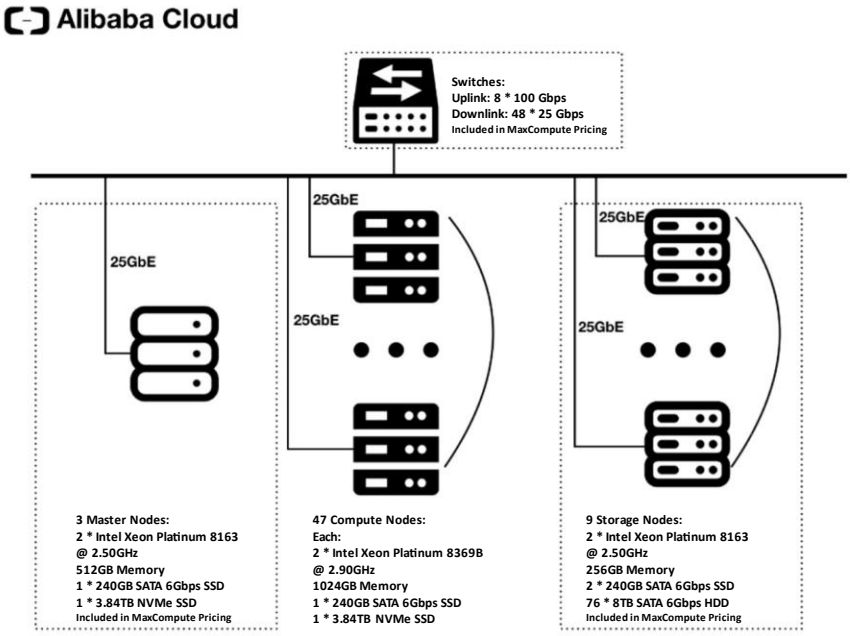
Alibaba Cloud	**Alibaba Cloud MaxCompute**	TPCx-BB Rev. v1.5.2 TPC-Pricing Rev. v2.8.0 Report Date: August 18, 2022
Total System Cost	TPCx-BB Performance Metric	Price/Performance
3,664,590 USD	**64,580.63** BBQpm@100000	**56.75 USD** $/BBQpm@100000

Framework	Operating System	Other Software	Availability Date	Scale Factor	Streams
MaxCompute v3.42	Alibaba Group Enterprise Linux Server 7.2 (Paladin)	None	August 18, 2022	100000	4

System Configuration



Physical Storage/Scale Factor: 56.80	Scale Factor/Physical Memory: 1.92

Servers:	59x Master Node / Compute Node / Storage Node	
Total Processors/Cores/Threads	118/3,584/7,168	
3x Master Nodes: 2x Intel® Xeon® Platinum 8163 CPU @ 2.50GHz 512 GiB Onboard SATA Controller 1x 240 GB SATA 6 Gbps SSD 1x 3.84 TB NVMe SSD Mellanox MT27710 2-port	**47x Compute Nodes:** 2x Intel(R) Xeon(R) Platinum 8369B CPU @ 2.90GHz 1,024 GiB Onboard SATA Controller 1x 240 GB SATA 6 Gbps SSD 1x 3.84 TBD NVMe SSD Mellanox MT28800 2-port	**9x Storage Nodes:** 2x Intel(R) Xeon(R) Platinum 8163 CPU @ 2.50GHz 256 GiB Onboard SATA Controller 2x 240 GB SATA 6 Gbps SSD 76x 8 TB SATA 6 Gbps HDD Mellanox MT27710 2-port
Connectivity:	Network Switch (8x 100 Gbps Up; 48x 25 Gbps Down)	

Alibaba Cloud	**Alibaba Cloud MaxCompute**	TPCx-BB Rev. v1.5.2 TPC-Pricing Rev. v2.8.0 Report Date: August 18, 2022

Description	Part Number	Source	Unit Price	Qty	Ext. Price	3-Year Maint.
License Compute and Software Services						
MaxCompute Annual Subscription (6,000 CU)	Asia Pacific SE 1 (Singapore)	1	$1,584,000.00	3	$4,752,000.00	
Master Node				3		
Intel® Xeon® Platinum 8163 @ 2.50 GHz				2		
32 GB Memory				16		
240 GB SATA 6 Gbps SSD				1		
3.84 TB NVMe SSD				1		
Compute Node				47		
Intel® Xeon® Platinum 8369B @ 2.90 GHz				2		
64 GB Memory				16		
240 GB SATA 6 Gbps SSD				1		
3.84 TB NVMe SSD				1		
Storage Node				9		
Intel® Xeon® Platinum 8163 @ 2.50 GHz				2		
32 GB Memory				8		
240 GB SATA 6 Gbps SSD				2		
8 TB SATA 6 Gbps HDD				76		
Network Switches (8x100Gbps Up; 48x25Gbps Down)				NA		
1-Year Annual Subscription Discount (30%)			-$475,200.00	3	-$1,425,600.00	
MaxCompute Storage for 1 year 100000 Scale Factor (20.90 TB compressed)		1	$4,686.74	3	$14,060.22	
MaxCompute Enterprise Service for 1 year 24x7, 4 hour response		1	$106,744.08	3		$320,232.24
	License Compute and Software Services Sub-Total				**$3,340,460.22**	**$320,232.24**
Other Components						
13-inch MacBook Pro M1 Chip (includes 2 spares)		2	$1,299.00	3	$3,897.00	
	Other Components Sub-Total				**$3,897.00**	**$0.00**
					3-Year Cost of Ownership	**$3,664,590**

Pricing Source:1 = Alibaba; 2 = Apple.com

(1) All discounts are based on US list prices and for similar quantities and configurations. The discounts are based on the overall specific components pricing from respective vendors 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.

Audited by Doug Johnson of InfoSizing

Three-Year Cost of Ownership	**$3,664,590**
BBQpm@100000	**64,580.63**
$/BBQpm@100000	**$ 56.75**

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 at pricing@tpc.org. Thank you.

Numerical Quantities

Scale Factor	100000
Streams	4
SUT Validation Test	PASS

Performance Run (Run 1)

Overall Run Start Time	2022-07-31 00:14:59.316
Overall Run End Time	2022-07-31 05:22:41.848
Overall Run Elapsed Time	18,462.532
Load Test Start Time	2022-07-31 00:14:59.317
Load Test End Time	2022-07-31 00:44:08.199
Load Test Elapsed Time	1,748.882
Power Test Start Time	2022-07-31 00:44:08.200
Power Test End Time	2022-07-31 02:08:59.126
Power Test Elapsed Time	5,090.926
Throughput Test Start Time	2022-07-31 02:08:59.127
Throughput Test End Time	2022-07-31 05:22:41.848
Throughput Test Elapsed Time	11,622.721
Performance Metric (BBQpm@100000)	64,580.63

Repeatability Run (Run 2)

Overall Run Start Time	2022-07-31 08:57:59.970
Overall Run End Time	2022-07-31 13:49:10.932
Overall Run Elapsed Time	17,470.962
Load Test Start Time	2022-07-31 08:57:59.970
Load Test End Time	2022-07-31 09:27:31.462
Load Test Elapsed Time	1,771.492
Power Test Start Time	2022-07-31 09:27:31.464
Power Test End Time	2022-07-31 10:55:14.324
Power Test Elapsed Time	5,262.860
Throughput Test Start Time	2022-07-31 10:55:14.325
Throughput Test End Time	2022-07-31 13:49:10.932
Throughput Test Elapsed Time	10,436.607
Performance Metric (BBQpm@100000)	67,983.71

Performance Run Report (Run 1)

****
TPCx-BB
Result
v1.5.2
****
INFO: T_LOAD = 1748.882
INFO: T_LD = 0.1 * T_LOAD: 174.8882
INFO: T_PT = 2348.58710288479
INFO: T_T_PUT = 11622.721
INFO: T_TT = 2905.68025
INFO: === Checking validity of the final result ===
INFO: OK: All required BigBench phases were performed.
INFO: OK: All 30 queries were running in the power test.
INFO: OK: All 30 queries were running in the first throughput test.
INFO: OK: Pretend mode was inactive. All commands were executed.
INFO: === Final result ===
INFO: VALID BBQpm@100000 = 64580.6300328222

Repeatability Run Report (Run 2)

****
TPCx-BB
Result
v1.5.2
****
INFO: T_LOAD = 1771.492
INFO: T_LD = 0.1 * T_LOAD: 177.1492
INFO: T_PT = 2339.29932051281
INFO: T_T_PUT = 10436.607
INFO: T_TT = 2609.15175
INFO: === Checking validity of the final result ===
INFO: OK: All required BigBench phases were performed.
INFO: OK: All 30 queries were running in the power test.
INFO: OK: All 30 queries were running in the first throughput test.
INFO: OK: Pretend mode was inactive. All commands were executed.
INFO: === Final result ===
INFO: VALID BBQpm@100000 = 67983.7113235733

Summary details of the run reports are shown above. For the complete run reports, see the Support Files Archive.