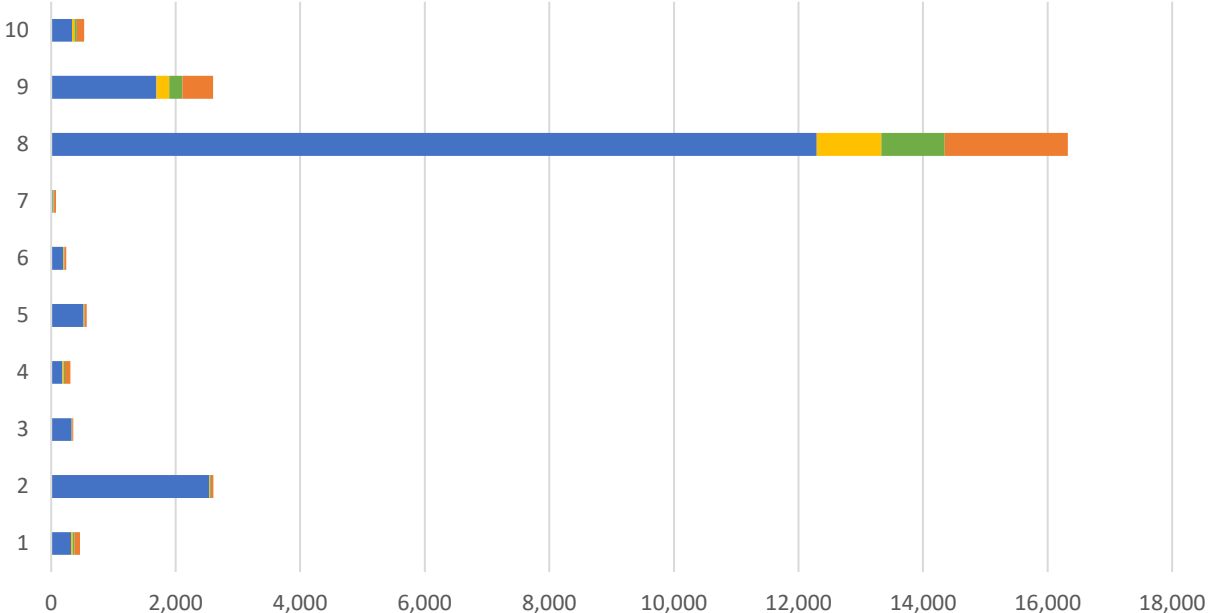

 Hewlett Packard Enterprise		ProLiant DL380a Gen11		TPCx-AI 1.0.2 TPC Pricing 2.8.0 Report Date Jun. 12, 2023																																																							
TPCx-AI Performance 710.26 AIUCpm@30	Total System Cost \$89,568 USD	Price/Performance \$126.11 USD/AIUCpm@30	Availability Date June 12, 2023																																																								
Framework Anaconda Pro	Operating System Red Hat Enterprise Linux 8.6	Other Software N/A	Scale Factor 30	Streams 100																																																							
<p>Use Case Time (sec.) by Phase ■ Training ■ Serving 1 ■ Serving 2 ■ Throughput (Avg) </p>  <table border="1"> <caption>Approximate Use Case Time (sec.) by Phase</caption> <thead> <tr> <th>Case</th> <th>Training (sec)</th> <th>Serving 1 (sec)</th> <th>Serving 2 (sec)</th> <th>Throughput (Avg) (sec)</th> </tr> </thead> <tbody> <tr><td>1</td><td>~200</td><td>~100</td><td>~100</td><td>~100</td></tr> <tr><td>2</td><td>~2500</td><td>~100</td><td>~100</td><td>~100</td></tr> <tr><td>3</td><td>~200</td><td>~100</td><td>~100</td><td>~100</td></tr> <tr><td>4</td><td>~200</td><td>~100</td><td>~100</td><td>~100</td></tr> <tr><td>5</td><td>~300</td><td>~100</td><td>~100</td><td>~100</td></tr> <tr><td>6</td><td>~200</td><td>~100</td><td>~100</td><td>~100</td></tr> <tr><td>7</td><td>~100</td><td>~100</td><td>~100</td><td>~100</td></tr> <tr><td>8</td><td>~12500</td><td>~1000</td><td>~1000</td><td>~1000</td></tr> <tr><td>9</td><td>~1500</td><td>~200</td><td>~200</td><td>~200</td></tr> <tr><td>10</td><td>~200</td><td>~100</td><td>~100</td><td>~100</td></tr> </tbody> </table>					Case	Training (sec)	Serving 1 (sec)	Serving 2 (sec)	Throughput (Avg) (sec)	1	~200	~100	~100	~100	2	~2500	~100	~100	~100	3	~200	~100	~100	~100	4	~200	~100	~100	~100	5	~300	~100	~100	~100	6	~200	~100	~100	~100	7	~100	~100	~100	~100	8	~12500	~1000	~1000	~1000	9	~1500	~200	~200	~200	10	~200	~100	~100	~100
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Server Type		1x ProLiant DL380a Gen11 (Server)																																																									
Processors		2x Intel(R) Xeon(R) Platinum 8462Y+ (2.8 GHz, 32-core)																																																									
Memory		1,024 GiB																																																									
Storage Controller		1x NS204i-u Gen11																																																									
Storage Device		2x 480 GB NVMe																																																									
Network Controller		1x Mellanox MCX562A-ACAI 10/25Gb 2-port																																																									

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Maintenance</th> </tr> </thead> <tbody> <tr> <td colspan="7">Server Hardware</td> </tr> <tr> <td>HPE DL380a Gen11 4DW CTO Svr</td> <td>P05175-B21</td> <td>1</td> <td>\$3,392.00</td> <td>1</td> <td>\$3,392.00</td> <td></td> </tr> <tr> <td>Intel Xeon-Platinum 8462Y+ 2.8GHz 32-core 300W Processor for HPE</td> <td>P49603-B21</td> <td>1</td> <td>\$14,268.00</td> <td>2</td> <td>\$28,536.00</td> <td></td> </tr> <tr> <td>HPE 64GB (1x64GB) Dual Rank x4 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit</td> <td>P43331-B21</td> <td>1</td> <td>\$4,068.00</td> <td>16</td> <td>\$65,088.00</td> <td></td> </tr> <tr> <td>HPE Alletra 4120 High Performance Heat Sink Kit</td> <td>P51832-B21</td> <td>1</td> <td>\$175.00</td> <td>2</td> <td>\$350.00</td> <td></td> </tr> <tr> <td>HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit</td> <td>P38997-B21</td> <td>1</td> <td>\$685.00</td> <td>2</td> <td>\$1,370.00</td> <td></td> </tr> <tr> <td>HPE MCX562A-ACAI Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter</td> <td>P10112-B21</td> <td>1</td> <td>\$1,040.00</td> <td>1</td> <td>\$1,040.00</td> <td></td> </tr> <tr> <td>HPE 3 Year Tech Care Essential wDMR DL380a Gen11 HW Service</td> <td>H38YLE</td> <td>1</td> <td>\$22,626.00</td> <td>1</td> <td></td> <td>\$22,626.00</td> </tr> <tr> <td>HPE USB US Keyboard/Mouse Kit (inclcd 2 spares)</td> <td>631341-B21</td> <td>1</td> <td>\$32.00</td> <td>3</td> <td>\$96.00</td> <td></td> </tr> <tr> <td>HPE 42U 600x1200mm Adv G2 Kit Shock Rack</td> <td>H6167A</td> <td>1</td> <td>\$6,600.00</td> <td>1</td> <td>\$6,600.00</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Subtotal</td> <td>\$106,472.00</td> <td>\$22,626.00</td> </tr> <tr> <td colspan="7">Storage</td> </tr> <tr> <td>HPE NS204i-u Gen11 Ht Plg Boot Opt Dev</td> <td>P48183-B21</td> <td>1</td> <td>\$1,994.00</td> <td>1</td> <td>\$1,994.00</td> <td></td> </tr> <tr> <td>HPE DL3XX Gen11 Ball Bearing Rail 8 Kit</td> <td>P52345-B21</td> <td>1</td> <td>\$375.00</td> <td>1</td> <td>\$375.00</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Subtotal</td> <td>\$2,369.00</td> <td>\$0.00</td> </tr> <tr> <td colspan="7">Other</td> </tr> <tr> <td>HP V22v G5 FHD Monitor (inclcd 2 spares)</td> <td>65P56AA#ABA</td> <td>3</td> <td>\$129.99</td> <td>3</td> <td>\$389.97</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Subtotal</td> <td>\$389.97</td> <td>\$0.00</td> </tr> <tr> <td colspan="7">Software Components</td> </tr> <tr> <td>RHEL Svr Sckt/2 Gst 1yr 24x7 E-LTU</td> <td>J8J36A</td> <td>1</td> <td>\$1,214.00</td> <td>1</td> <td>\$1,214.00</td> <td></td> </tr> <tr> <td>Anaconda Pro Subscription</td> <td>NA</td> <td>2</td> <td>\$10,000.00</td> <td>1</td> <td>\$10,000.00</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Subtotal</td> <td>\$11,214.00</td> <td>\$0.00</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Total Extended Price</td> <td>\$120,444.97</td> <td>\$22,626.00</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Total Discounts</td> <td>\$48,978.00</td> <td>\$4,525.00</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Grand Totals</td> <td>\$71,466.97</td> <td>\$18,101.00</td> </tr> </tbody> </table>			Description	Part Number	Source	List Price	Qty	Extended Price	1-Yr. Maintenance	Server Hardware							HPE DL380a Gen11 4DW CTO Svr	P05175-B21	1	\$3,392.00	1	\$3,392.00		Intel Xeon-Platinum 8462Y+ 2.8GHz 32-core 300W Processor for HPE	P49603-B21	1	\$14,268.00	2	\$28,536.00		HPE 64GB (1x64GB) Dual Rank x4 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit	P43331-B21	1	\$4,068.00	16	\$65,088.00		HPE Alletra 4120 High Performance Heat Sink Kit	P51832-B21	1	\$175.00	2	\$350.00		HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	P38997-B21	1	\$685.00	2	\$1,370.00		HPE MCX562A-ACAI Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter	P10112-B21	1	\$1,040.00	1	\$1,040.00		HPE 3 Year Tech Care Essential wDMR DL380a Gen11 HW Service	H38YLE	1	\$22,626.00	1		\$22,626.00	HPE USB US Keyboard/Mouse Kit (inclcd 2 spares)	631341-B21	1	\$32.00	3	\$96.00		HPE 42U 600x1200mm Adv G2 Kit Shock Rack	H6167A	1	\$6,600.00	1	\$6,600.00						Subtotal	\$106,472.00	\$22,626.00	Storage							HPE NS204i-u Gen11 Ht Plg Boot Opt Dev	P48183-B21	1	\$1,994.00	1	\$1,994.00		HPE DL3XX Gen11 Ball Bearing Rail 8 Kit	P52345-B21	1	\$375.00	1	\$375.00						Subtotal	\$2,369.00	\$0.00	Other							HP V22v G5 FHD Monitor (inclcd 2 spares)	65P56AA#ABA	3	\$129.99	3	\$389.97						Subtotal	\$389.97	\$0.00	Software Components							RHEL Svr Sckt/2 Gst 1yr 24x7 E-LTU	J8J36A	1	\$1,214.00	1	\$1,214.00		Anaconda Pro Subscription	NA	2	\$10,000.00	1	\$10,000.00						Subtotal	\$11,214.00	\$0.00					Total Extended Price	\$120,444.97	\$22,626.00					Total Discounts	\$48,978.00	\$4,525.00					Grand Totals	\$71,466.97	\$18,101.00
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<p>Pricing: 1 = HPE; 2 = Anaconda;3 = Hewlett Packard Inc.</p> <p>* All discounts are based on US list prices and for similar quantities and configurations. A discount was based on the overall specific components pricing from vendor 1 in this single quotation. Discounts for similarly sized configurations will be similar to those quoted here, but may vary based on the components in the configuration.</p> <p style="text-align: center;">Audited by Doug Johnson, InfoSizing</p>	<p>Total System Cost (USD): \$89,568</p> <p>AIUCpm@30: 710.26</p> <p>\$/AIUCpm@30: \$126.11</p>																																																																																																																																																																																							
<p><i>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.</i></p>																																																																																																																																																																																								

 Hewlett Packard Enterprise	<h1>ProLiant DL380a Gen11</h1>	TPCx-AI 1.0.2 TPC Pricing 2.8.0 Report Date Jun. 12, 2023
<u>Numerical Quantities</u>		
AIUCpm@30 Scale Factor Streams Kit Version Execution Status Accuracy Status	710.26 30 100 1.0.2 Pass Pass	T _{Load} 9.49 T _{LD} 9.49 T _{PTT} 496.20 T _{PST1} 27.84 T _{PST2} 27.73 T _{PST} 27.84 T _{TT} 3.15
<u>Test Times</u>		
Overall Run Start Time Overall Run End Time Overall Run Elapsed Time		2023-04-20 20:04:47.622 2023-04-21 02:57:40.911 24,773.289
Load Test Start Time Load Test End Time Load Test Elapsed Time		2023-04-20 20:08:55.591 2023-04-20 20:09:05.099 9.508
Power Training Start Time Power Training End Time Power Training Elapsed Time		2023-04-20 20:09:05.102 2023-04-21 01:16:11.142 18,426.040
Power Serving 1 Start Time Power Serving 1 End Time Power Serving 1 Elapsed Time		2023-04-21 01:16:11.146 2023-04-21 01:39:13.385 1,382.239
Power Serving 2 Start Time Power Serving 2 End Time Power Serving 2 Elapsed Time		2023-04-21 01:39:13.388 2023-04-21 02:01:55.162 1,361.774
Scoring Start Time Scoring End Time Scoring Elapsed Time		2023-04-21 02:02:51.380 2023-04-21 02:05:14.805 143.425
Throughput Start Time Throughput End Time Throughput Elapsed Time		2023-04-21 02:05:14.825 2023-04-21 02:57:40.907 3,146.082

 Hewlett Packard Enterprise	<h1>ProLiant DL380a Gen11</h1>	TPCx-AI	1.0.2
		TPC Pricing	2.8.0
		Report Date	Jun. 12, 2023

Numerical Quantities (continued)

Use Case Times & Accuracy

Use Case	Training (sec)	Serving 1 (sec)	Serving 2 (sec)	Throughput (avg)	Accuracy
UC01	318.358	29.659	30.793	83.655	0.000
UC02	2,536.405	12.785	12.757	44.657	0.238
UC03	331.185	4.051	4.246	14.947	3.553
UC04	181.401	21.105	21.161	83.356	0.706
UC05	517.695	9.956	9.692	36.510	0.037
UC06	192.662	11.106	10.083	30.845	0.544
UC07	26.672	9.581	9.756	29.814	1.005
UC08	12,294.705	1,036.788	1,016.658	1,977.167	0.755
UC09	1,689.276	209.584	208.850	493.462	1.000
UC10	337.588	37.524	37.676	118.322	0.817

Use Case Serving Times (sec.)

