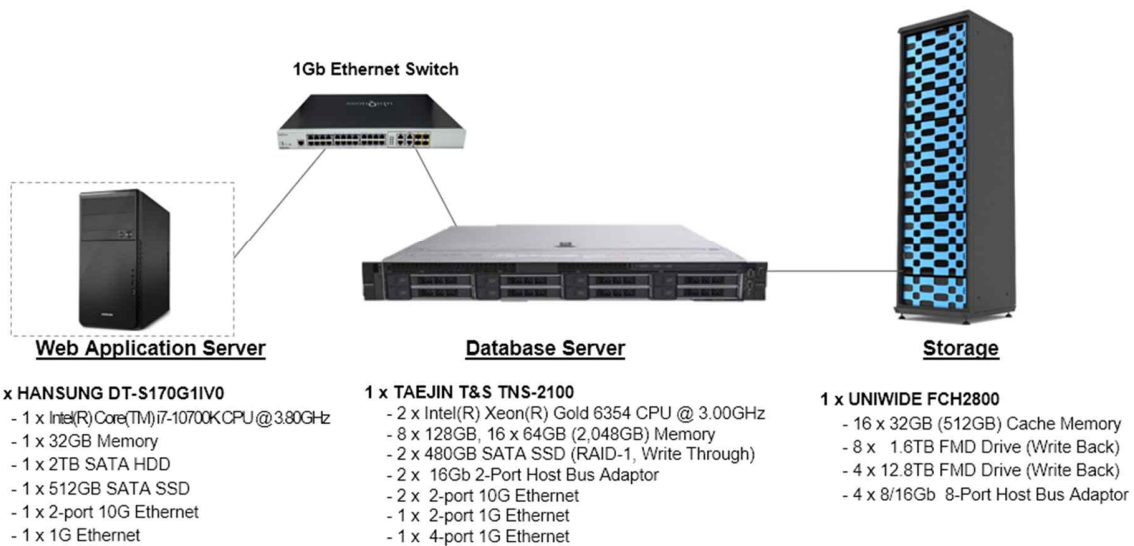|		
![TTA logo]	**Goldilocks v3.1 Standard Edition on TAEJIN T&S TNS2100**	**TPC-C Version 5.11.0 TPC Pricing 2.8.0** Report Date **13-Jun-2022**

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
₩ 482,989,000 (KRW)	**190,443 tpmC**	**2,537 KRW/tpmC**	**Available Now**

Server Processors/Cores/Threads	Database Manager	Operating System	Other Software	Number of Users
2/36/72	**Goldilocks v3.1 Standard Edition**	**RHEL 7.9**	**JBoss Web Server**	**150,000**

Priced Configuration (TAEJIN T&S)

Web Application Server

3 x HANSUNG DT-S170G1IV0
- 1 x Intel(R) Core(TM) i7-10700K CPU @ 3.80GHz
- 1 x 32GB Memory
- 1 x 2TB SATA HDD
- 1 x 512GB SATA SSD
- 1 x 2-port 10G Ethernet
- 1 x 1G Ethernet

Database Server

1 x TAEJIN T&S TNS-2100
- 2 x Intel(R) Xeon(R) Gold 6354 CPU @ 3.00GHz
- 8 x 128GB, 16 x 64GB (2,048GB) Memory
- 2 x 480GB SATA SSD (RAID-1, Write Through)
- 2 x 16Gb 2-Port Host Bus Adaptor
- 2 x 2-port 10G Ethernet
- 1 x 2-port 1G Ethernet
- 1 x 4-port 1G Ethernet

Storage

1 x UNIWIDE FCH2800
- 16 x 32GB (512GB) Cache Memory
- 8 x 1.6TB FMD Drive (Write Back)
- 4 x 12.8TB FMD Drive (Write Back)
- 4 x 8/16Gb 8-Port Host Bus Adaptor

System Components	DB Server		WAS Server	
	Quantity	Description	Quantity	Description
Processors/Cores/Threads	2/36/72	Intel(R) Xeon(R) Gold 6354 CPU @ 3.00GHz	1/8/16	Intel(R) Core(TM) i7-10700K CPU @ 3.80GHz
Memory	8/16	128 GB / 64 GB	1	32GB
Storage Controller	1 2	- LSI MegaRAID Tri-Mode SAS3516 - Broadcom / LSI MegaRAID Tri-Mode SAS3516		
Storage Device	2 8 4	480 SATA SSD (Write Through) 1.6TB FMD SSD (External, Write back) 12.8TB FMD SSD (External, Write back)	1 1	1TB SATA HDD 512GB SATA SSD
Total Storage Capacity		64.96TB		

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	TPC-C Version 5.11.0 TPC Pricing 2.8.0
Goldilocks v3.1 Standard Edition on TAEJIN T&S TNS2100	**Report Date** 13-Jun-2022
	Available Now

Description	Part Number	Source	Unit Price	Qty	Price	3-Yr. Maint. Price
Server Hardware						
DB Server – TAEJIN TNS(TNS-2100)	KR580S2	1	**52,000,000**	1	**52,000,000**	
TNS-2100, 2U, 2 소켓, 32xDIMM, 8x2.5", PSU(1+1)1400W	Model	1	(included)	1		
Intel® Xeon® Gold 6354 3.0G, 18C/36T, 39MB 캐시	CPU	1	(included)	2		
128GB DDR4 3200MHz RDIMM	RAM	1	(included)	8		
64GB DDR4 2666MHz RDIMM	RAM	1	(included)	16		
480GB SSD SATA 6Gbps 2.5"	SSD	1	(included)	2		
SAS Controller 8G Cache	RAID	1	(included)	1		
10GbE 2Port SFP+ Network Adapter(GBIC 포함)	NIC	1	(included)	2		
16G FC 2Port HBA	HBA	1	(included)	2		
3year, 24x7x4hr Onsite Support Service 1	Maintenance	1	(included)	1		
WAS Servers (per server) - DT-S170G1IV0	DT-S170G1IV0	2	1,551,000	3	**4,653,000**	
Intel® Core Processor i7-10700K, 3.8GHz	-	2	(included)	1		
DDR4 32GB, Samsung, UDIMM PC4-25600U	-	2	(included)	1		
Seagate Barracuda ST2000DM008 2 TB 3.5"	-	2	(included)	1		
HP SSD EX900 512GB	-	2	(included)	1		
2-port 10G Ethernet Controller	-	2	(included)	1		
3year, 24x7x4hr Onsite Support Service 1	Maintenance	2	792,000	3		2,376,000
Server Hardware Sub Total					**56,653,000**	**2,376,000**
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		
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	T22601-0117-03	3	3,900,000	8	31,200,000	
12.8TB Flash Memory Disk Drive	T22601-0117-05	3	40,625,000	4	162,500,000	
3-yrs 24x7x4hrs Onsite Support Service	-	3	26,350,000	1		26,350,000

Storage Hardware Sub Total					**265,950,000**	**26,350,000**
Client/Server Software						
Red Hat Enterprise Linux Server Standard 3yrs	RH00004F3	4	4,098,000	4	16,392,000	
RHEL Server Standard Maintenance - 3yrs 24x7x4hrs	RP-CPS(OS)	4	6,000,000	4		24,000,000
Red Hat JBoss Web Server 4-Core Standard 3Year	MW00123F3	4	2,144,000	6	12,864,000	
JBoss Web Server per 4Core 3Year Maintenance	RP-CPS(WAS)	4	12,000,000	6		72,000,000
Goldilocks v3.1 Standard Edition	-	5	144,000,000	1	144,000,000	
Goldilocks v3.1 Standard Edition Technical Supports	-	5	77,000,000	3		231,000,000
Software Sub Total					**173,256,000**	**327,000,000**
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*						
Red Hat OS Discount					-6,792,000	-16,000,000
Red Hat JBoss Discount					-5,304,000	-36,000,000
SW Discount - Goldilocks					-100,800,000	-209,400,000
Discounts Sub Total					**-112,896,000**	**-261,400,000**
Total					**388,663,000**	**94,326,000**

Pricing Notes
1) TAEJIN T&S Inc.
2) Hansung Corporation.
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(₩):   482,989,000

TPC-C throughput: 190,443 tpmC

Price/Performance: 2,537 ₩ / 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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**Goldilocks v3.1 Standard Edition
on TAEJIN T&S TNS2100**

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**TPC-C Version 5.11.0
TPC Pricing 2.8.0**

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**Report Date
13-Jun-2022**

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			Available Now

MQTh, computed Maximum Qualified Throughput	**190,443 tpmC**	

Response Times (seconds)	**Min**	**Average**	**90th**	**Max**
New-Order	0.102	0.103	0.103	1.044
Payment	0.102	0.103	0.103	0.316
Order-Status	0.101	0.102	0.102	0.313
Delivery (interactive portion)	0.101	0.101	0.101	0.311
Delivery (deferred portion)	0.002	0.004	0.006	0.185
Stock-Level	0.102	0.102	0.103	0.311
Menu	0.101	0.101	0.102	0.696

Emulated Display Delay: 0.1 sec.

Transaction Mix	**Percent**	**Number**
New-Order	44.980%	79,986,284
Payment	43.011%	76,484,519
Order-Status	4.003%	7,117,494
Delivery	4.003%	7,118,825
Stock-Level	4.003%	7,119,078

Keying Times (seconds)	**Min**	**Average**	**Max**
New-Order	18.001	18.001	18.130
Payment	3.001	3.001	3.096
Order-Status	2.001	2.001	2.035
Delivery	2.001	2.001	2.042
Stock-Level	2.001	2.001	2.061

Think Times (seconds)	**Min**	**Average**	**Max**
New-Order	0.001	12.045	120.501
Payment	0.001	12.041	120.501
Order-Status	0.001	10.045	100.501
Delivery	0.001	5.029	50.301
Stock-Level	0.001	5.034	50.301

Test Duration	
Ramp-up time	65 min
Measurement Interval (MI)	420 min
Checkpoints in MI	15
Checkpoint Interval (Average / Max)	27:51 min / 27:53 min
Number of Transactions in MI (all types)	177,826,200

TPC-C Full Disclosure Report