

		<b>Supermicro A+ Server 2014TP-HTR</b>		TPCx-IoT: v2.0.0
				TPC-Pricing: v2.4.0
				Report Date: April 02, 2021
Total System Cost		TPCx-IoT Performance Metric		Price/Performance
<b>138,580 USD</b>		<b>472,200.88 IoTps</b>		<b>\$293.48 USD \$/kIoTps</b>
Number of Records	DBMS Software	Operating System	Other Software	Availability Date
832 Million	HBase 2.0.0 on Cloudera Distribution for Apache Hadoop 6.0.1	Red Hat Enterprise Linux Server Release 7.6	None	Aug 31, 2019
<b>System Configuration</b>				
<p><b>1x Supermicro A+ Server 2014TP-HTR</b> TwinPro™ with 4x H12SST-PS Nodes, each with:</p> <ul style="list-style-type: none"> <li>1x AMD EPYC 7542 32-Core Processor</li> <li>256 GB (8x 32GB RDIMM 3200MT/s Dual Rank)</li> <li>1x 256GB M.2 PCIe Gen3</li> <li>1x Mellanox Dual Port 25GbE SFP28 NIC</li> <li><b>3x 1TB M.2 PCIe Gen3 (Data Nodes)</b></li> </ul>				
		 <p>Mellanox SN2410 Network Switch (48-port 25GbE + 8-port 100GbE)</p>		
Total Number of Servers:		1x Supermicro A+ Server 2014TP-HTR (TwinPro™ with 4x H12SST-PS Nodes)		
Total Processors/Cores/Threads:		4/128/256		
Server Configuration (each)	Processors	1x AMD EPYC 7542 2.9GHz 32-Core		
	Memory	256GB		
	Storage Device	1x 256GB M.2 PCIe Gen3 (all nodes) 3x 1TB M.2 PCIe Gen3 (Data Nodes)		
	Network	1x Supermicro AOC-MH25G-m2S2T Dual Port 25GbE SFP28 NIC		
	Connectivity:	Mellanox SN2410 Network Switch		
Total Rack Units:		(2x2014TP-HTR) + (1xSN2410) = (2x1) + (1x1) = 3RU		



## Supermicro A+ Server 2014TP-HTR

TPCx-IoT: v2.0.0

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Report Date: April 02,2021

Description	Part Number	Qty	Unit Price	Extended Price	3 yr. Maint. Price
<b>HARDWARE COMPONENTS</b>					
Supermicro Super Server H12SST-PS - Rail, Power Cord (included)	AS -2014TP-HTR	1	\$2,941.00	\$2,941.00	
AMD EPYC™ 7542 2.9GHz/3.4GHz, 32C/64T 225W	PSE-ROM7542-0075	1	\$3,320.00	\$3,320.00	
SK hynix 32GB 2Rx4 PC4-3200 HMA84GR7CJR4N-XN	MEM-DR432L-HL01-ER32	1	\$141.20	\$141.20	
M.2 256GB TOSHIBA KXG50ZNV256G	HDS-TMN0-KXG50ZNV256G	4	\$45.50	\$182.00	
M.2 1TB TOSHIBA KXG50ZNV1T02	HDS-TMN0-KXG50ZNV1T02	9	\$138.00	\$1,242.00	
Mellanox Ethernet CX4LX 25GbE Network Adapter	AOC-MH25G-m2S2TM	4	\$249.90	\$999.60	
4-hour 7x24 On-site Service 3years	OS4HR3	1	\$1,888.30		\$1,888.30
Mellanox SN2410 Switch	MSN2410-CB2F	2	\$25,387.00	\$25,387.00	
Mellanox Tech Support and Warranty - Silver 3 years with 4 Hours On-Site Support for SN2000 Series Switch	SUP-SN2000-3S-4H	2	\$2,475.00		\$2,475.00
Mellanox MCP2M00-A001E30N Ethernet Passive Copper Cable 25GbE SFP28 1m Black 30AWG CA-N	MCP2M00-A001E30N	2	\$52.00	\$260.00	
12U Open Frame Server Rack - Adjustable Depth - 4-Post Data Rack	4POSTRACK12U	2	\$195.99	\$391.98	
NEMA 5-15P to IEC320 C15 14AWG 125V/15A	P515C15-15ABE-10	2	\$10.00	\$20.00	
24" LED Monitor		2	\$79.00	\$158.00	
Keyboard and Mouse		2	\$14.56	\$29.12	
Subtotal				\$49,109.55	\$4,363.30
<b>HARDWARE COMPONENTS</b>			<b>Subtotal</b>	<b>\$49,109.55</b>	<b>\$4,363.30</b>



**Supermicro A+ Server  
2014TP-HTR**

TPCx-IoT: v2.0.0


TPC-Pricing: v2.4.0

Report Date: April 02,2021

Description	Part Number	K e y	Unit Price	Q t y	Extended Price	3 yr. Maint. Price
<b>SOFTWARE COMPONENTS</b>						
Cloudera Enterprise Operational DB Edition, Node License, 24x7, 1YR		2	\$6,000.00	1 2		\$72,000.00
Red Hat Enterprise Linux 7.6, 3yr Premium Subscription		1	\$3,276.86	4		\$13,107.44
<b>SOFTWARE COMPONENTS</b>			Subtotal		\$0.00	\$85,107.44
<b>Total</b>					\$49,109.55	\$89,470.74

Pricing : 1 Supermicro (based upon total system cost as purchased by a regular customer)  Pricing : 2 Obtained from third-party or online	<p><b>Three-Year Cost of Ownership : \$138,580</b></p> <hr/> <p><b>IoTps : 472200.88</b></p> <hr/> <p><b>\$ / kIoTps : \$293.48</b></p>
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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 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 sections of the TPC benchmark specifications. If you find that the stated prices are not available according to these terms, please inform the TPC at [pricing@tpc.org](mailto:pricing@tpc.org).*

	<b>Supermicro A+ Server 2014TP-HTR</b>	TPCx-IoT: v2.0.0
		TPC-Pricing: v2.4.0
		Report Date: April 02, 2021
Measurement Results for Performance Run		
Total Number of Records	832 Million	
Warmup Run - Start Time	2019-08-02 18:04:00	
Warmup Run - End Time	2019-08-02 18:38:41	
Warmup Run Elapsed Time in Seconds	2,079.425	
Measured Run Start Time	2019-08-02 18:38:41	
Measured Run End Time	2019-08-02 19:08:04	
Total Time In Seconds	1,761.962	
Measurement Results for Repeatability Run		
Total Number of Records	832 Million	
Warmup Run Start Time	2019-08-02 19:42:53	
Warmup Run End Time	2019-08-02 20:18:08	
Warmup Run Elapsed Time in Seconds	2,113.894	
Measured Run Start Time	2019-08-02 20:18:08	
Measured Run End Time	2019-08-02 20:47:00	
Total Time In Seconds	1,731.521	



**Supermicro A+ Server  
2014TP-HTR**

TPCx-IoT: v2.0.0

TPC-Pricing: v2.4.0

Report Date: April 02, 2021

**Run Report for Performance Run**

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TPCx-IoT Performance Metric (IoTps) Report

Total Time For Warmup Run In Seconds = 2,079.425

Total Time In Seconds = 1,761.962

Total Number of Records = 832 Million

TPCx-IoT Performance Metric (IoTps): 472,200.8760

**Run Report for Repeatability Run**

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TPCx-IoT Performance Metric (IoTps) Report

Total Time For Warmup Run In Seconds = 2,113.894

Total Time In Seconds = 1,731.521

Total Number of Records = 832 Million

TPCx-IoT Performance Metric (IoTps): 480,502.4022