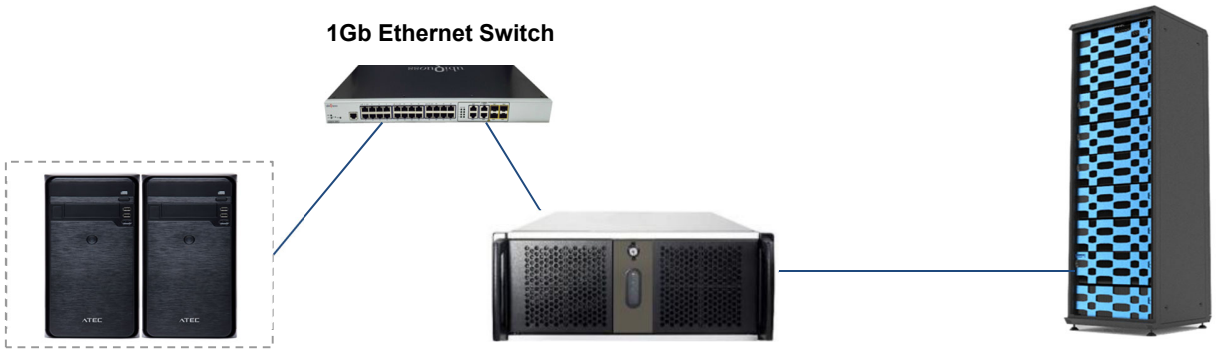
Goldilocks v3.1 Standard Edition on Nexite N811E-SI490

TPC-C Version 5.11.0
TPC Pricing 2.4.0

Report Date
14-Oct-2019

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
₩ 233,705,900 (KRW)	**76,168 tpmC**	**3,069 KRW/tpmC**	**Available Now**

Server Processors/Cores/Threads	Database Manager	Operating System	Other Software	Number of Users
2/20/40	**Goldilocks v3.1 Standard Edition**	**RHEL 7.6**	**JBoss Web Server**	**60,000**



Web Application Server

2 x ATEC A6HGBCP
- 1 x Intel Xeon E3-1270 V5 3.60GHz
- 2 x 8GB Memory
- 1 x 1TB SATA HDD
- 1 x 250GB SATA SSD
- 1 x 1Gb Ethernet

Database Server

1 x Nexite N811E-SI490
- 2 x Intel Xeon Silver 4114 2.20GHz
- 12 x 64GB (768GB) Memory
- 2 x 500GB SATA SSD
- 1 x 16Gb 2-Port Host Bus Adaptor
- 1 x 10Gb Ethernet

Storage

1 x UNIWIDE FCH2800
- 16 x 32GB (512GB) Cache Memory
- 8 x 1.6TB FMD Drive
- 4 x 8/16Gb 8-Port Host Bus Adaptor

System Components	DB Server		WAS Server	
	Quantity	Description	Quantity	Description
Processors/Cores/Threads	2/20/40	Intel Xeon Silver 4114 2.20GHz	1/4/8	Intel Xeon E3-1270 V5 3.60GHz
Memory	12	64GB	2	8GB
Storage Controller	1 1	SAS 12G Raid 16Gb FC HBA		
Storage Device	2 8	500GB SATA SSD 1.6TB FMD SSD (External)	1 1	1TB SATA HDD 250GB SATA SSD
Total Storage Capacity		13.80TB		

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Description	Part Number	Source	Unit Price	Qty	Price	3-Yr. Maint. Price
Server Hardware						
1 x DB Server – Nexite N811E-SI490	NXNP-A001	1	17,230,900	1	**17,230,900**	
N811E Barbone (NXE-IC621P + Chenbro 4U Rack + Acbel 875W)	MBAA-I022	1	(included)	1		
Intel Xeon Scalable Silver 4114 Processor (10Core 2.2GHz/13.75MB)	SMCP-0015	1	(included)	2		
64GB LR-DDR4 2666 ECC RDIMM Memory (M386A8K40BM2-CTD7Q)	SMME-0026	1	(included)	12		
500GB V-NAND 860 EVO	SMST-0020	1	(included)	2		
Intel RS3DC040, RAID Card (LSI SAS3108)	SMCR-0005	1	(included)	1		
Qlogic QLE2672-CK, Dual-port 16Gbps DFC HBA Card	SMCR-0006	1	(included)	1		
HDmSAS- SATA Cable Ass'y(4EA)	SMCB-0075	1	(included)	1		
Trackball Mini Keyboard	SAKB-0003	1	(included)	1		
LGE 27-inch Monitor (27MK430H)	SMOT-0011	1	(included)	1		
Maintenance - 7x24x4 Care Pack (3-yrs)		1	4,500,000	1		**4,500,000**
2 x WAS Servers (per server) - A6HGBDPNN	A6HGBDPNN	2	1,750,000	2	**3,500,000**	
Intel® Xeon® Processor XEON E3-1270V5, 3.6GHz		2	(included)	1		
DDR4 8GB (2400MHz / PC4 19000 / ECC / REG)		2	(included)	2		
Samsung 850EVO, 250GB, SATA3, TLC, MEX		2	(included)	1		
1TB, 7200RPM, 64M, SATAIII, ST1000DM010		2	(included)	1		
KUB-1407, USB, Black		2	(included)	1		
MUB-1407, USB, 1000DPI, Black		2	(included)	1		
Tower, 500W, ATX		2	(included)	1		
UTP CAT5e Ethernet Cable 1M		2	(included)	1		
Power Cord, NICETECH, 2.5M		2	(included)	1		
A6HGBDPNN 7x24x4 Care Pack (3-yrs)		2	(included)	1		
Server Hardware Sub Total					**20,730,900**	**4,500,000**
Storage Hardware						
All Flash Storage - FCH2800	FCH2800	3	72,250,000	1	**72,250,000**	
FCH2800 Controller Device	T0001-0117-00	3	(included)	1		
Back-end Bus Adapter 12G SAS	T0001-0117-01	3	(included)	1		
16G 8-Port Host Bus Adapter	T0001-0117-02	3	(included)	4		
Cache Interconnect Adapter	T0001-0117-03	3	(included)	1		
Cache Memory DDR-3 (32GB)	T0001-0117-04	3	(included)	16		
FCH2800 Flash Disk Drive Expantion Unit	T0001-0117-05	3	(included)	1		
FCH2800 controller cpu Board	T0001-0117-06	3	(included)	1		
Rack 600x1200x2010 mm (WxDxH) 42U	T0001-0117-07	3	(included)	1		
Storage Management SW	T0001-0117-08	3	(included)	1		

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UTP CAT5e Ethernet Cable 1M	61001-0001-00	3	(included)	1		
Power Cord, NICETECH, 2.5M	42119-0005-00	3	(included)	2		
1.6TB Flash Memory Disk Drive	DKC-F810I-1R6FM.P	3	3,900,000	8	31,200,000	
3-yrs 24x7x4hrs Onsite Support Service		3	26,350,000	1		26,350,000
Storage Hardware Sub Total					**103,450,000**	**26,350,000**
Client/Server Software						
Red Hat Enterprise Linux Server Standard 3yrs	RH00004F3	4	3,975,000	3	11,925,000	
RHEL Server Standard Maintenance - 3yrs 24x7x4hrs	RSC-LSF3	4	6,000,000	3		18,000,000
Red Hat JBoss Web Server 4-Core Standard 3Year	MW00123F3	4	2,086,000	2	4,172,000	
JBoss Web Server per 16Core 3Year Maintenance	RSC-JSF3	4	12,000,000	1		12,000,000
Goldilocks v3.1 Standard Edition		5	96,000,000	1	96,000,000	
Goldilocks v3.1 Standard Edition Technical Supports		5	10,000,000	3		30,000,000
Software Sub Total					**112,097,000**	**60,000,000**
Other Hardware						
UbiQuoss uSafe3010-24ps (10G, 24-port)(w/spares)	22917889	6	1,900,000	3	5,700,000	
Other Hardware Sub Total					**5,700,000**	
Discounts*						
SW Discount - Goldilocks					-64,000,000	-15,600,000
Red Hat OS Discount					-4,770,000	-12,000,000
Red Hat JBoss Discount					-1,252,000	-6,000,000
Discounts Sub Total					**-70,022,000**	**-33,600,000**
Total					**171,955,900**	**61,750,000**

Pricing Notes

1) Nexite Inc.
2) Atec Co., Ltd.
3) UNIWIDE Technologies Inc.
4) Rockplace Inc.
5) Sunjesoft Inc.
6) UbiQuoss Inc.

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(₩): 233,705,900

TPC-C throughput: 76,168 tpmC

Price/Performance: 3,069 ₩ / tpmC

Benchmark implementation and results independantly audited by Francois Raab 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	76,168 tpmC

Response Times (seconds)	Min	Average	90th	Max
New-Order	0.102	0.104	0.104	0.706
Payment	0.102	0.104	0.104	0.906
Order-Status	0.102	0.103	0.103	0.509
Delivery (interactive portion)	0.101	0.101	0.101	0.706
Delivery (deferred portion)	0.002	0.006	0.008	0.573
Stock-Level	0.102	0.103	0.104	0.506
Menu	0.101	0.102	0.102	0.707

Emulated Display Delay: 0.1 sec.

Transaction Mix	Percent	Number
New-Order	44.979%	31,992,039
Payment	43.012%	30,592,407
Order-Status	4.003%	2,846,875
Delivery	4.003%	2,847,266
Stock-Level	4.003%	2,847,320

Keying Times (seconds)	Min	Average	Max
New-Order	18.001	18.001	18.002
Payment	3.001	3.001	3.001
Order-Status	2.001	2.001	2.001
Delivery	2.001	2.001	2.006
Stock-Level	2.001	2.001	2.002

Think Times (seconds)	Min	Average	Max
New-Order	0.001	12.042	120.501
Payment	0.001	12.044	120.501
Order-Status	0.001	10.048	100.501
Delivery	0.001	5.028	50.301
Stock-Level	0.001	5.029	50.301

Test Duration	
Ramp-up time	65 min
Measurement Interval (MI)	420 min
Checkpoints in MI	15
Checkpoint Interval (Average / Max)	27.58 min / 28.00 min
Number of Transactions in MI (all types)	71,125,907

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