**Machbase 6.5.1**

**Total System Cost**  
$302,788 USD

**TPCx-IoT Performance Metric**  
3,410,800.16 IoTps

**Price/Performance**  
$0.09 USD/IoTps

### Servers

<table>
<thead>
<tr>
<th>Server</th>
<th>Operating System</th>
<th>Other Software</th>
<th>Availability Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermicro A+ Server 1114S-WN10RT</td>
<td>Red Hat Enterprise Linux Server Release 8.3</td>
<td>None</td>
<td>Mar 16, 2021</td>
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</table>

### System Under Test Configuration Overview

**Total Servers:** 4x Supermicro A+ Server 1114S-WN10RT  
(with 4x H12SSW-NTR Nodes)

**Total Processors/Cores/Threads:** 4/160/320

**Server Configuration:**
- **Processor:** 1x AMD EPYC 7713 (2.00GHz, 64-core, 256 MB L3)
- **Memory:** 1,024 GB
- **Storage Device:** 1x 960GB NVMe M.2 PCIe SSD Gen3  
  1x 7.68TB NVMe PCIe SSD Gen4
- **Network Controller:** 1x Mellanox MT27800 Family 100GbE  
  1x Broadcom BCM57416 NetXtreme-E Dual-Media 10GBe
- **Connectivity:** NVIDIA MSN2700 100GbE Switch  
  (4x 1114S-WN10RT) + (1x MSN2700) = (4x1) + (1x1) = 5 RU

**Availability Date:** Mar 16, 2021
## EXECUTIVE SUMMARY

### Machbase 6.5.1

#### TPCx-IoT

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
<th>Source</th>
<th>List Price (USD)</th>
<th>Qty</th>
<th>Extended Price (USD)</th>
<th>3 yr. Maint. Price (USD)</th>
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<tbody>
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<td>Supermicro A+ Server 11145-WN10RT</td>
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<td>NVIDIA MSN2700-C52F Spectrum 100Gbe 1U Open Ethernet Switch</td>
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<td>Copper Cable Ethernet 100Gbe QD F428</td>
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<td>3) Mellanox Technologies Inc</td>
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<td>4) Red Hat Inc</td>
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<td>5) Machbase Inc</td>
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<td>6) Hewlett Packard Inc</td>
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<td>IoTPs:</td>
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<td>USD/IoTPs:</td>
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**TPC Pricing**

<table>
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<th>Report Date</th>
<th>Mar. 15, 2021</th>
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*All discounts are based on US list prices and for similar quantities and configurations. Discounts for similarly sized configurations will be similar to those quoted here, but may vary based on the components in the configuration.*

**Notes:**

Prices used in TPC benchmarks must reflect the actual prices a customer would pay for purchase of the components in all regions specified in the result. Individually negotiated discounts are not permitted. Special prices based on assumptions about past or future purchases are not permitted. All discounts reflect standard pricing conventions for the listed components. For complete details, see the pricing section of the TPC benchmark specification. If you find that stated prices are not available according to these terms, please inform the TPC at pricing@tpc.org. Thank you.

---

**TPCx-IoT 1.0.5**

**Executive Summary**

**TTA**

**Report Date**

March 15, 2021
### Machbase 6.5.1

#### TPC Pricing

- TPCx-IoT: 1.0.5
- TPC Pricing: 2.6.0

#### Report Date

- March 15, 2021

#### Executive Summary

#### Numerical Quantities

| Scale Factor | 6440000000 |

#### Performance Run (Run2)

| Warmup Run Start Time | 2021-03-03 02:02:07.000 |
| Warmup Run End Time | 2021-03-03 02:32:50.000 |
| Warmup Run Elapsed Time | 1,841.657 |
| Measured Run Start Time | 2021-03-03 02:32:50.000 |
| Measured Run End Time | 2021-03-03 03:04:19.000 |
| Measured Run Elapsed Time | 1,888.120 |

- **Performance Metric (IoTps)**: 3,410,800.16

#### Repeatability Run (Run1)

| Warmup Run Start Time | 2021-03-03 00:54:58.000 |
| Warmup Run End Time | 2021-03-03 01:25:02.000 |
| Warmup Run Elapsed Time | 1,802.580 |
| Measured Run Start Time | 2021-03-03 01:25:02.000 |
| Measured Run End Time | 2021-03-03 01:56:09.000 |
| Measured Run Elapsed Time | 1,866.829 |

- **Performance Metric (IoTps)**: 3,449,699.99
Performance Run Report (Run2)

TPCx-IoT Performance Metric (IoTps) Report
Test Run2 details : Total Time For Warmup Run In Seconds = 1,841.657
Test Run2 details : Total Time In Seconds = 1,888.120
Total Number of Records = 644000000

TPCx-IoT Performance Metric (IoTps): 3410800.1610

Repeatability Run Report (Run1)

TPCx-IoT Performance Metric (IoTps) Report
Test Run1 details : Total Time For Warmup Run In Seconds = 1,802.580
Test Run1 details : Total Time In Seconds = 1,866.829
Total Number of Records = 644000000

TPCx-IoT Performance Metric (IoTps): 3449699.9993

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Edition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 15, 2021</td>
<td>First</td>
<td>Initial Publication</td>
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