




Goldilocks v3.1 Standard Edition on Jet-speed™ HHA2212


TPC-C Version 5.11.0
TPC Pricing 2.1.0

Report Date
09-May-2017
Revised Date
31-May-2017


Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
₩ 241,936,000 (KRW)	139,909 tpmC	1,730 KRW/tpmC	09-May-2017
Server Processors/Cores/Threads	Database Manager Operating System	Operating System	Other Software
2/16/16	Goldilocks v3.1 Standard Edition	CentOS 6.6	JBOSS



DB server



HP 1420-24G-2SFP
(Ethernet 1G switch)



WAS server

1 x DB Server Based Jet-speed™ HHA2212

- 2 x Intel Xeon E5-2630v3 2.4GHz
- 24 x 64GB DIMM (1.5TB RAM)
- 2 x 300GB SAS 15K rpm
- 2 x FC HBA 8Gb
- 1 x Intel NIC X520-RS2

1 x Storage JS2800

- 8 x DRAM-SSD 64GB
- 1 x PCI-Express External Switch Card

1 x Storage NGS500

- 10 x 1.2TB SAS 10K
- 2 x FC 8Gb Target Port

3 x WAS Server TJS104

- 2 x Intel Xeon E5-2630v3 2.4GHz
- 2 x 300GB SAS 15K
- 2 x 16GB DDR4 RAM
- 1 x Intel NIC x520-SR2

System Components	DB Server		WAS Server	
	Quantity	Description	Quantity	Description
Processors/Cores/Threads	2/16/16	2.4GHz Xeon E5-2630V3	2/16/32	2.4GHz Xeon E5-2630V3
Memory	24	64GB	2	16GB
Storage Controller	1	SAS 12G Raid	1	SAS 12G Raid
Storage Device	2	300GB SAS HDD (int.)	2	300GB
	10	1.2TB SAS HDD		
	8	64GB DRAM-SSD		
Total Storage Capacity		13.1 TB		



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Description	Part Number	Source	Unit Price	Qty	Price	3-Yr. Maint. Price
Server Hardware						
DB Server Based Jet-speed™ HHA2212	HHA2212	1	36,500,000	1	36,500,000	
HHA2212 Barebone Kit with 800W Redundant PSU	92002-0008-00	1	(include)	1		
E5-2630V3 Intel Xeon 2.4GHz 8_Core L3_20M	20104-0004-00	1	(include)	2		
Memory 64GB DDR4 PC4-2133 ECC Reg.	20231-0004-00	1	(include)	24		
HDD SAS 300GB 15k	20320-0013-00	1	(include)	2		
HBA QLE-2562 8Gb	22201-0006-00	1	(include)	1		
SAS/SATA 8ch 12G LSI MegaRAID 9361-8i	22204-0017-00	1	(include)	1		
NIC Intel X520-SR2	22202-0104-00	1	(include)	1		
UTP CAT5e Ethernet Cable 1M	42050-0001-00	1	(include)	1		
Power Cord, NICETECH, 2.5M	42119-0005-00	1	(include)	2		
DELL KB216 Eng/Kor Keyboard	91010-0001-00	1	(include)	1		
Optical Mouse, Two Buttons, USB	91010-0002-00	1	(include)	1		
Monitor 27 inch	91009-0001-01	1	(include)	1		
3-yrs 24x7x4hrs NBD Onsite Support Service		1	5,700,000	1		5,700,000
3 x WAS Servers (per server)						
TJS104 Barebone Kit with 800W Redundant PSU	92002-0010-00	1	5,500,000	3	16,500,000	
E5-2630V3 Intel Xeon 2.4GHz 8_Core L3_20M	20104-0004-00	1	(include)	2		
Memory Memory 16GB DDR4 PC4-2133 ECC Reg.	20231-0002-00	1	(include)	2		
HDD SAS 300GB 15k	20320-0014-00	1	(include)	2		
NIC Intel X520-SR2	22202-0104-00	1	(include)	1		
UTP CAT5e Ethernet Cable 1M	42050-0001-00	1	(include)	1		
Power Cord, NICETECH, 2.5M	42119-0005-00	1	(include)	2		
3-yrs 24x7x4hrs Onsite Support Service		1	2,640,000	1		2,640,000
Sub Total					53,000,000	8,340,000
Storage Hardware						
NGS500	NGS500	1	41,580,000	1	41,580,000	
NGS500 Controller with 800W Redundant PSU	92004-0001-00	1	(include)	1		
SSD SATA 480 6G	20320-0015-00	1	(include)	2		
SAS 1.2TB 10K	22201-0006-02	1	(include)	10		
FC 8Gb Target Port	61002-0001-01	1	(include)	2		
Network Management Port	22201-0006-02	1	(include)	1		
OM3 LC-LC 5M Cable	42040-0003-00	1	(include)	2		
UTP CAT5e Ethernet Cable 1M	61001-0001-00	1	(include)	1		
Storage Management SW		1	(include)	1		
Power Cord, NICETECH, 2.5M	42119-0005-00	1	(include)	2		
3-yrs 24x7x4hrs Onsite Support Service		1	9,900,000	1		9,900,000

JS2800	JS2800	1	23,160,000	1	23,160,000	
JS2800 Barebone Kit with 550W Redundant PSU	92002-0018-00	1	(include)	1		
DRAM-SSD 64GB	30102-0002-00	1	(include)	8		
PCI-Express External Switch Card	30120-0009-00	1	(include)	1		
PCI-Express External Cable	42122-0001-00	1	(include)	1		
Power Cord, NICETECH, 2.5M	42119-0005-00	1	(include)	2		
3-yrs 24x7x4hrs Onsite Support Service		1	5,550,000	1		5,550,000
Sub Total					64,740,000	15,450,000
<u>Client/Server Software</u>						
CentOS Linux OS Platform 3yr 24x7x4hrs		3	7,200,000	4		28,800,000
JBoss Web Server 3yr 24x7x4hrs		3	12,600,000	3		37,800,000
Goldilocks v3.1 Standard Edition 16Core		2	96,000,000	1	96,000,000	
Goldilocks v3.1 Standard Edition 16Core Technical Supports – 3-yrs 24x7x4hrs		2	10,000,000	3		30,000,000
Sub Total					96,000,000	96,600,000
<u>Other Hardware</u>						
HP 1420-24G-2SFP (1/100/1000, 24-port))(w/spares)	JH017A	4	242,000	3	726,000	
Sub Total					726,000	
<u>Discounts*</u>						
CentOS Discount		3				-5,760,000
JBoss Discount		3				-7,560,000
SUNJESOFT Discount		2			-64,000,000	-15,600,000
Sub Total					-64,000,000	-28,920,000
Total					150,466,000	91,470,000

Pricing Notes

- 1) Taejin Infotech Co., LTD 3) <http://www.linux.co.kr>
2) SUNJESOFT Inc. 4) <http://mjnetwork.co.kr>

All of the prices are based on South Korea's currency, KRW (₩, Korean Won) and excluded VAT.

* All discounts are based on Korea 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.

Three year cost of ownership KRW(₩): 241,936,000

Benchmark rating: 139,909 tpmC

Price/Performance: 1,730 ₩ / tpmC

Benchmark implementation and results independantly audited by Doug Johnson of InfoSizing (www.sizing.com)

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 pricing specifications. If you find that the stated prices are not available according to these terms, please inform the TPC at pricing@tpc.org. Thank you.



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MQTh, computed Maximum Qualified Throughput	139,909 tpmC
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Response Times (seconds)	Min	Average	90th	Max
New-Order	0.102	0.105	0.106	0.954
Payment	0.102	0.105	0.105	0.952
Order-Status	0.102	0.104	0.104	0.950
Delivery (interactive portion)	0.101	0.101	0.101	0.948
Delivery (deferred portion)	0.003	0.016	0.014	4.625
Stock-Level	0.102	0.104	0.105	0.950
Menu	0.101	0.102	0.101	0.948

Emulated Display Delay: 0.1 sec.

Transaction Mix	Percent	Number
New-Order	44.982%	67,158,862
Payment	43.010%	64,214,272
Order-Status	4.002%	5,975,686
Delivery	4.003%	5,976,495
Stock-Level	4.003%	5,976,176

Keying Times (seconds)	Min	Average	Max
New-Order	18.000	18.000	18.847
Payment	3.000	3.000	3.847
Order-Status	2.000	2.000	2.847
Delivery	2.000	2.000	2.847
Stock-Level	2.000	2.000	2.847

Think Times (seconds)	Min	Average	Max
New-Order	0.000	12.002	120.947
Payment	0.000	12.006	120.947
Order-Status	0.000	10.008	100.100
Delivery	0.000	5.005	50.947
Stock-Level	0.000	5.011	50.100

Test Duration	
Ramp-up time	30 min
Measurement Interval (MI)	480 min
Checkpoints in MI	17
Checkpoint interval	Avg 27.5 min
Number of transactions (all types) in MI	149,301,491