2 details : Total Time For Warmup Run In Seconds = 2,059.186
Test Run2 details : Total Time In Seconds = 2,012.889
                        Total Number of Records = 210000000

TPCx-IoT Performance Metric (IoTps): 1043276.6039

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Repeatability Run Report (Run1)

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TPCx-IoT Performance Metric (IoTps) Report
Test Run1 details : Total Time For Warmup Run In Seconds = 2,017.764
Test Run1 details : Total Time In Seconds = 1,982.044
                        Total Number of Records = 210000000

TPCx-IoT Performance Metric (IoTps): 1059512.3014

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Summary details of the run reports are show above. For the complete run reports, see the Supporting Files Archive.
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Revision History

<table>
<thead>
<tr>
<th>Date</th>
<th>Edition</th>
<th>Description</th>
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<tbody>
<tr>
<td>November 11, 2019</td>
<td>First</td>
<td>Initial Publication</td>
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