



## Goldilocks v3.1 Standard Edition on UNIWIIDE RC124

TPC-C Version 5.11.0  
TPC Pricing 2.3.0

Report Date  
**21-Nov-2018**

Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
<b>₩ 245,369,000 (KRW)</b>	<b>76,168 tpmC</b>	<b>3,230 KRW/tpmC</b>	<b>Available Now</b>
Server Processors/Cores/Threads	Database Manager	Operating System	Other Software
<b>2/40/80</b>	<b>Goldilocks v3.1 Standard Edition</b>	<b>RHEL 7.5</b>	<b>JBoss Web Server</b>
			Number of Users
			<b>60,000</b>

1Gb Ethernet Switch



**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 UNIWIIDE RC124**

- 2 x Intel Xeon Gold 6148 2.40GHz
- 24 x 32GB (768GB) Memory
- 3 x 600GB SAS HDD
- 2 x 16/32Gb 2-Port Host Bus Adaptor
- 1 x 10Gb Ethernet

**Storage**

**1 x UNIWIIDE 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	2/40/80	Intel Xeon Gold 6148 2.40GHz	1/4/8	Intel Xeon E3-1270 V5 3.60GHz
Memory	24	32GB	2	8GB
Storage Controller	1	SAS 12G Raid		
	1	16/32Gb FC HBA		
Storage Device	3	600GB SAS HDD	1	1TB SATA HDD
	8	1.6TB FMD SSD (External)	1	250GB SATA SSD
Total Storage Capacity		14.6TB		



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Description	Part Number	Source	Unit Price	Qty	Price	3-Yr. Maint. Price
<b>Server Hardware</b>						
<b>1 x DB Server – RC124</b>	<b>RC124</b>	1	22,992,000	1	<b>22,992,000</b>	
Uni RC124_8bay_800W(1+1)	10102-0405-00	1	(included)	1		
Xeon Gold 6148 20C 2.4GHz 150W	20109-0381-00	1	(included)	2		
32GB DDR4-2666 R ECC	S26361-F4026-L232	1	(included)	24		
HDD SAS 12G 600GB 10K 512n 2.5"	S26361-F5550-L160	1	(included)	3		
8CH SAS 12G 2GB (RAID 0,1,5,6)	S26361-F5243-L2	1	(included)	1		
2Ch, FC 16G, HBA, PCI-E QLE2692	22208-0086-00	1	(included)	1		
Trackball Mini Keyboard		1	(included)	1		
27-inch Monitor		1	(included)	1		
Maintenance - 7x24x4 Care Pack (3-yrs)		1	2,290,000	1		<b>2,290,000</b>
<b>2 x WAS Servers (per server) - A6HGBDPNN</b>						
Intel® Xeon® Processor XEON E3-1270V5, 3.6GHz	PCPURXEON010A	2	(included)	1		
DDR4 8GB ( 2400MHz / PC4 19000 / ECC / REG )	PMEMRE409630A	2	(included)	2		
Samsung 850EVO, 250GB, SATA3, TLC, MEX	PSSDR250G002A	2	(included)	1		
1TB, 7200RPM, 64M, SATAIII, ST1000DM010	PHDDR001T011A	2	(included)	1		
KUB-1407, USB, Black	PKBDRPK10612A	2	(included)	1		
MUB-1407, USB, 1000DPI, Black	PMOURU000019C	2	(included)	1		
Tower, 500W, ATX	PPOWR500W004A	2	(included)	1		
UTP CAT5e Ethernet Cable 1M	PCPURXEON010A	2	(included)	1		
Power Cord, NICETECH, 2.5M	PMEMRE409630A	2	(included)	1		
A6HGBDPNN 7x24x4 Care Pack (3-yrs)		2	240,000	2		<b>480,000</b>
<b>Server Hardware Sub Total</b>					<b>26,752,000</b>	<b>2,770,000</b>
<b>Storage Hardware</b>						
<b>All Flash Storage - FCH2800</b>	<b>FCH2800</b>	1	72,250,000	1	<b>72,250,000</b>	
FCH2800 Controller Device	T0001-0117-00	1	(included)	1		
Back-end Bus Adapter 12G SAS	T0001-0117-01	1	(included)	1		
16G 8-Port Host Bus Adapter	T0001-0117-02	1	(included)	4		
Cache Interconnect Adapter	T0001-0117-03	1	(included)	1		
Cache Memory DDR-3 (32GB)	T0001-0117-04	1	(included)	16		
FCH2800 Flash Disk Drive Expantion Unit	T0001-0117-05	1	(included)	1		
FCH2800 controller cpu Board	T0001-0117-06	1	(included)	1		
Rack 600x1200x2010 mm (WxDxH) 42U	T0001-0117-07	1	(included)	1		
Storage Management SW	T0001-0117-08	1	(included)	1		
UTP CAT5e Ethernet Cable 1M	61001-0001-00	1	(included)	1		
Power Cord, NICETECH, 2.5M	42119-0005-00	1	(included)	2		
1.6TB Flash Memory Disk Drive	DKC-F810I-	1	3,900,000	8	31,200,000	

	1R6FM.P					
3-yrs 24x7x4hrs Onsite Support Service		1	26,350,000	1		26,350,000
<b>Storage Hardware Sub Total</b>					<b>103,450,000</b>	<b>26,350,000</b>
<b><u>Client/Server Software</u></b>						
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
JBoss Enterprise Web Server, Standard 3Year	MW0232248F3	4	7,571,000	2	15,142,000	
JBoss Standard per 16Core 3Year Maintenance	RSC-JSF3	4	12,000,000	2		24,000,000
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
<b>Software Sub Total</b>					<b>123,067,000</b>	<b>60,000,000</b>
<b><u>Other Hardware</u></b>						
UbiQuoss uSafe3010-24ps (w/spares)	22917890	6	1,500,000	3	4,500,000	
<b>Other Hardware Sub Total</b>					<b>4,500,000</b>	
<b><u>Discounts*</u></b>						
SW Discount - Goldilocks					-64,000,000	-15,600,000
Red Hat OS Discount					-4,770,000	-12,000,000
Red Hat JBoss Discount					-5,150,000	-6,000,000
<b>Discounts Sub Total</b>					<b>-73,920,000</b>	<b>-39,600,000</b>
<b>Total</b>					<b>183,849,000</b>	<b>61,520,000</b>

<p><b>Pricing Notes</b></p> <p>1) UNIWIDE Technologies Inc.    4) Rockplace Inc.  2) Atec Co., Ltd.                    5) Sunjesoft Inc.  3) Not Used                            6) NSG Inc.</p> <p>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.</p>	<p><b>Three year cost of ownership KRW(₩):        245,369,000</b></p> <p><b>TPC-C throughput:        76,168 tpmC</b></p> <p><b>Price/Performance:    3,230 ₩ / tpmC</b></p>
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**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	90 <sup>th</sup>	Max
New-Order	0.102	0.104	0.104	0.571
Payment	0.102	0.103	0.104	0.513
Order-Status	0.102	0.103	0.103	0.471
Delivery (interactive portion)	0.101	0.101	0.101	0.511
Delivery (deferred portion)	0.002	0.004	0.006	0.408
Stock-Level	0.102	0.103	0.103	0.484
Menu	0.101	0.102	0.102	0.659

Emulated Display Delay: 0.1 sec.

Transaction Mix	Percent	Number
New-Order	44.979%	31,990,910
Payment	43.011%	30,590,854
Order-Status	4.003%	2,846,851
Delivery	4.004%	2,847,595
Stock-Level	4.004%	2,847,731

Keying Times (seconds)	Min	Average	Max
New-Order	18.001	18.001	18.023
Payment	3.001	3.001	3.013
Order-Status	2.001	2.001	2.019
Delivery	2.001	2.001	2.025
Stock-Level	2.001	2.001	2.001

Think Times (seconds)	Min	Average	Max
New-Order	0.001	12.045	120.501
Payment	0.001	12.045	120.501
Order-Status	0.001	10.042	100.501
Delivery	0.001	5.029	50.301
Stock-Level	0.001	5.027	50.301

### Test Duration

Ramp-up time	65 min
Measurement Interval (MI)	420 min
Checkpoints in MI	15
Checkpoint Interval (Average / Max)	27:57 / 28:00
Number of Transactions in MI (all types)	71,123,941