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## OL68-UCSB

2 x Intel Xeon E5-2643 0 testing with a Cisco s UCSB-B200-M3 and Matrox s MGA G200e [Pilot] on OracleServer 7.4 via the Phoronix Test Suite.

### Automated Executive Summary

*OL74-UCSB had the most wins, coming in first place for 64% of the tests.*

*Based on the geometric mean of all complete results, the fastest (OL74-UCSB) was 1.42x the speed of the slowest (OL68-UCSB).*

*The results with the greatest spread from best to worst included:*

*Java SciMark (Monte Carlo Performance) at 154.151x*

*Bork File Encrypter (File Encryption Time) at 93.936x*

*Java SciMark (FFT Performance) at 75.247x*

*Java SciMark (Composite Performance) at 54.453x*

*Java SciMark (SOR Performance) at 26.797x*

*John The Ripper (Test: Traditional DES) at 3.672x*

*Threaded I/O Tester (64MB Random Read - 32 Threads) at 3.536x*

*Timed MrBayes Analysis (Primate Phylogeny Analysis) at 1.904x*

*Sudokut (Total Time) at 1.901x*

*CacheBench (Write Cache) at 1.881x.*

## Test Systems:

### OL68-UCSB

Processor: 2 x Intel Xeon E5-2680 0 @ 3.50GHz (32 Cores), Motherboard: Cisco s UCSB-B200-M3, Chipset: Intel Xeon E5/Core, Memory: 16384 MB + 8192 MB + 16384 MB + 8192 MB DDR3-1600MHz, Disk: 12 x 54GB FlashArray + 12 x 215GB FlashArray, Graphics: Matrox s MGA G200e [Pilot], Network: Cisco s VIC NIC

OS: OracleServer 6.8, Kernel: 4.1.12-37.4.1.el6uek.x86\_64 (x86\_64), Compiler: GCC 4.4.7 20120313, File-System: ext4

Compiler Notes: --build=x86\_64-redhat-linux --disable-dssi --disable-libjava-multilib --disable-libunwind-exceptions --enable-\_cxa\_atexit --enable-bootstrap --enable-checking=release --enable-gnu-unique-object --enable-java-awt=gtk --enable-java-maintainer-mode --enable-languages=c,c++,objc,obj-c++,java,fortran,ada --enable-libgcj-multifile --enable-shared --enable-threads=posix --mandir=/usr/share/man --with-arch\_32=i686 --with-cloog --with-ppl --with-tune=generic

Disk Notes: DEADLINE / data=ordered,relatime,rw,stripe=1024

Processor Notes: Scaling Governor: intel\_pstate powersave

System Notes: Python 2.6.6.

### OL74-UCSB

Processor: 2 x Intel Xeon E5-2643 0 @ 3.50GHz (16 Cores), Motherboard: Cisco s UCSB-B200-M3, Chipset: Intel Xeon E5/Core, Memory: 24 x 16384 MB DDR3-1333MHz, Disk: 12 x 54GB FlashArray + 12 x 215GB FlashArray, Graphics: Matrox s MGA G200e [Pilot], Network: Cisco s VIC NIC

OS: OracleServer 7.4, Kernel: 4.1.12-103.7.3.el7uek.x86\_64 (x86\_64), Compiler: GCC 4.8.5 20150623, File-System: ext4, Screen Resolution: 1024x768

Compiler Notes: --build=x86\_64-redhat-linux --disable-libgcj --disable-libunwind-exceptions --enable-\_cxa\_atexit --enable-bootstrap --enable-checking=release --enable-gnu-indirect-function --enable-gnu-unique-object --enable-initfini-array --enable-languages=c,c++,objc,obj-c++,java,fortran,ada,go,lto --enable-plugin --enable-shared --enable-threads=posix --mandir=/usr/share/man --with-arch\_32=x86-64 --with-linker-hash-style=gnu --with-tune=generic

Disk Notes: DEADLINE / data=ordered,relatime,rw,stripe=1024

Processor Notes: Scaling Governor: intel\_pstate performance

System Notes: Python 2.7.5.

	OL68-UCSB	OL74-UCSB
<b>AIO-Stress - Rand Write (MB/s)</b>	<b>1853</b>	<b>1713</b>
Normalized	100%	92.44%
Standard Deviation	1%	1.6%
<b>SQLite - T.S.I (sec)</b>	<b>28.81</b>	<b>21.99</b>
Normalized	76.33%	100%
Standard Deviation	4.3%	6.4%
<b>FS-Mark - 1.F.1.S (Files/s)</b>	<b>165.07</b>	<b>219.40</b>
Normalized	75.24%	100%
Standard Deviation	0.6%	1.3%

<b>Dbench - 12 Clients (MB/s)</b>	<b>1012</b>	<b>1389</b>
Normalized	72.9%	100%
Standard Deviation	0.9%	0.7%
<b>Dbench - 48 Clients (MB/s)</b>	<b>1792</b>	<b>2886</b>
Normalized	62.07%	100%
Standard Deviation	1.9%	0.7%
<b>Dbench - 128 Clients (MB/s)</b>	<b>1741</b>	<b>3175</b>
Normalized	54.83%	100%
Standard Deviation	2.9%	0.2%
<b>Dbench - 1 Clients (MB/s)</b>	<b>135.17</b>	<b>209.40</b>
Normalized	64.55%	100%
Standard Deviation	0.5%	1.4%
<b>Threaded I/O Tester - 64MB Rand Read - 32 Threads (MB/s)</b>	<b>58520</b>	<b>206943</b>
Normalized	28.28%	100%
Standard Deviation	1.1%	5.9%
<b>Threaded I/O Tester - 64MB Rand Write - 32 Threads (MB/s)</b>	<b>995.65</b>	<b>1133</b>
Normalized	87.89%	100%
Standard Deviation	4.4%	12%
<b>Compile Bench - Compile (MB/s)</b>	<b>1119</b>	<b>1238</b>
Normalized	90.37%	100%
Standard Deviation	5.8%	0.5%
<b>Compile Bench - Initial Create (MB/s)</b>	<b>204.50</b>	<b>213.69</b>
Normalized	95.7%	100%
Standard Deviation	3.8%	2.8%
<b>Compile Bench - Read Compiled Tree (MB/s)</b>	<b>438.66</b>	<b>498.99</b>
Normalized	87.91%	100%
Standard Deviation	1.9%	3.9%
<b>Unpacking The Linux Kernel - linux-2.6.32.tar.bz2</b>	<b>10.40</b>	<b>9.32</b>
Normalized	89.62%	100%
Standard Deviation	2.4%	1.6%
<b>PostMark - D.T.P (TPS)</b>	<b>4076</b>	<b>4054</b>
Normalized	100%	99.46%
Standard Deviation	0.9%	0.9%
<b>RAMspeed SMP - Integer Add (MB/s)</b>	<b>20792</b>	<b>20435</b>
Normalized	100%	98.29%
<b>RAMspeed SMP - Integer Copy (MB/s)</b>	<b>17973</b>	<b>16870</b>
Normalized	100%	93.87%
<b>RAMspeed SMP - Integer Scale (MB/s)</b>	<b>17560</b>	<b>17475</b>
Normalized	100%	99.51%
<b>RAMspeed SMP - Floating-Point Add (MB/s)</b>	<b>20766</b>	<b>18663</b>
Normalized	100%	89.87%
<b>Stream - Copy (MB/s)</b>	<b>16212</b>	<b>25490</b>
Normalized	63.6%	100%
Standard Deviation	0.8%	0.9%
<b>Stream - Scale (MB/s)</b>	<b>16197</b>	<b>19324</b>
Normalized	83.82%	100%
Standard Deviation	2.1%	1.2%
<b>Stream - Triad (MB/s)</b>	<b>18476</b>	<b>21191</b>
Normalized	87.19%	100%
Standard Deviation	1.6%	2.4%
<b>Stream - Add (MB/s)</b>	<b>18262</b>	<b>21477</b>
Normalized	85.03%	100%
Standard Deviation	1.3%	1.4%

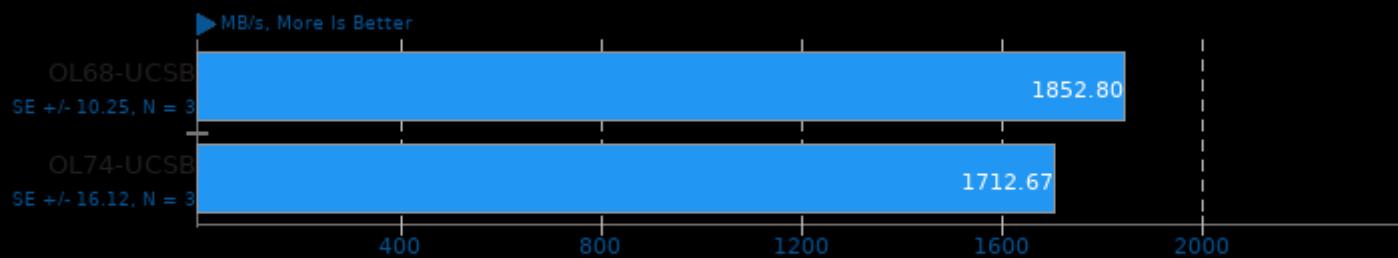
<b>Stream - Copy (MB/s)</b>	<b>16212</b>	<b>25490</b>
Normalized	63.6%	100%
Standard Deviation	0.8%	0.9%
<b>Stream - Scale (MB/s)</b>	<b>16197</b>	<b>19324</b>
Normalized	83.82%	100%
Standard Deviation	2.1%	1.2%
<b>Stream - Add (MB/s)</b>	<b>18262</b>	<b>21477</b>
Normalized	85.03%	100%
Standard Deviation	1.3%	1.4%
<b>Loopback TCP Network Performance - T.T.T.1.V.L</b>	14.22	
Standard Deviation	1%	
<b>Timed HMMer Search - P.D.S (sec)</b>	<b>9.80</b>	<b>8.93</b>
Normalized	91.12%	100%
Standard Deviation	2.1%	0.4%
<b>Timed MrBayes Analysis - P.P.A (sec)</b>	<b>599.17</b>	<b>314.76</b>
Normalized	52.53%	100%
Standard Deviation	0.8%	0.1%
<b>Java SciMark - FFT Performance (Mflops)</b>	<b>12.93</b>	<b>972.94</b>
Normalized	1.33%	100%
Standard Deviation	0.1%	0%
<b>Java SciMark - SOR Performance (Mflops)</b>	<b>50.49</b>	<b>1353</b>
Normalized	3.73%	100%
Standard Deviation	1.7%	0%
<b>Java SciMark - C.P (Mflops)</b>	<b>31.81</b>	<b>1732</b>
Normalized	1.84%	100%
Standard Deviation	0.6%	0.3%
<b>Java SciMark - M.C.P (Mflops)</b>	<b>5.17</b>	<b>796.96</b>
Normalized	0.65%	100%
Standard Deviation	1.3%	2.3%
<b>Bork File Encrypter - F.E.T (sec)</b>	<b>1035</b>	<b>11.02</b>
Normalized	1.06%	100%
Standard Deviation	0.4%	0.6%
<b>Fhourstones - C.C.4.S (Kpos / sec)</b>	<b>9217</b>	<b>8341</b>
Normalized	100%	90.49%
Standard Deviation	0.4%	0.4%
<b>BYTE Unix Benchmark - Dhrystone 2 (LPS)</b>	<b>24672441</b>	<b>25682053</b>
Normalized	96.07%	100%
Standard Deviation	0.1%	0.1%
<b>CacheBench - Read Cache (MB/s)</b>	<b>2910</b>	<b>2960</b>
Normalized	98.31%	100%
Standard Deviation	2%	0%
<b>CacheBench - Write Cache (MB/s)</b>	<b>12437</b>	<b>23393</b>
Normalized	53.17%	100%
Standard Deviation	0.8%	0%
<b>SciMark - Composite (Mflops)</b>	<b>484.83</b>	<b>460.86</b>
Normalized	100%	95.06%
Standard Deviation	1.8%	1.6%
<b>Gcrypt Library - C.E.C (us)</b>	<b>2717</b>	<b>2547</b>
Normalized	93.74%	100%
Standard Deviation	0.2%	0.5%
<b>TSCP - A.C.P (Nodes/s)</b>	<b>958542</b>	<b>975519</b>
Normalized	98.26%	100%
Standard Deviation	0.1%	0.1%
<b>John The Ripper - Blowfish (Real C/S)</b>	<b>15211</b>	<b>9369</b>
Normalized	100%	61.59%

	Standard Deviation	0%
<b>John The Ripper - Traditional DES (Real C/S)</b>	<b>57601333</b>	<b>15687333</b>
Normalized	100%	27.23%
Standard Deviation	0.3%	0.1%
<b>John The Ripper - Blowfish (Real C/S)</b>	<b>15211</b>	<b>9350</b>
Normalized	100%	61.47%
Standard Deviation	0%	0.2%
<b>John The Ripper - MD5 (Real C/S)</b>	<b>212565</b>	<b>129003</b>
Normalized	100%	60.69%
Standard Deviation	0.6%	0.1%
<b>x264 - H.2.V.E (FPS)</b>	<b>270.80</b>	<b>217.55</b>
Normalized	100%	80.34%
Standard Deviation	1.2%	1.2%
<b>GraphicsMagick - HWB Color Space (Iterations/min)</b>	<b>162</b>	<b>171</b>
Normalized	94.74%	100%
Standard Deviation	1.4%	
<b>Himeno Benchmark - P.P.S (MFLOPS)</b>	<b>1488</b>	<b>1427</b>
Normalized	100%	95.91%
Standard Deviation	1.8%	0.6%
<b>7-Zip Compression - C.S.T (MIPS)</b>	<b>54736</b>	<b>33770</b>
Normalized	100%	61.7%
Standard Deviation	0.4%	1.1%
<b>Timed Apache Compilation - Time To Compile (sec)</b>	<b>29.22</b>	<b>24.94</b>
Normalized	85.35%	100%
Standard Deviation	0.3%	0.2%
<b>Timed ImageMagick Compilation - Time To Compile</b>	<b>27.38</b>	<b>43.80</b>
Normalized	100%	62.51%
Standard Deviation	4%	3.3%
<b>Timed Linux Kernel Compilation - Time To Compile</b>	<b>58.86</b>	<b>89.36</b>
Normalized	100%	65.87%
Standard Deviation	3.3%	2.3%
<b>Timed MPlayer Compilation - Time To Compile (sec)</b>	<b>20.80</b>	
Standard Deviation	1.4%	
<b>Timed PHP Compilation - Time To Compile (sec)</b>	<b>52.54</b>	<b>69.94</b>
Normalized	100%	75.12%
Standard Deviation	1.1%	2.7%
<b>C-Ray - Total Time (sec)</b>	<b>16.51</b>	<b>16.52</b>
Normalized	100%	99.94%
Standard Deviation	0%	0.1%
<b>Parallel BZIP2 Compression - 2.F.C (sec)</b>	<b>4.18</b>	<b>6.18</b>
Normalized	100%	67.64%
Standard Deviation	10.2%	3.9%
<b>Bullet Physics Engine - 3000 Fall (sec)</b>	<b>6.24</b>	<b>5.82</b>
Normalized	93.27%	100%
Standard Deviation	0%	0.3%
<b>Bullet Physics Engine - Convex Trimesh (sec)</b>	<b>1.72</b>	<b>1.65</b>
Normalized	95.93%	100%
Standard Deviation	0.1%	0.1%
<b>Gzip Compression - 2.F.C (sec)</b>	<b>13.23</b>	<b>14.29</b>
Normalized	100%	92.58%
Standard Deviation	0.4%	0.3%
<b>LZMA Compression - 2.F.C (sec)</b>	<b>339.25</b>	<b>341.05</b>
Normalized	100%	99.47%
Standard Deviation	0.5%	0.3%
<b>Crafty - Elapsed Time (sec)</b>	<b>83.83</b>	<b>84.10</b>

	Normalized	100%	99.68%
	Standard Deviation	0.1%	0.2%
<b>ddraw - R.T.P.I.C (sec)</b>	<b>64.98</b>	<b>64.86</b>	
	Normalized	99.82%	100%
	Standard Deviation	0.1%	0%
<b>Monkey Audio Encoding - WAV To APE (sec)</b>	<b>6.56</b>	<b>6.11</b>	
	Normalized	93.14%	100%
	Standard Deviation	2.4%	0.3%
<b>FLAC Audio Encoding - WAV To FLAC (sec)</b>	<b>10.05</b>	<b>9.06</b>	
	Normalized	90.15%	100%
	Standard Deviation	1.6%	0.3%
<b>LAME MP3 Encoding - WAV To MP3 (sec)</b>	<b>15.32</b>	<b>15.50</b>	
	Normalized	100%	98.84%
	Standard Deviation	0.4%	0.2%
<b>WavPack Audio Encoding - WAV To WavPack (sec)</b>	<b>8.29</b>	<b>8.04</b>	
	Normalized	96.98%	100%
	Standard Deviation	0%	0.5%
<b>eSpeak Speech Engine - T.T.S.S (sec)</b>	<b>5.41</b>	<b>4.16</b>	
	Normalized	76.89%	100%
	Standard Deviation	2.3%	1.6%
<b>GnuPG - 1.F.E (sec)</b>	<b>9.76</b>	<b>8.87</b>	
	Normalized	90.88%	100%
	Standard Deviation	1.2%	0.4%
<b>Mencoder - AVI To LAVC (sec)</b>	<b>24.98</b>	<b>23.93</b>	
	Normalized	95.8%	100%
	Standard Deviation	1.3%	0.4%
<b>Sudokut - Total Time (sec)</b>	<b>43.89</b>	<b>23.09</b>	
	Normalized	52.61%	100%
	Standard Deviation	2.8%	0%
<b>OpenSSL - R.4.b.P (Signs/sec)</b>	<b>1628</b>	<b>961.97</b>	
	Normalized	100%	59.08%
	Standard Deviation	0.2%	0%
<b>NGINX Benchmark - S.W.P.S (Req/sec)</b>	<b>20291</b>	<b>21704</b>	
	Normalized	93.49%	100%
	Standard Deviation	3.4%	0.2%
<b>Apache Benchmark - S.W.P.S (Req/sec)</b>	<b>16120</b>	<b>28120</b>	
	Normalized	57.33%	100%
	Standard Deviation	0.9%	0.7%
<b>PHPBench - P.B.S (Score)</b>	<b>107346</b>	<b>139440</b>	
	Normalized	76.98%	100%
	Standard Deviation	0.5%	2.8%

## AIO-Stress 0.21

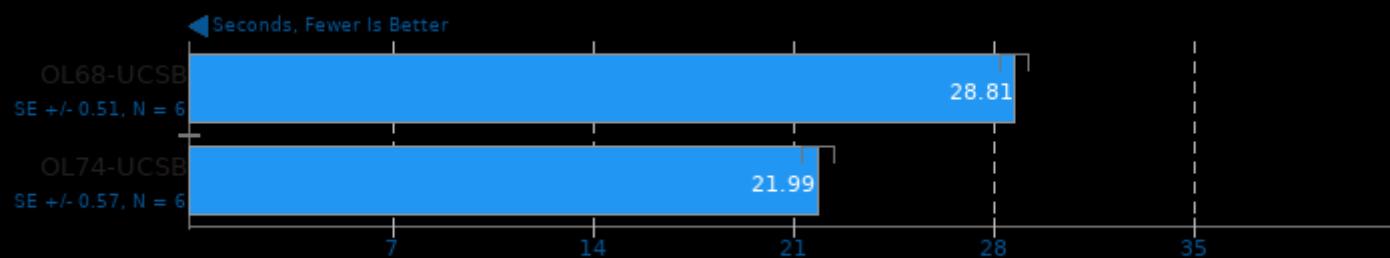
Random Write



1. (CC) gcc options: -pthread -laio

## SQLite 3.8.10.2

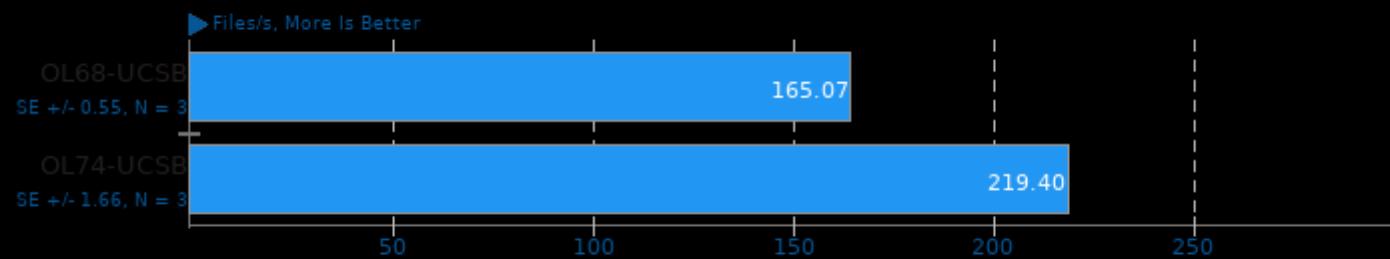
Timed SQLite Insertions



1. (CC) gcc options: -O2 -lreadline -lcurses -ldl -lpthread

## FS-Mark 3.3

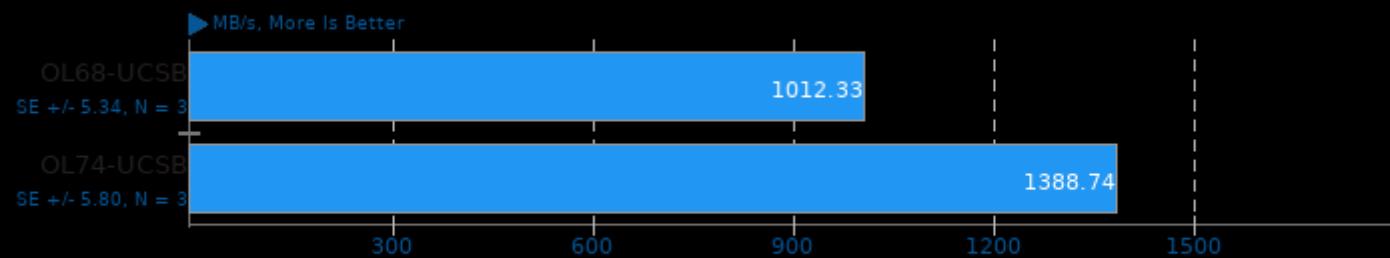
1000 Files, 1MB Size



1. (CC) gcc options: -static

## Dbench 4.0

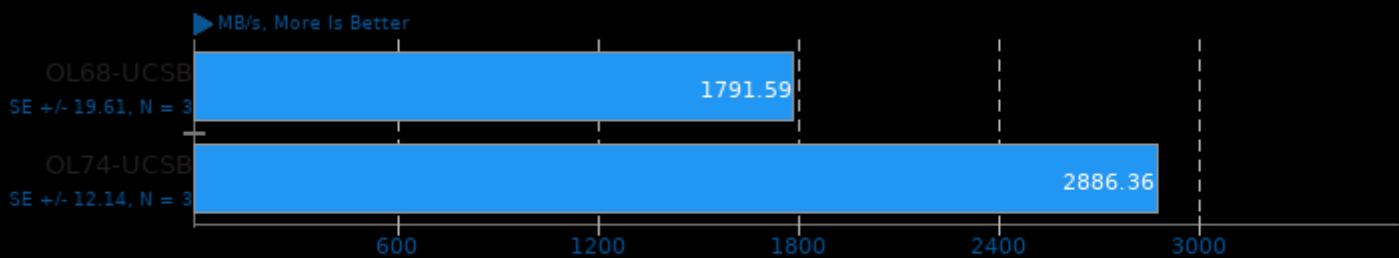
12 Clients



1. (CC) gcc options: -fno-optimize-sibling-calls

## Dbench 4.0

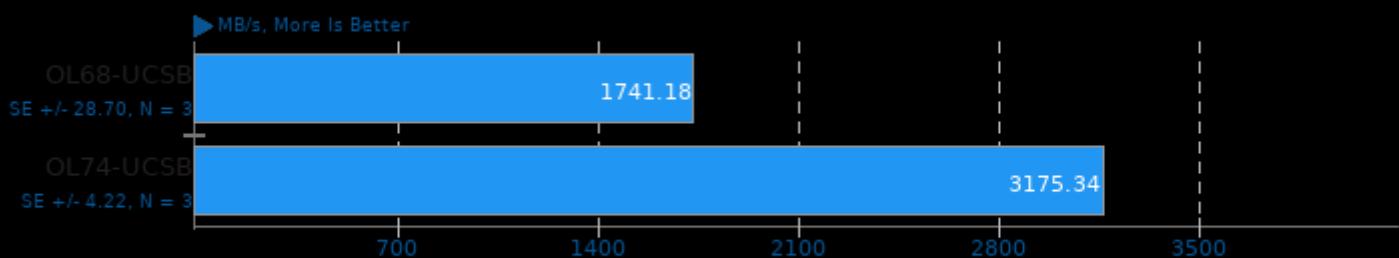
48 Clients



1. (CC) gcc options: -lpopt -O2

## Dbench 4.0

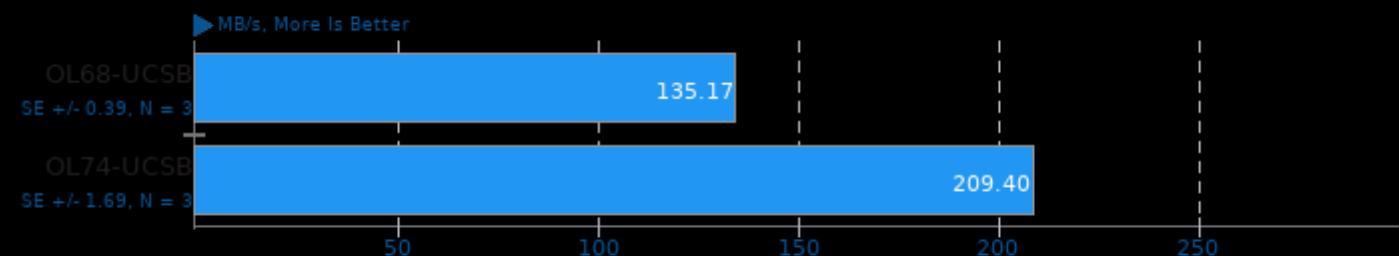
128 Clients



1. (CC) gcc options: -lpopt -O2

## Dbench 4.0

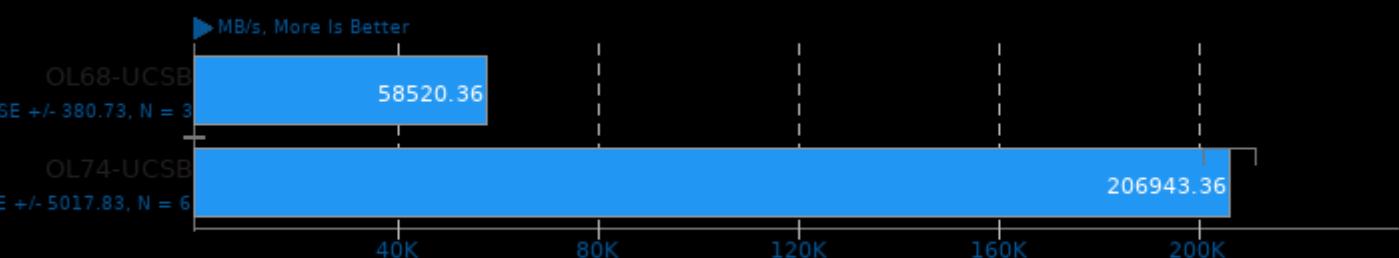
1 Clients



1. (CC) gcc options: -lpopt -O2

## Threaded I/O Tester 20170503

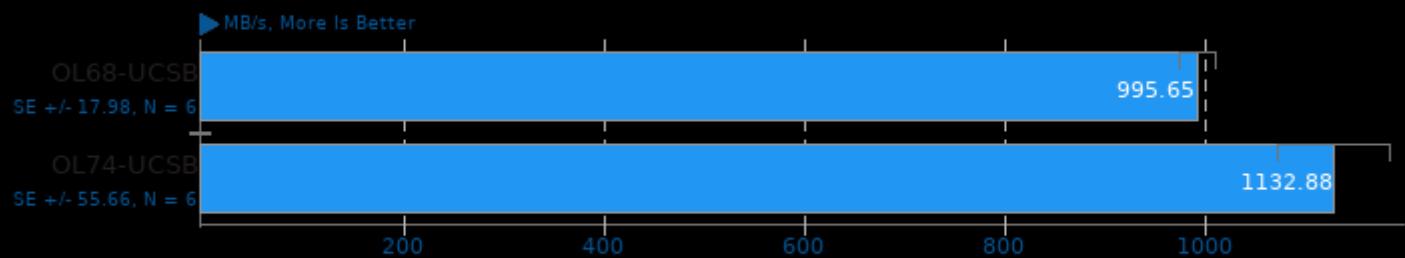
64MB Random Read - 32 Threads



1. (CC) gcc options: -O2

## Threaded I/O Tester 20170503

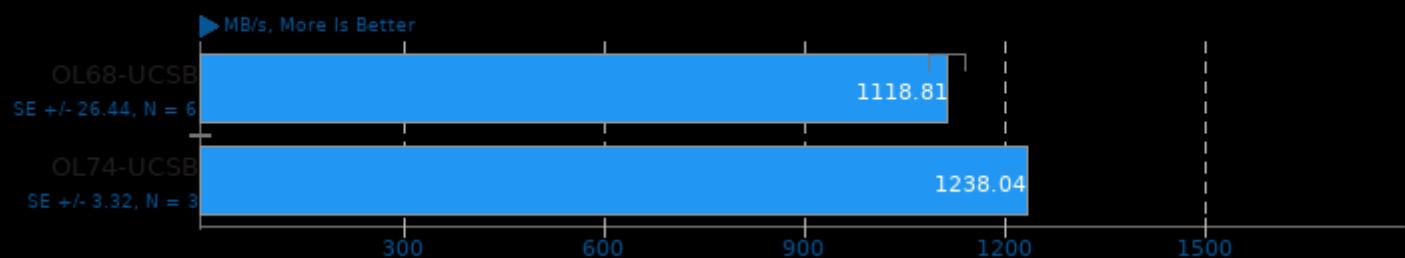
64MB Random Write - 32 Threads



1. (CC) gcc options: -O2

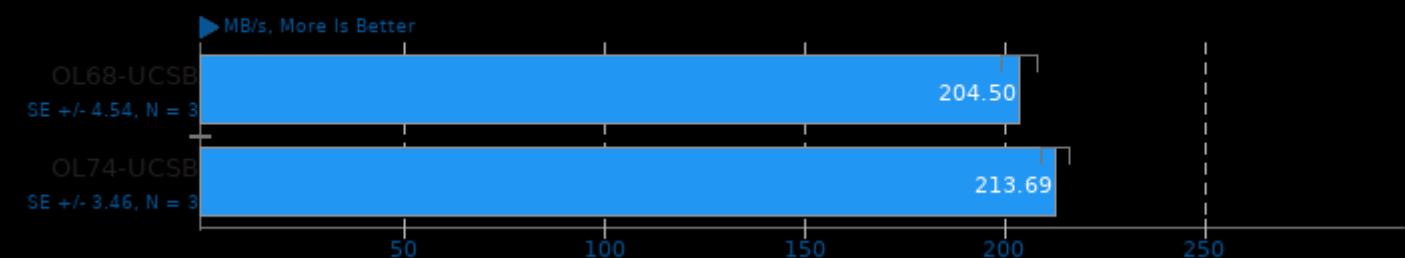
## Compile Bench 0.6

Test: Compile



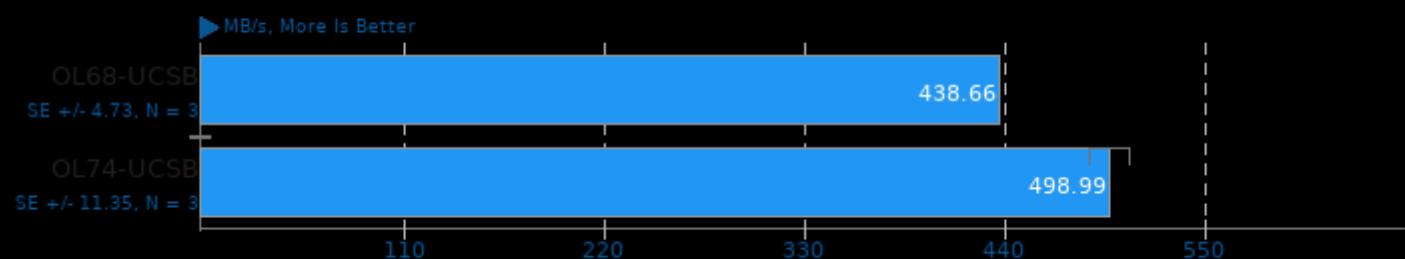
## Compile Bench 0.6

Test: Initial Create



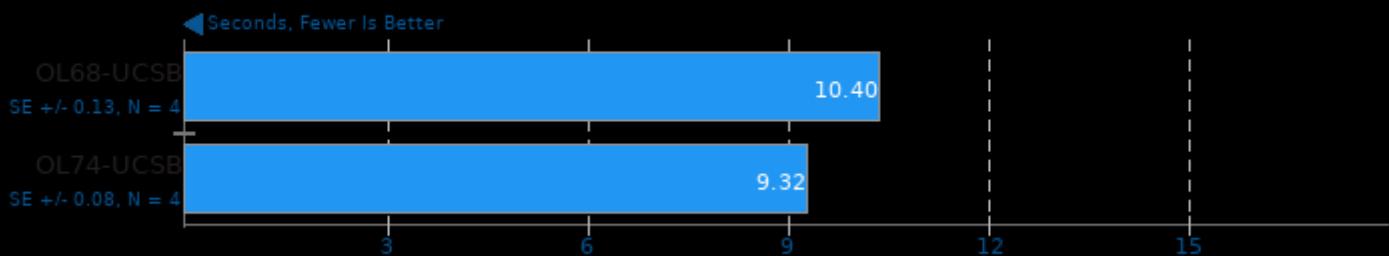
## Compile Bench 0.6

Test: Read Compiled Tree



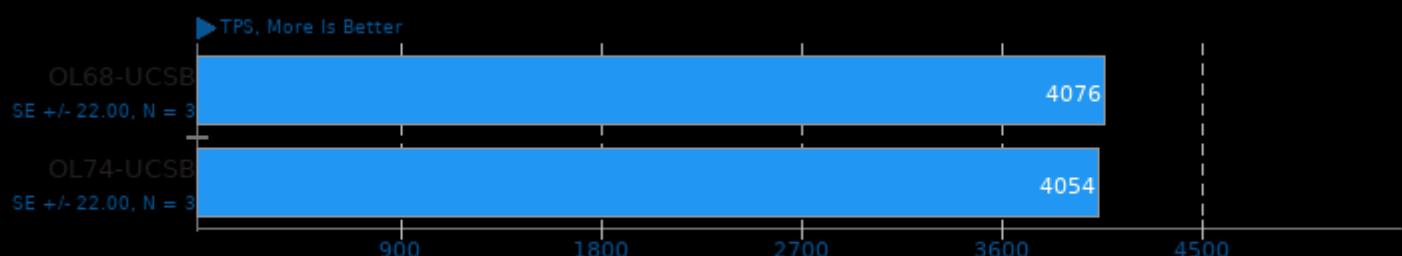
## Unpacking The Linux Kernel

linux-2.6.32.tar.bz2



## PostMark 1.51

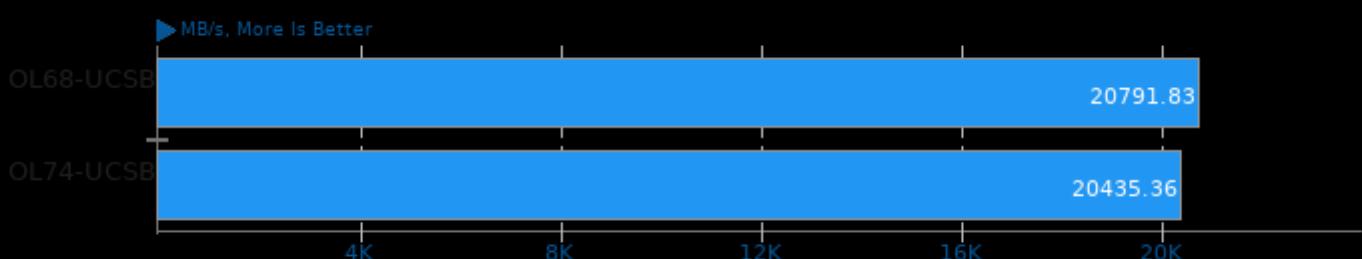
Disk Transaction Performance



1. (CC) gcc options: -O3

## RAMspeed SMP 3.5.0

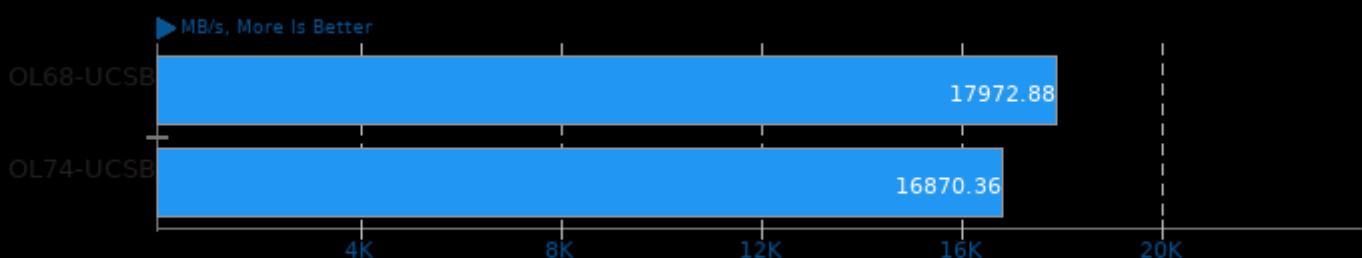
Integer Add



1. (CC) gcc options: -O3 -march=native

## RAMspeed SMP 3.5.0

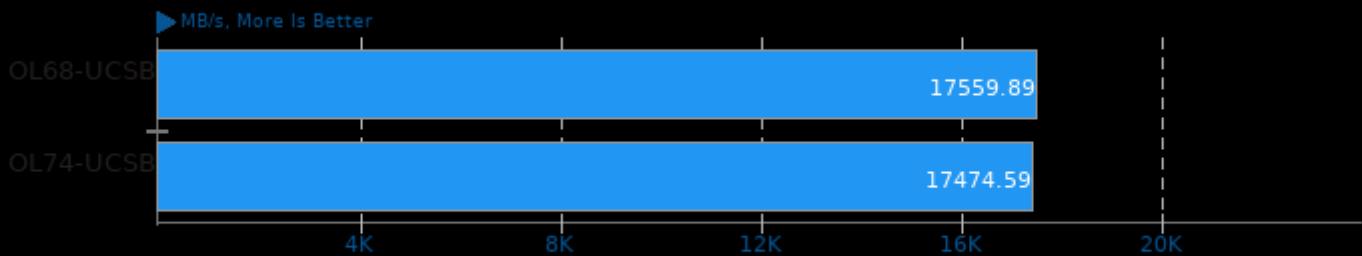
Integer Copy



1. (CC) gcc options: -O3 -march=native

## RAMspeed SMP 3.5.0

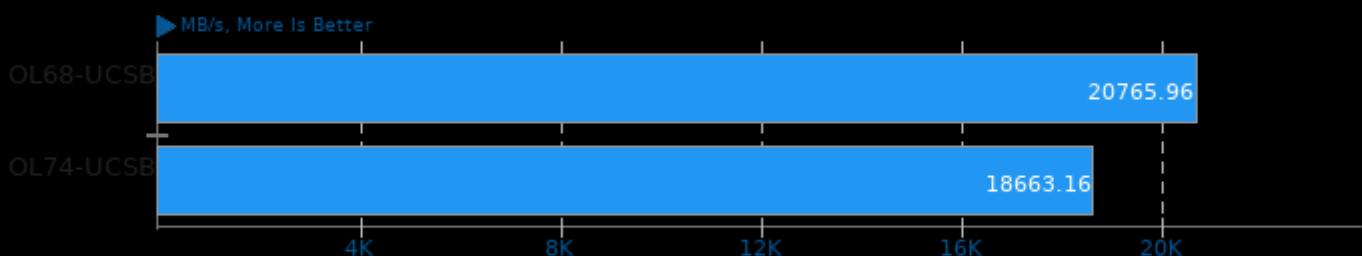
Integer Scale



1. (CC) gcc options: -O3 -march=native

## RAMspeed SMP 3.5.0

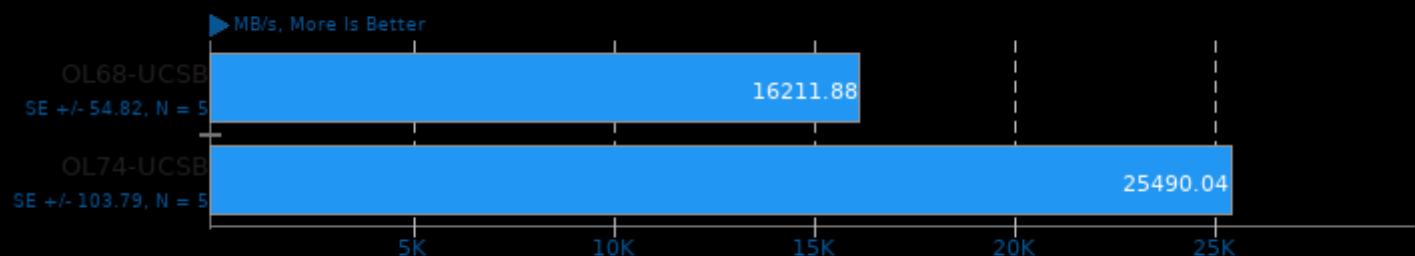
Floating-Point Add



1. (CC) gcc options: -O3 -march=native

## Stream 2013-01-17

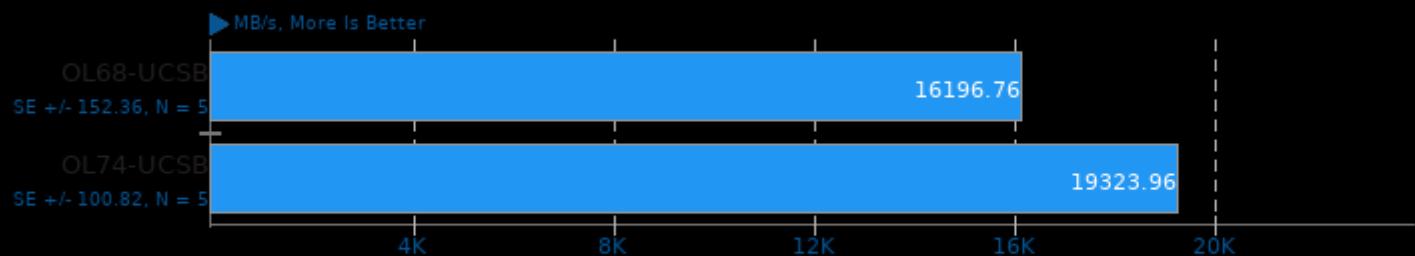
Type: Copy



1. (CC) gcc options: -O3 -march=native -fopenmp

## Stream 2013-01-17

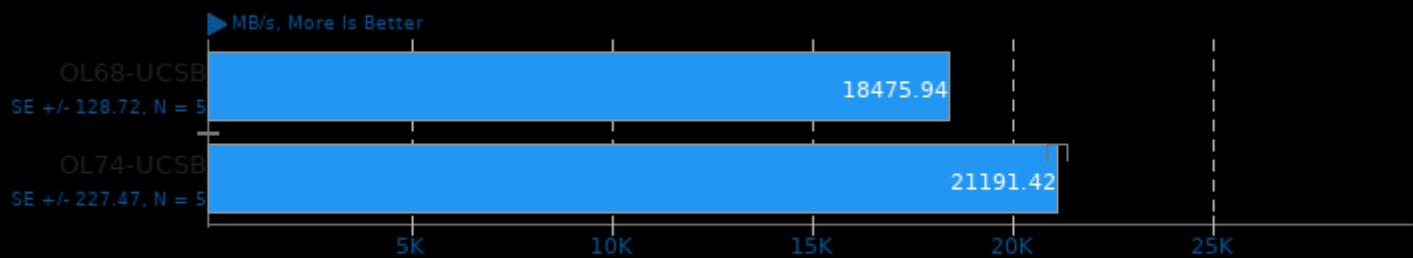
Type: Scale



1. (CC) gcc options: -O3 -march=native -fopenmp

**Stream 2013-01-17**

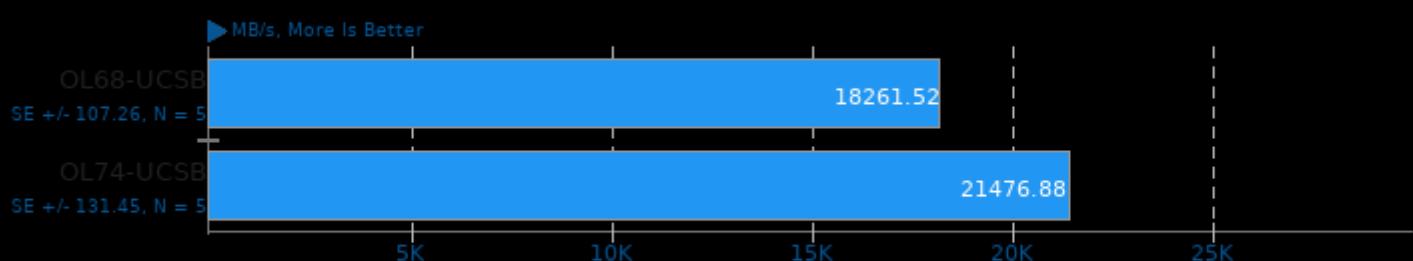
Type: Triad



1. (CC) gcc options: -O3 -march=native -fopenmp

**Stream 2013-01-17**

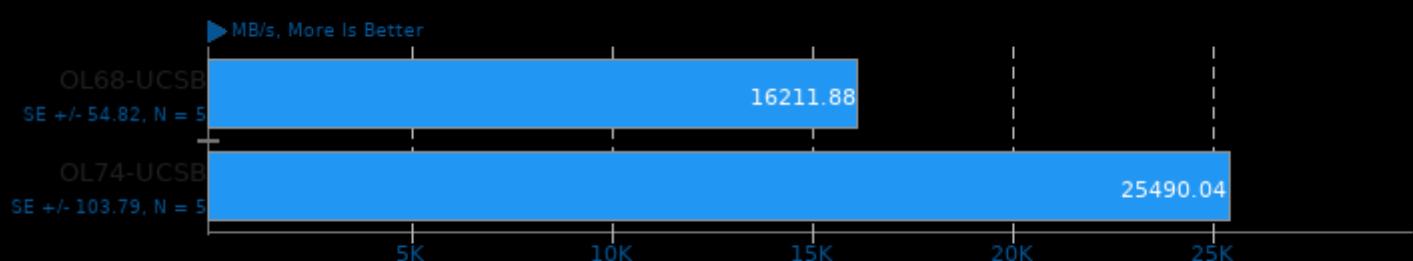
Add



1. (CC) gcc options: -O3 -march=native -fopenmp

**Stream 2013-01-17**

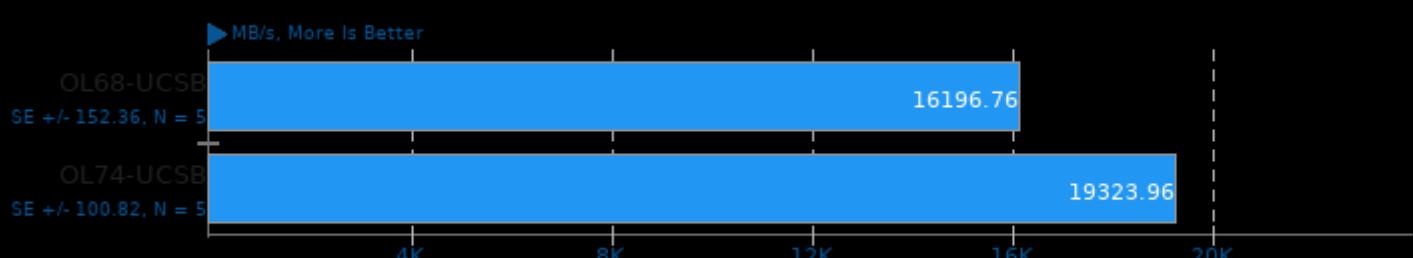
Copy



1. (CC) gcc options: -O3 -march=native -fopenmp

**Stream 2013-01-17**

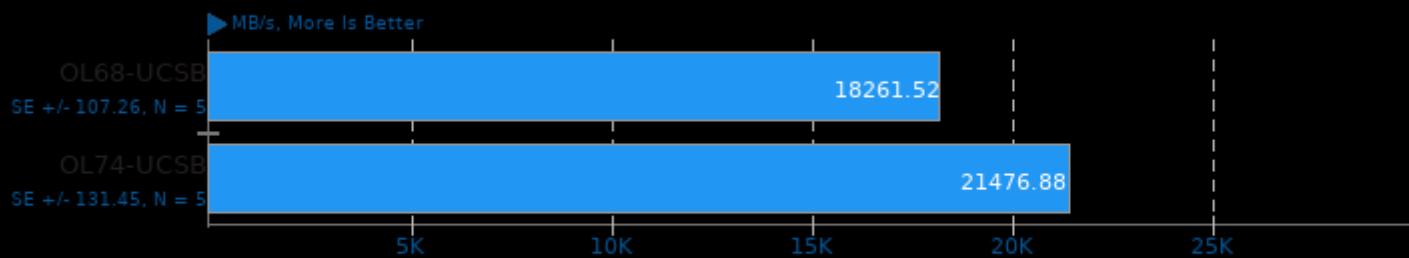
Scale



1. (CC) gcc options: -O3 -march=native -fopenmp

## Stream 2013-01-17

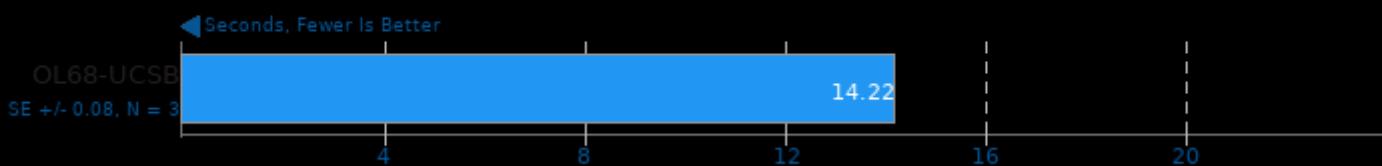
Type: Add



1. (CC) gcc options: -O3 -march=native -fopenmp

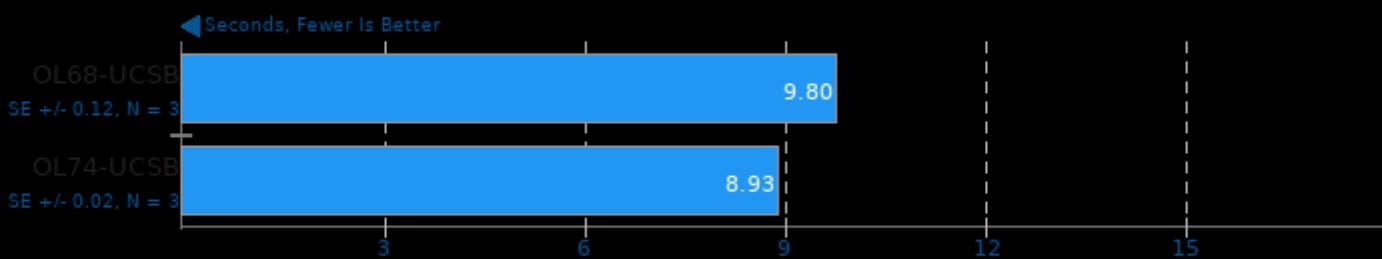
## Loopback TCP Network Performance

Time To Transfer 10GB Via Loopback



## Timed HMMer Search 2.3.2

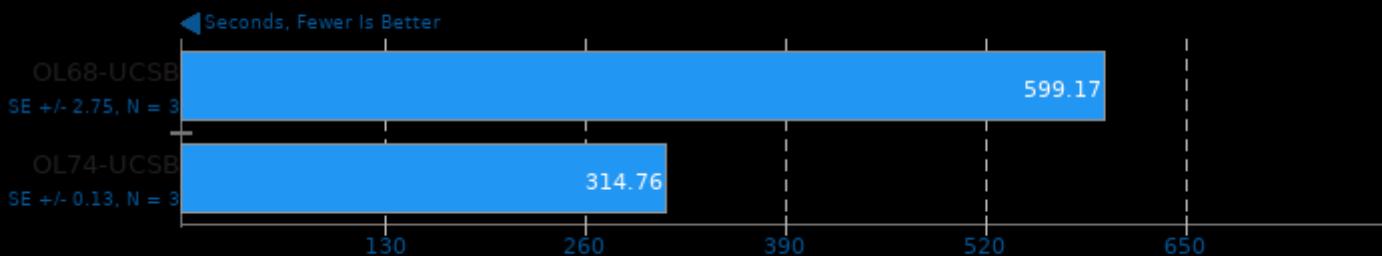
Pfam Database Search



1. (CC) gcc options: -O2 -pthread -lhmmer -lsquid -lm

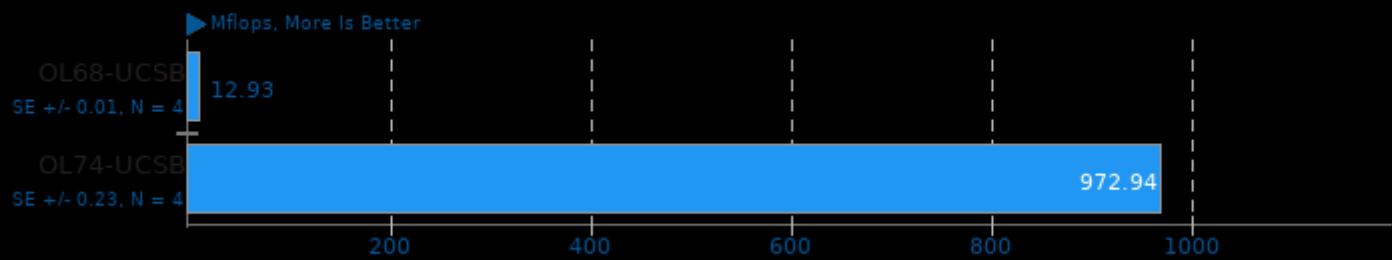
## Timed MrBayes Analysis 3.1.2

Primate Phylogeny Analysis



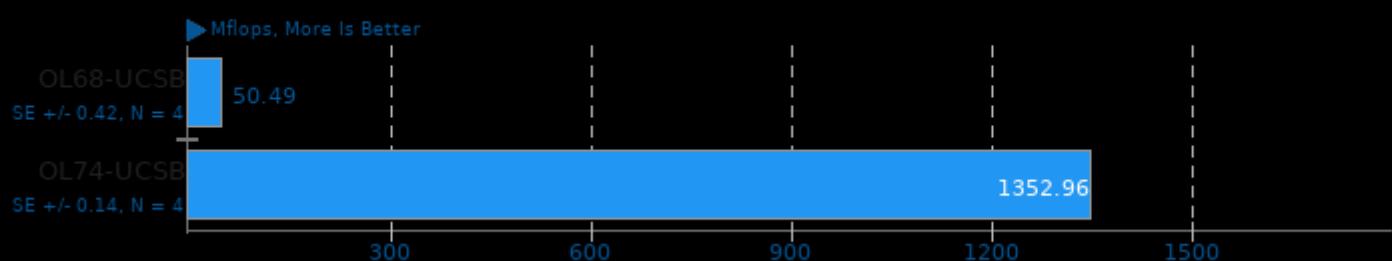
## Java SciMark 2.0

### FFT Performance



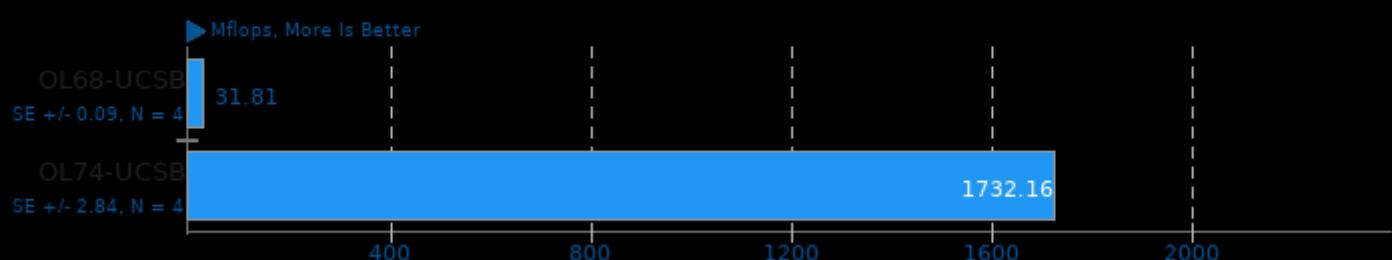
## Java SciMark 2.0

### SOR Performance



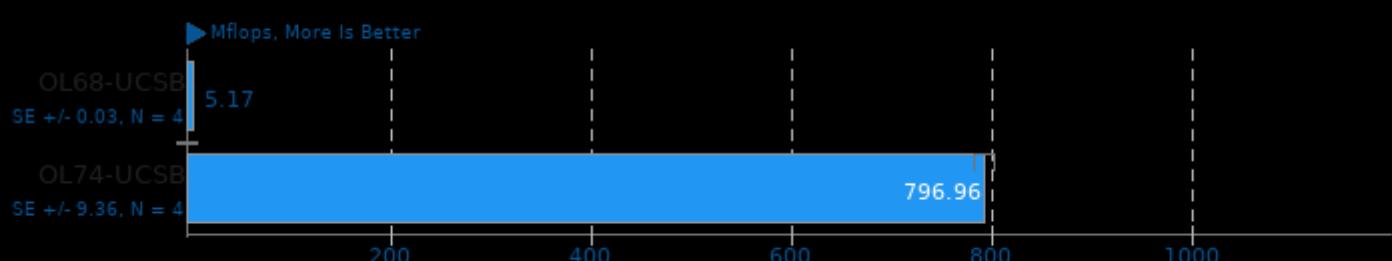
## Java SciMark 2.0

### Composite Performance



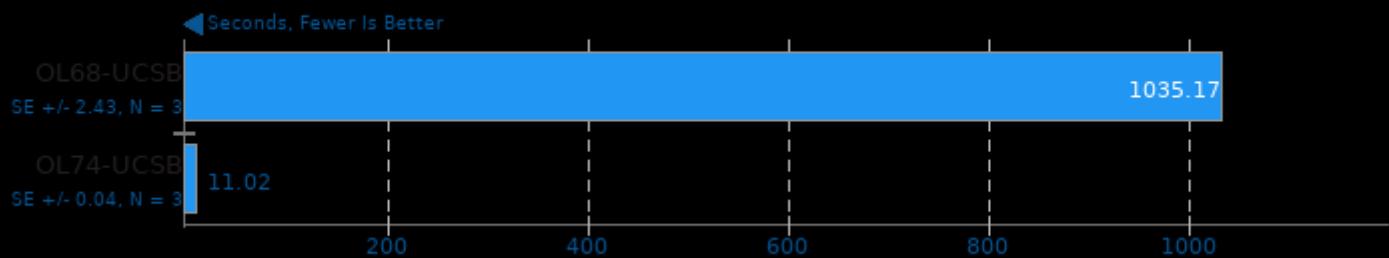
## Java SciMark 2.0

### Monte Carlo Performance



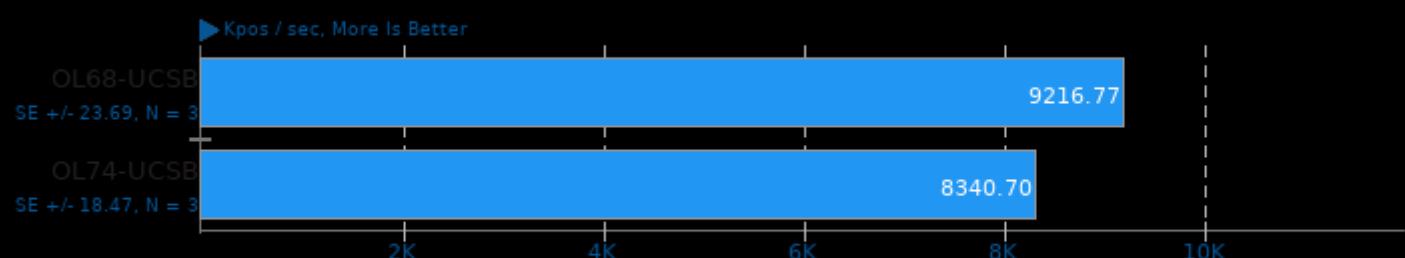
## Bork File Encrypter 1.4

File Encryption Time



## Fhourstones 3.1

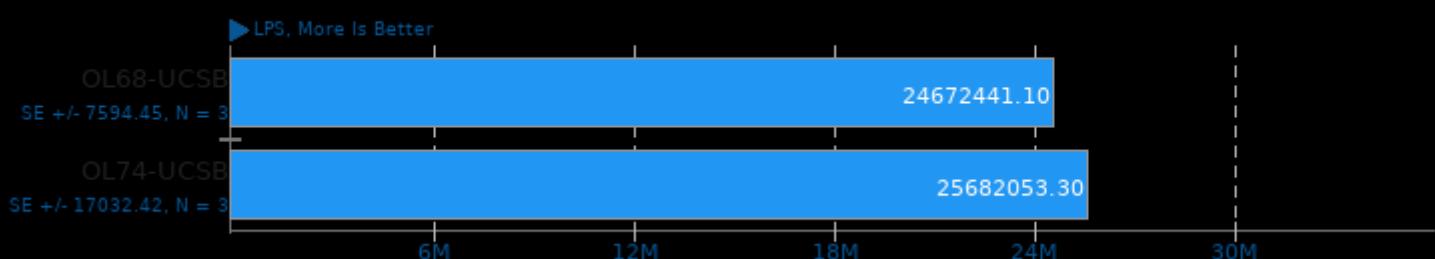
Complex Connect-4 Solving



1. (CC) gcc options: -O3

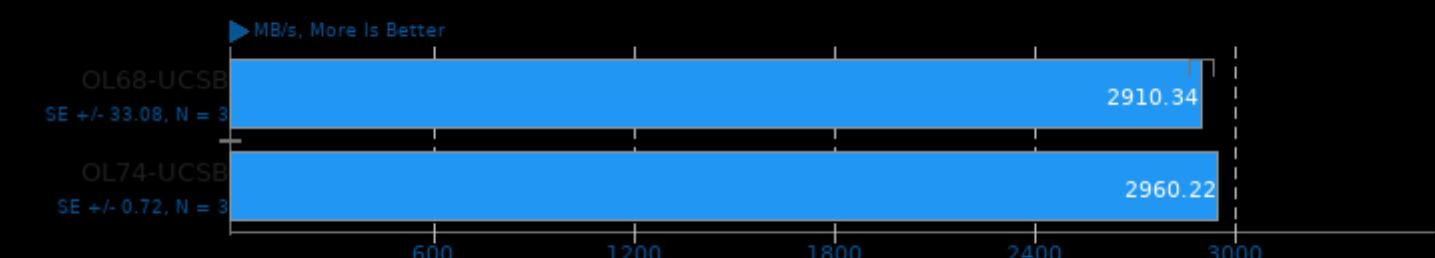
## BYTE Unix Benchmark 3.6

Dhrystone 2



## CacheBench

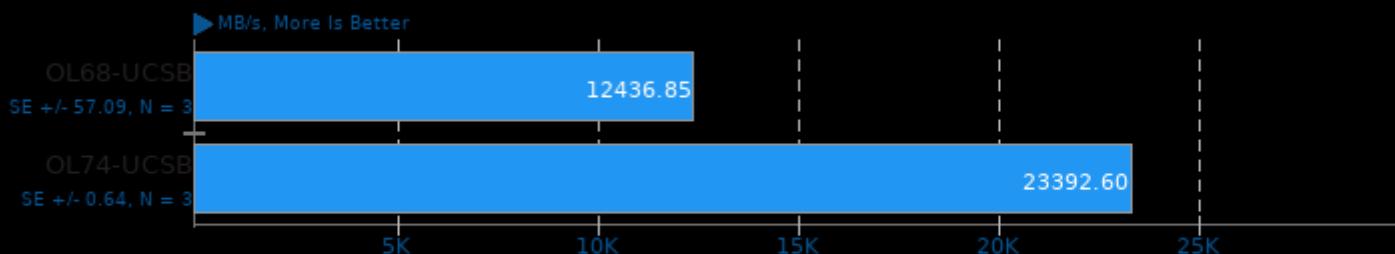
Read Cache



1. (CC) gcc options: -lrt

## CacheBench

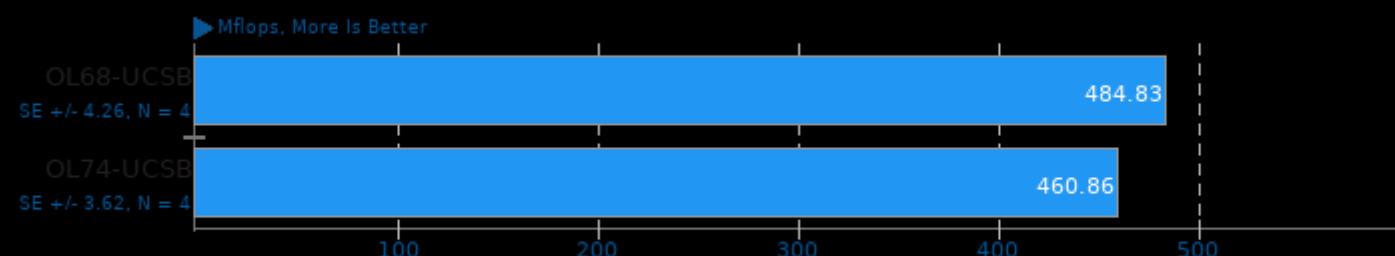
Write Cache



1. (CC) gcc options: -lrt

## SciMark 2.0

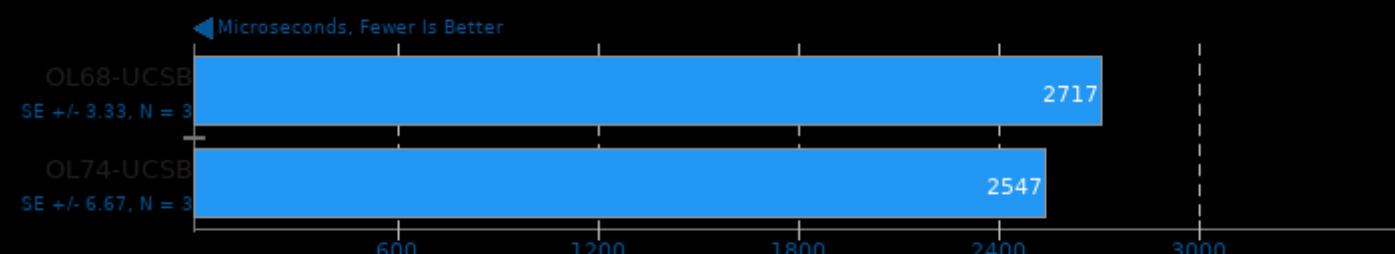
Composite



1. (CC) gcc options: -lm

## Gcrypt Library 1.4.4

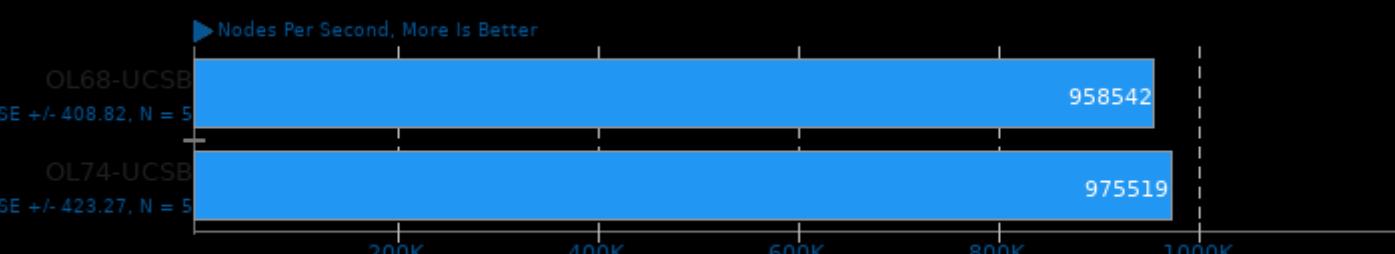
CAMELLIA256-ECB Cipher



1. (CC) gcc options: -O2 -fvisibility=hidden

## TSCP 1.81

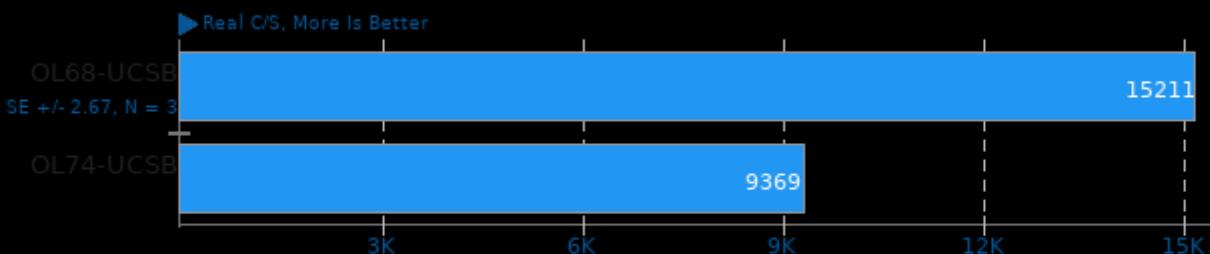
AI Chess Performance



1. (CC) gcc options: -O3 -march=native

## John The Ripper 1.8.0

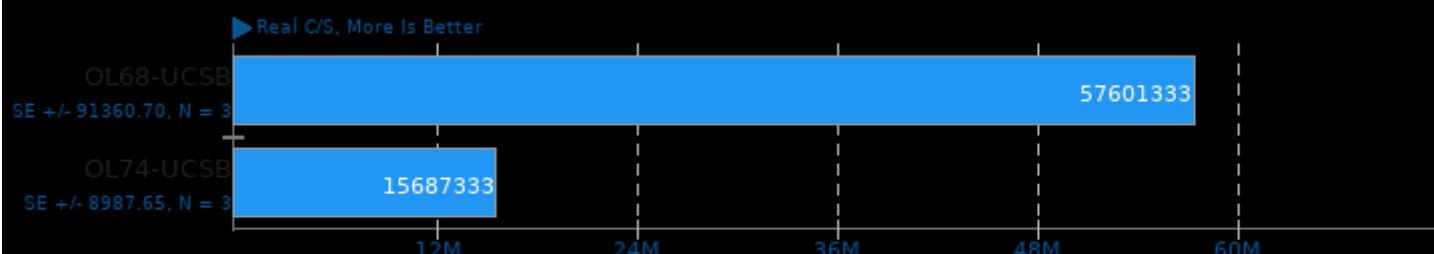
Test: Blowfish



1. (CC) gcc options: -fopenmp -lcrypt

## John The Ripper 1.8.0

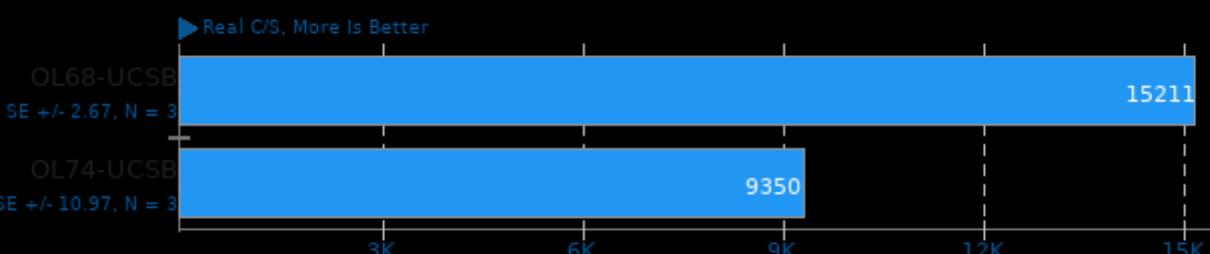
Test: Traditional DES



1. (CC) gcc options: -fopenmp -lcrypt

## John The Ripper 1.8.0

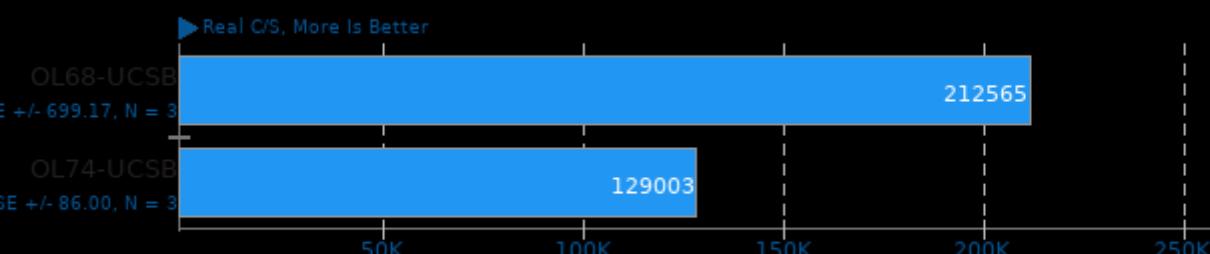
Blowfish



1. (CC) gcc options: -fopenmp -lcrypt

## John The Ripper 1.8.0

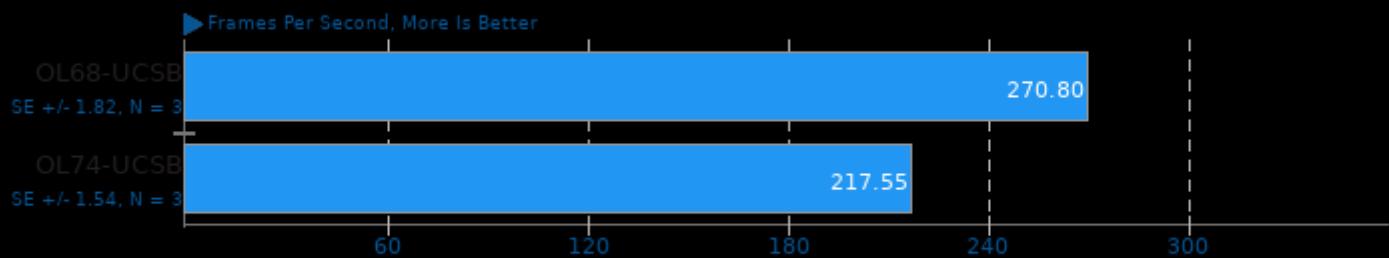
Test: MD5



1. (CC) gcc options: -fopenmp -lcrypt

## x264 2017-09-08

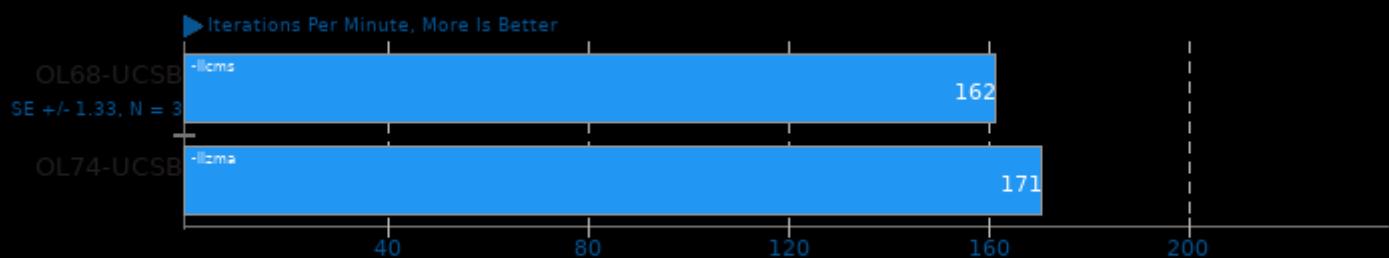
H.264 Video Encoding



1. (CC) gcc options: -ldl -m64 -lm -lpthread -O3 -ffast-math -std=gnu99 -fPIC -fomit-frame-pointer -fno-tree-vectorize

## GraphicsMagick 1.3.19

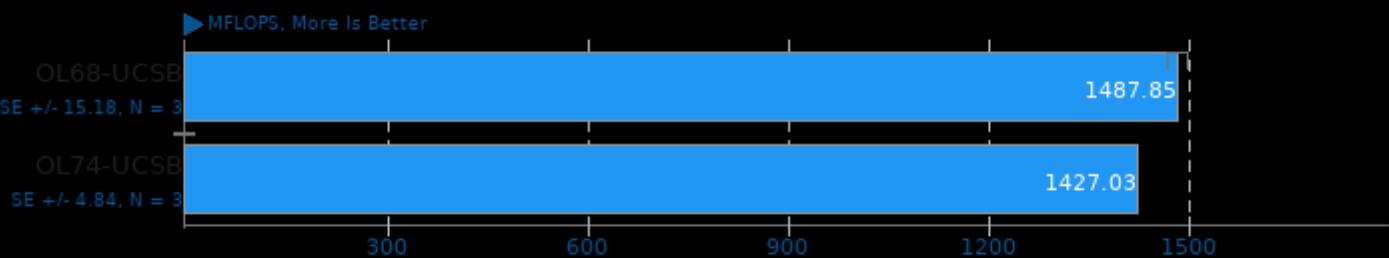
Operation: HWB Color Space



1. (CC) gcc options: -std=gnu99 -fopenmp -O2 -pthread -ltiff -lfreetype -jasper -ljpeg -lXext -lSM -lICE -lX11 -lbz2 -lxml2 -lz -lm -lgomp -lpthread

## Himeno Benchmark 3.0

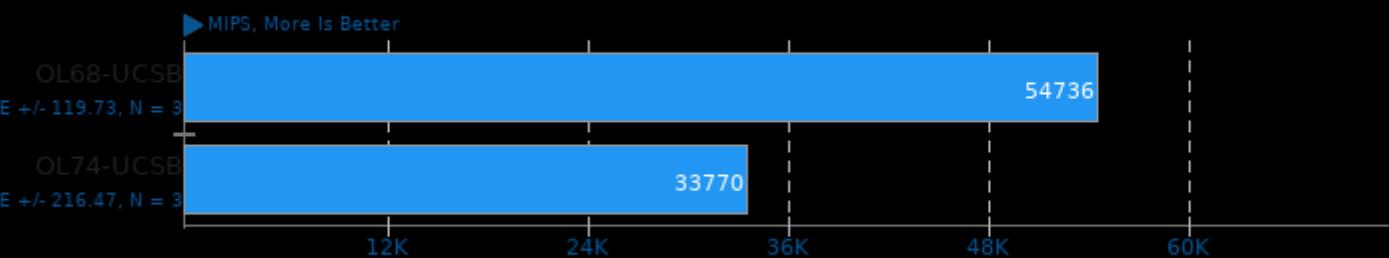
Poisson Pressure Solver



1. (CC) gcc options: -O3

## 7-Zip Compression 9.20.1

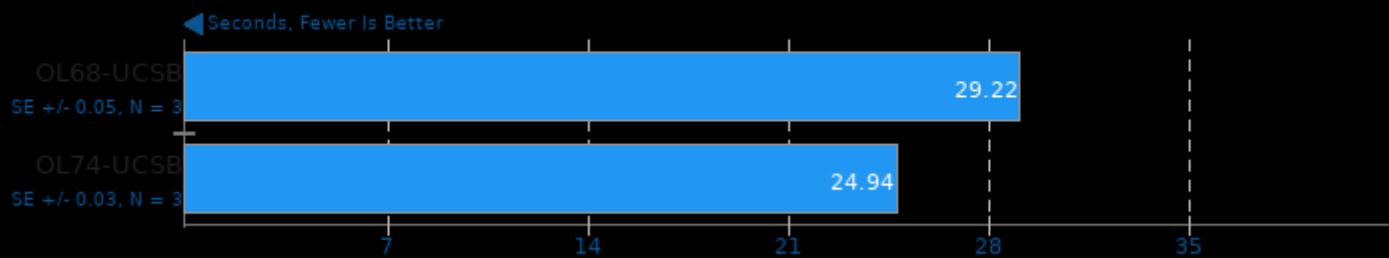
Compress Speed Test



1. (CXX) g++ options: -pipe -lpthread

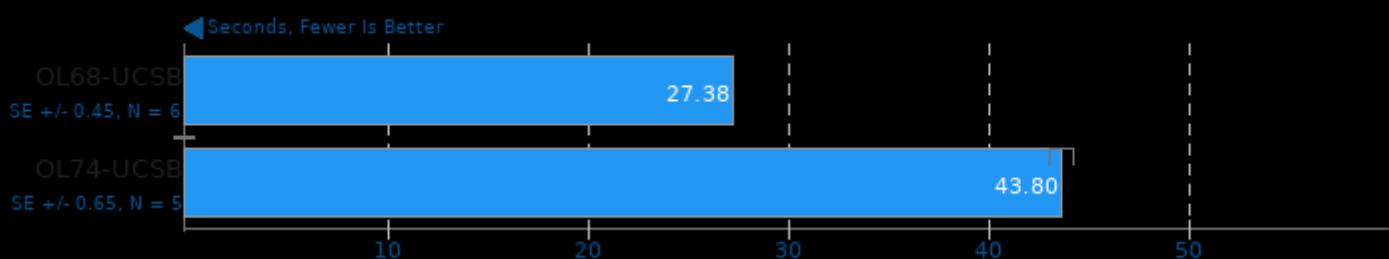
## Timed Apache Compilation 2.4.7

Time To Compile



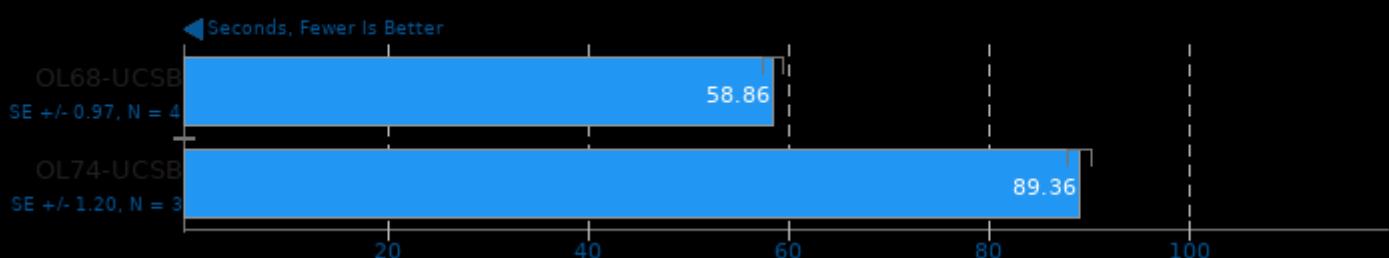
## Timed ImageMagick Compilation 6.9.0

Time To Compile



## Timed Linux Kernel Compilation 4.13

Time To Compile



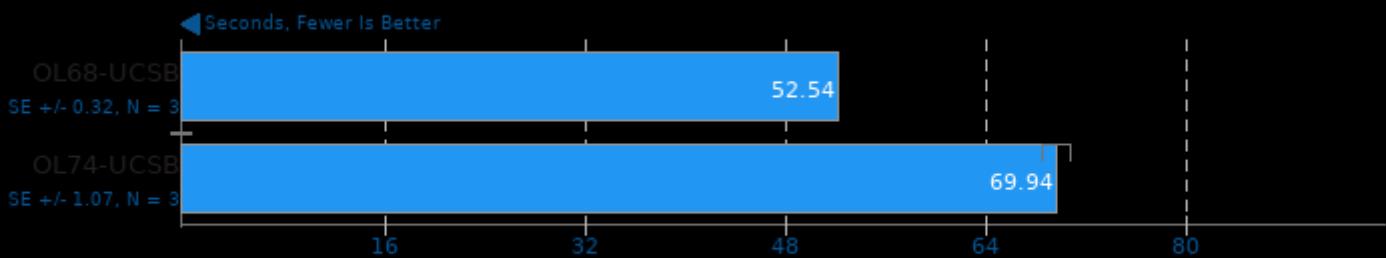
## Timed MPlayer Compilation 1.0-rc3

Time To Compile



## Timed PHP Compilation 7.1.9

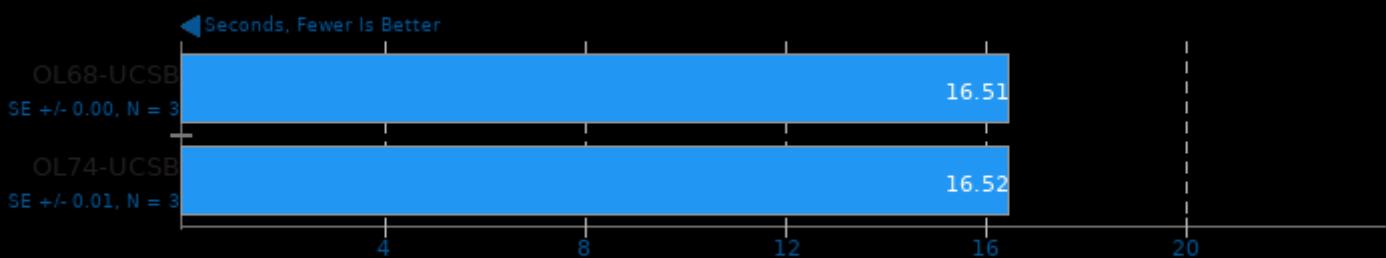
Time To Compile



1. (CC) gcc options: -O2 -pedantic -ldl -lz -lm

## C-Ray 1.1

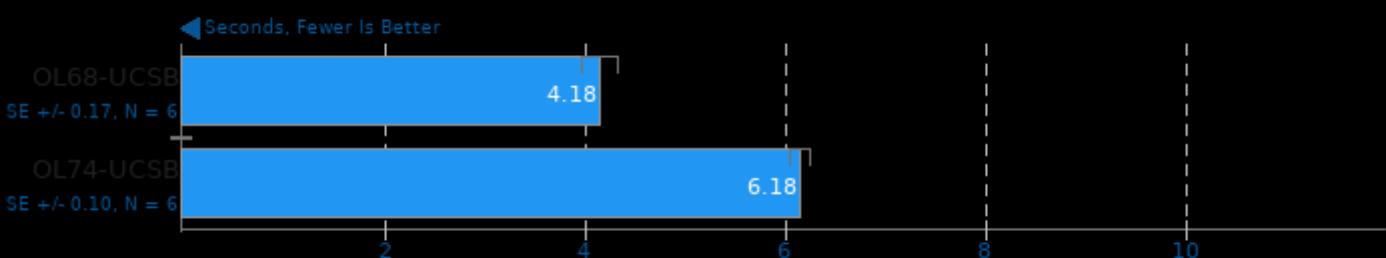
Total Time



1. (CC) gcc options: -lm -lpthread -O3

## Parallel BZIP2 Compression 1.1.12

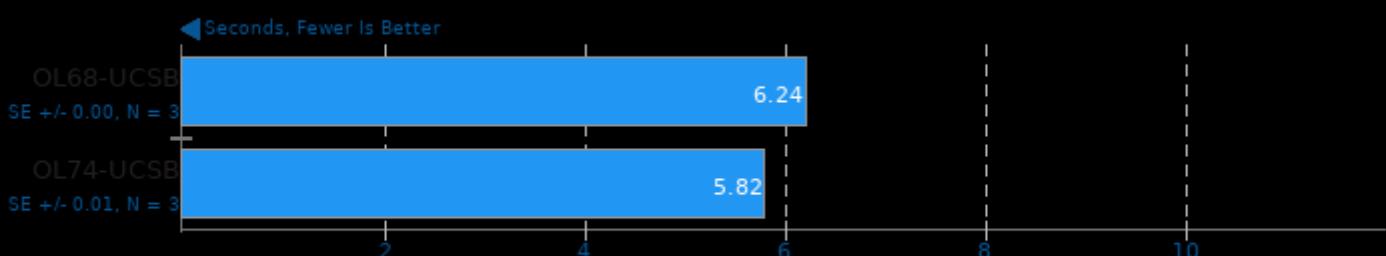
256MB File Compression



1. (CXX) g++ options: -O2 -pthread -lbz2 -lpthread

## Bullet Physics Engine 2.81

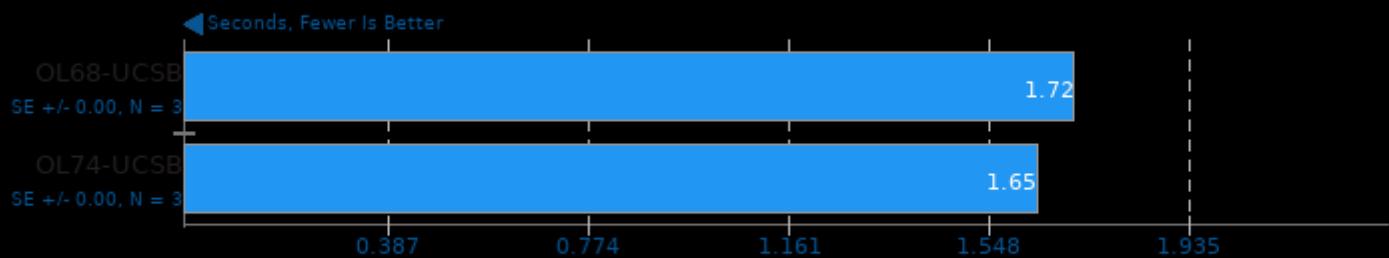
Test: 3000 Fall



1. (CXX) g++ options: -O3 -rdynamic -lglut -IGL -IGLU

## Bullet Physics Engine 2.81

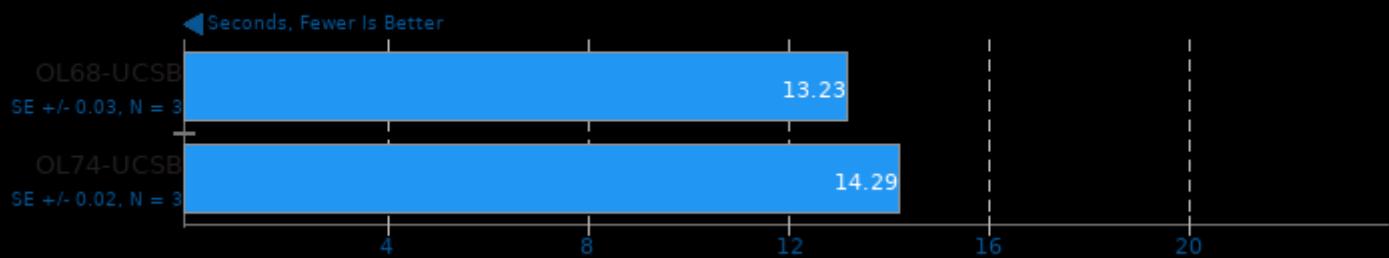
Test: Convex Trimesh



1. (CXX) g++ options: -O3 -rdynamic -lglut -IGL -IGLU

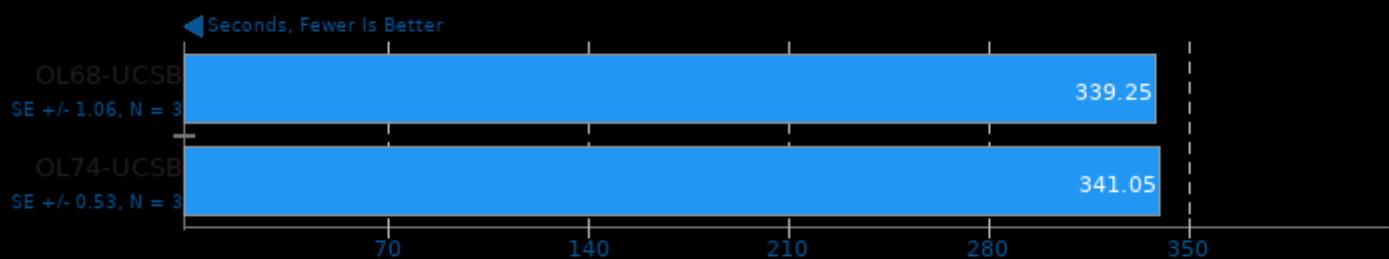
## Gzip Compression

2GB File Compression



## LZMA Compression

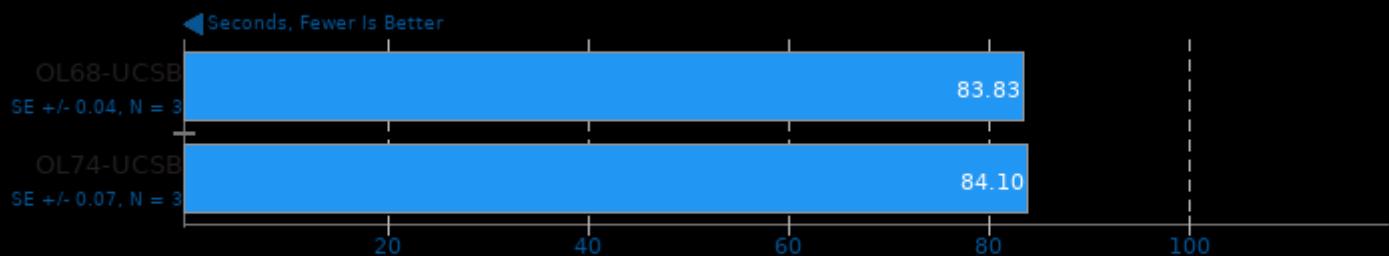
256MB File Compression



1. (CXX) g++ options: -O2

## Crafty 23.4

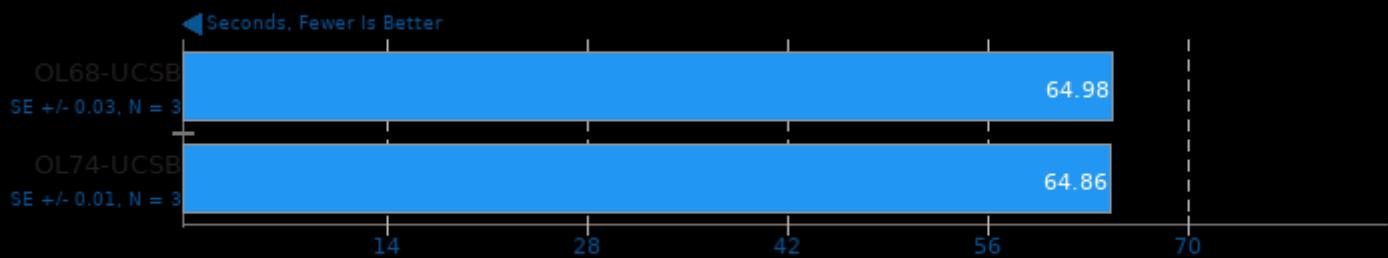
Elapsed Time



1. (CC) gcc options: -stdc++ -lm

## dcraw

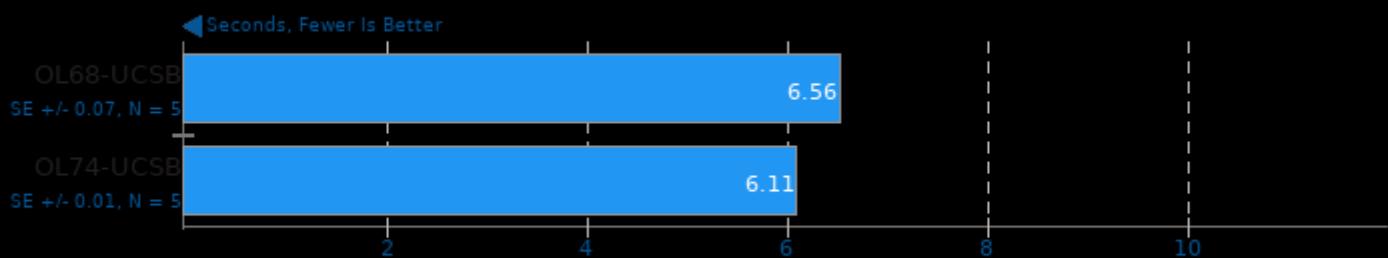
RAW To PPM Image Conversion



1. (CC) gcc options: -lm

## Monkey Audio Encoding 3.99u4b5s6

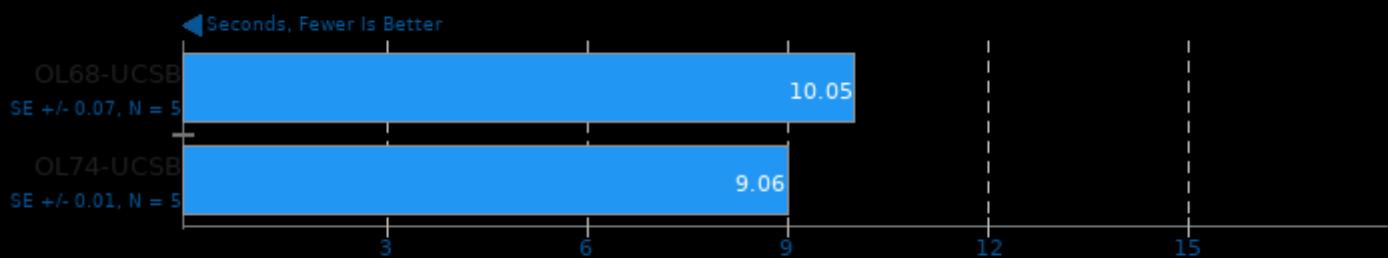
WAV To APE



1. (CXX) g++ options: -O3 -pedantic

## FLAC Audio Encoding 1.3.1

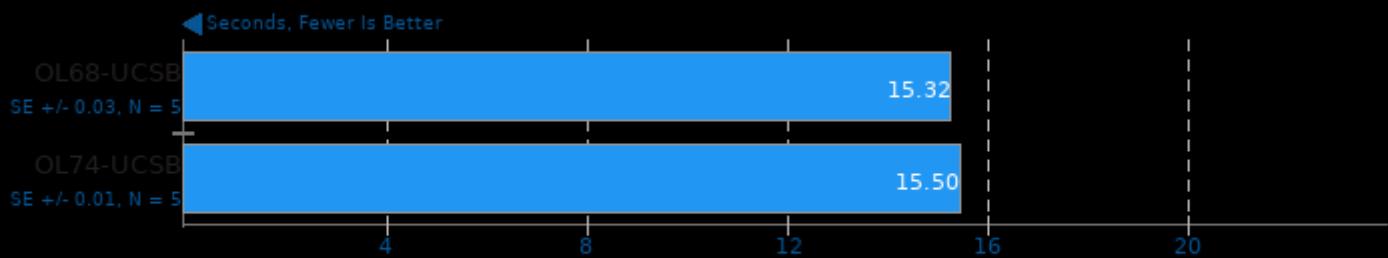
WAV To FLAC



1. (CXX) g++ options: -O2 -fvisibility=hidden -lm

## LAME MP3 Encoding 3.99.5

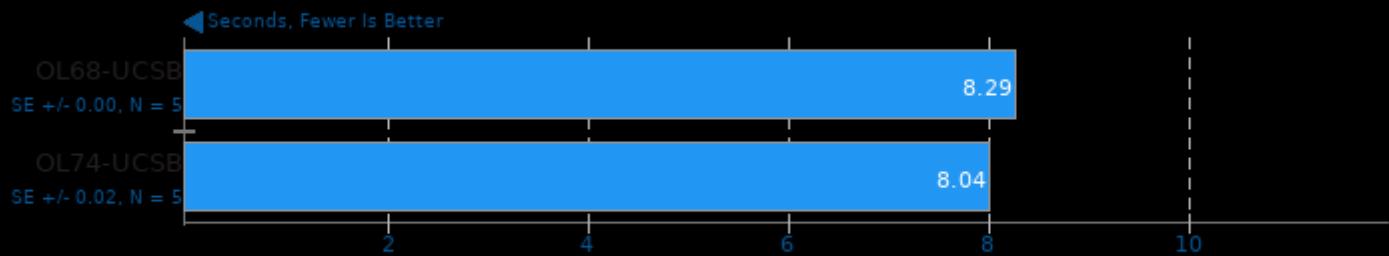
WAV To MP3



1. (CC) gcc options: -O3 -fomit-frame-pointer -ffast-math -fschedule-insns2 -fbranch-count-reg -force-addr -pipe -fincrusts -lm

## WavPack Audio Encoding 5.1

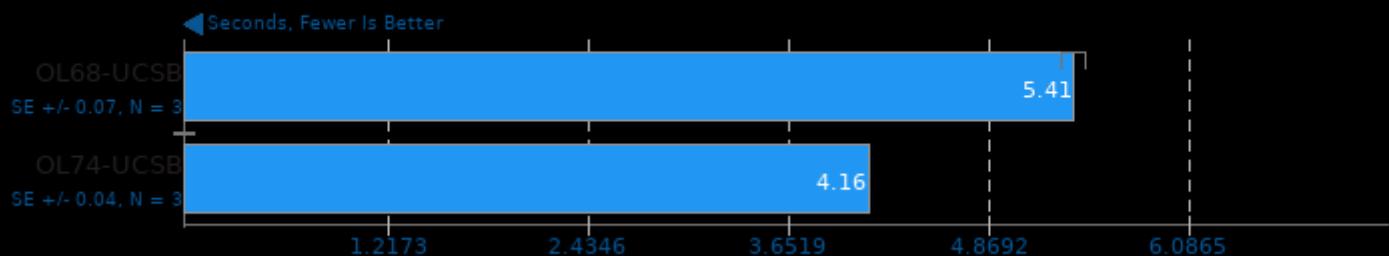
WAV To WavPack



1. (CC) gcc options: -O2 -lm

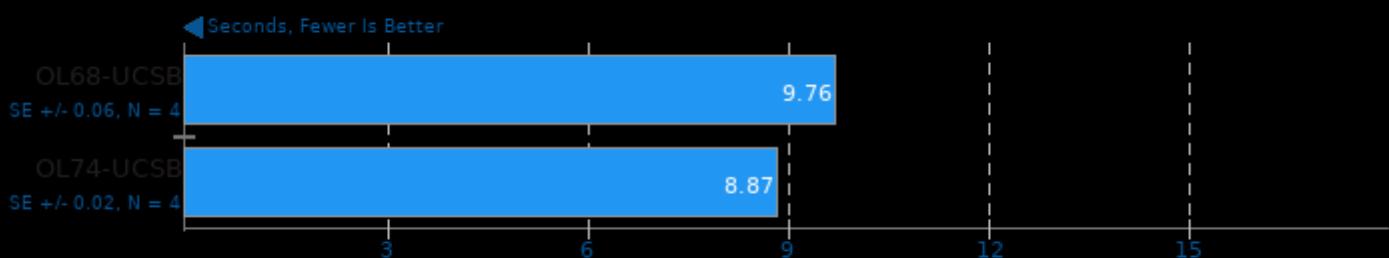
## eSpeak Speech Engine 1.40.02

Text-To-Speech Synthesis



## GnuPG 1.4.10

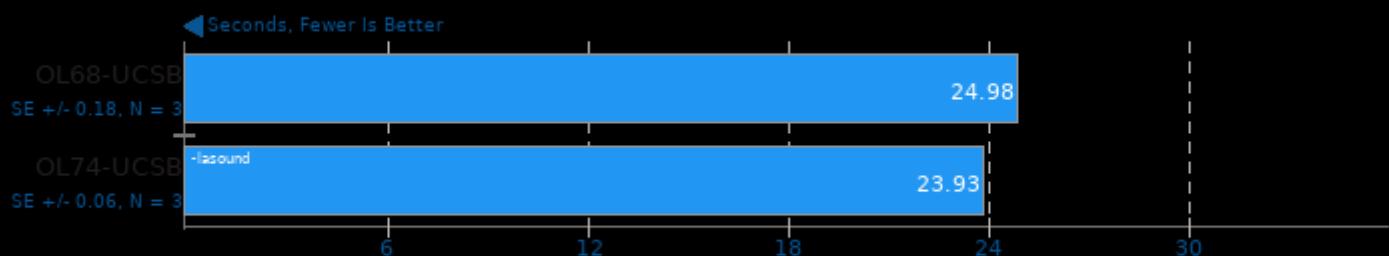
1GB File Encryption



1. (CC) gcc options: -O2 -MT -MD -MP -MF

## Mencoder 1.1

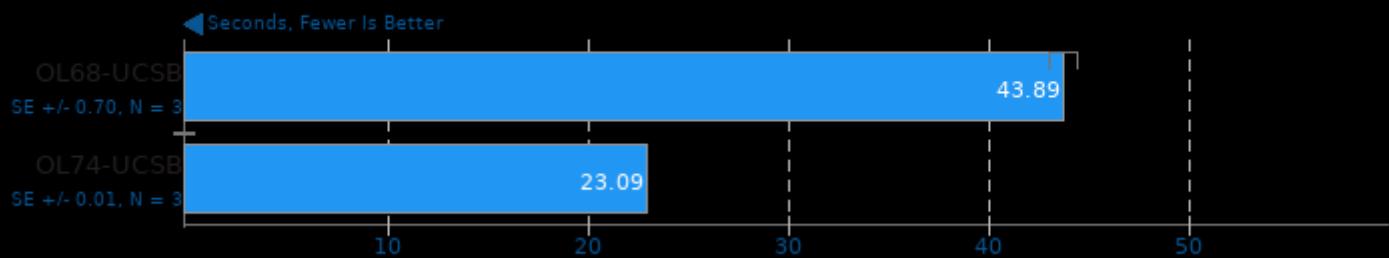
AVI To LAVC



1. (CC) gcc options: -lm -ffast-math -Incurse -lpng -lz -jpeg -freetype -lbz2 -lpthread -ldl -rdynamic

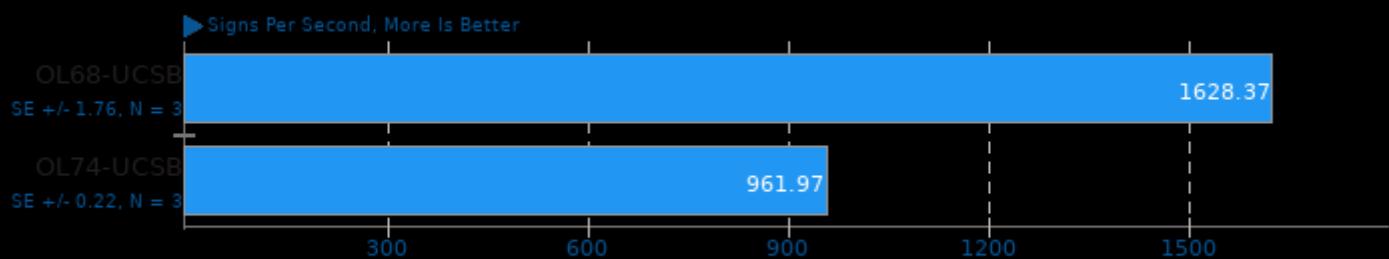
## Sudokut 0.4

Total Time



## OpenSSL 1.0.1g

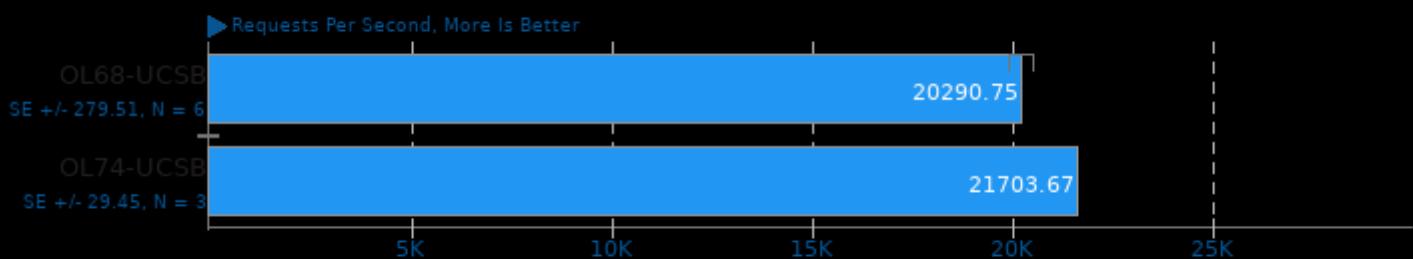
RSA 4096-bit Performance



1. (CC) gcc options: -m64 -O3 -lssl -lcrypto -lssl

## NGINX Benchmark 1.0.11

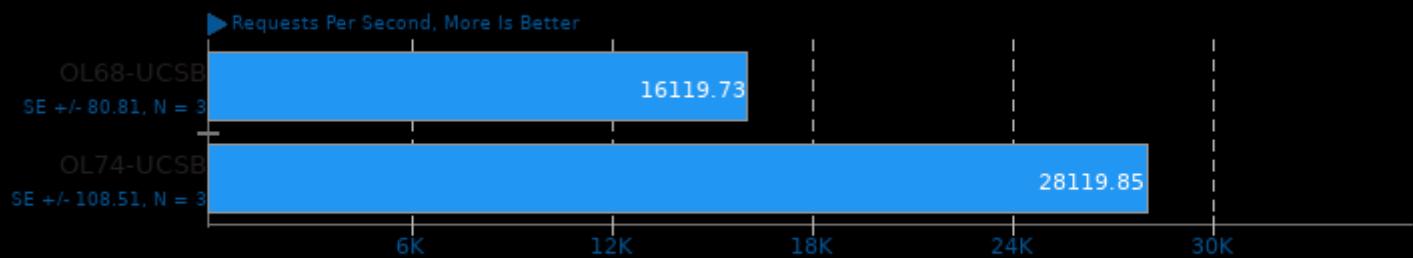
Static Web Page Serving



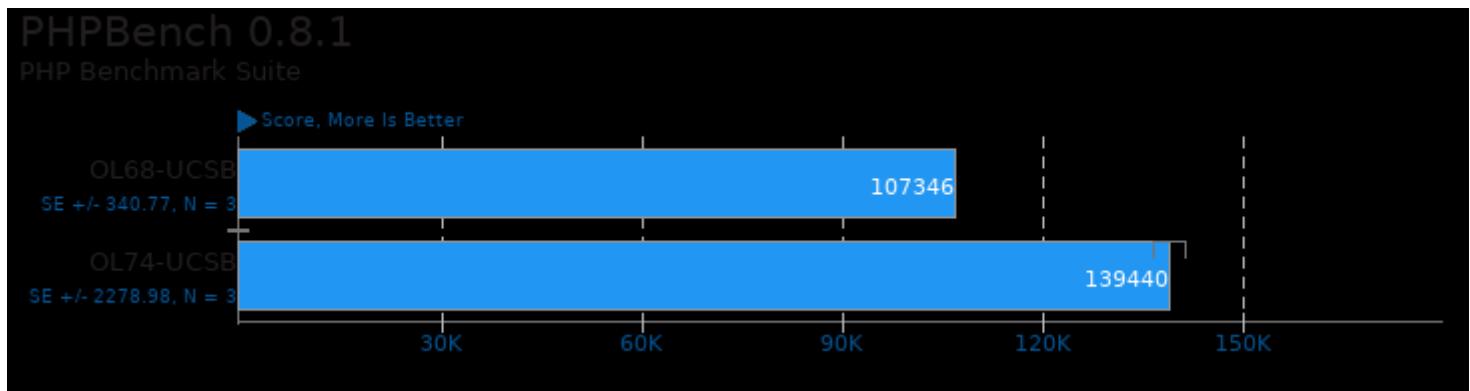
1. (CC) gcc options: -lpthread -lcrypt -lcrypto -lz -pipe

## Apache Benchmark 2.4.7

Static Web Page Serving



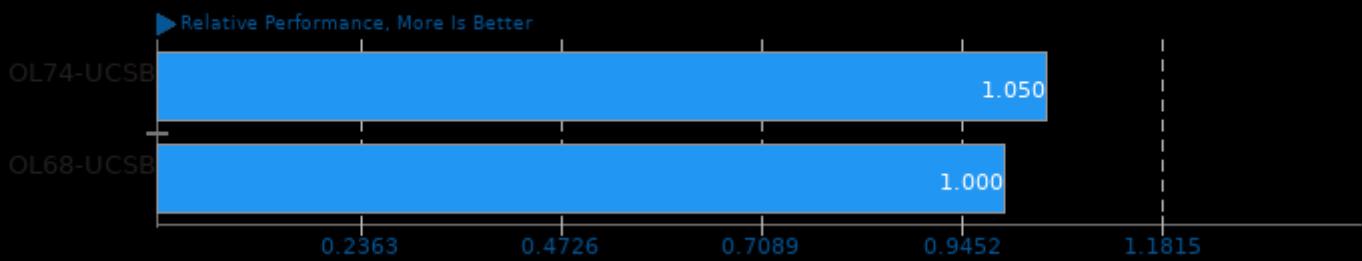
1. (CC) gcc options: -shared -fPIC -O2 -pthread



These geometric means are based upon test groupings / test suites for this result file.

### Geometric Mean Of Audio Encoding Tests

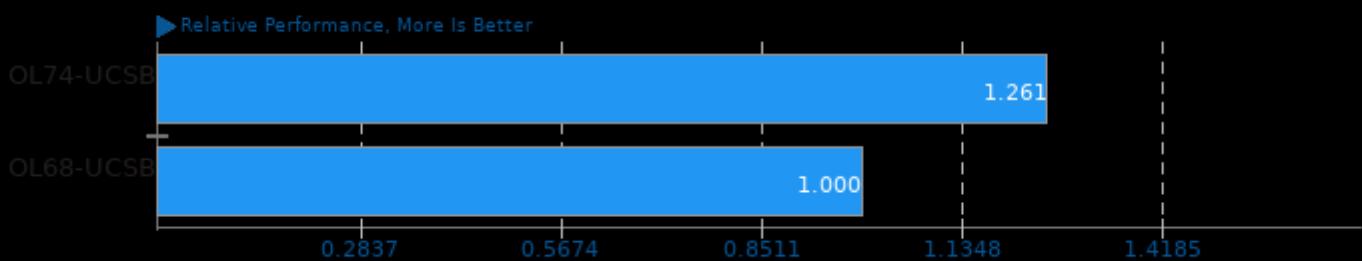
Result Composite - OL68-UCSB



Geometric mean based upon tests: pts/encode-mp3, pts/encode-flac, pts/encode-ape and pts/encode-wavpack

### Geometric Mean Of Bioinformatics Tests

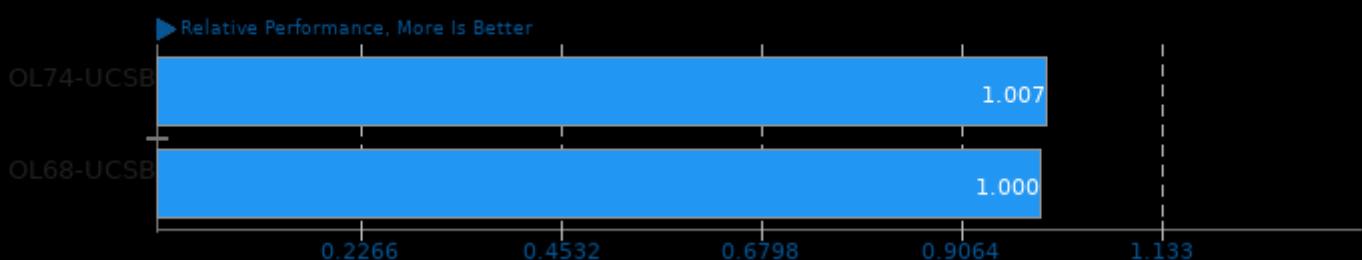
Result Composite - OL68-UCSB



Geometric mean based upon tests: pts/himeno, pts/mrbayes and pts/hmmer

### Geometric Mean Of Chess Test Suite

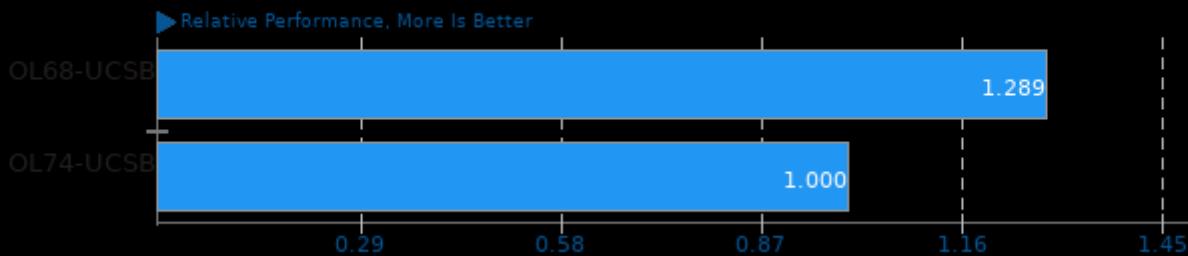
Result Composite - OL68-UCSB



Geometric mean based upon tests: pts/crafty and pts/tscp

## Geometric Mean Of Timed Code Compilation Tests

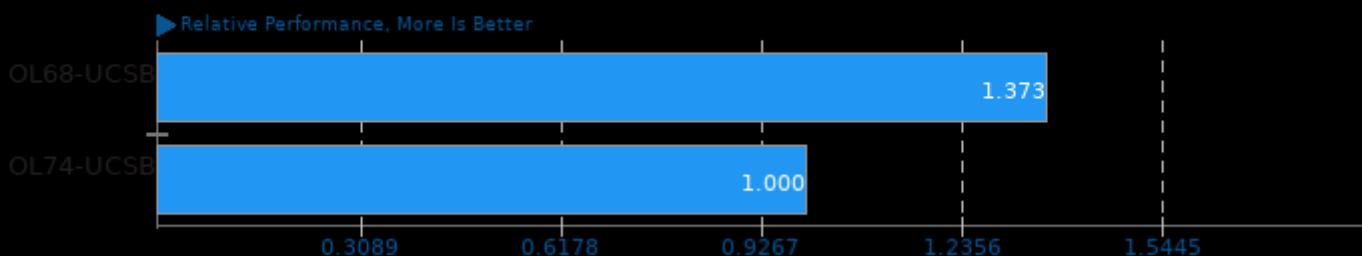
Result Composite - OL68-UCSB



Geometric mean based upon tests: pts/build-apache, pts/build-php, pts/build-linux-kernel, pts/build-imagemagick and pts/build-mplayer

## Geometric Mean Of Compression Tests

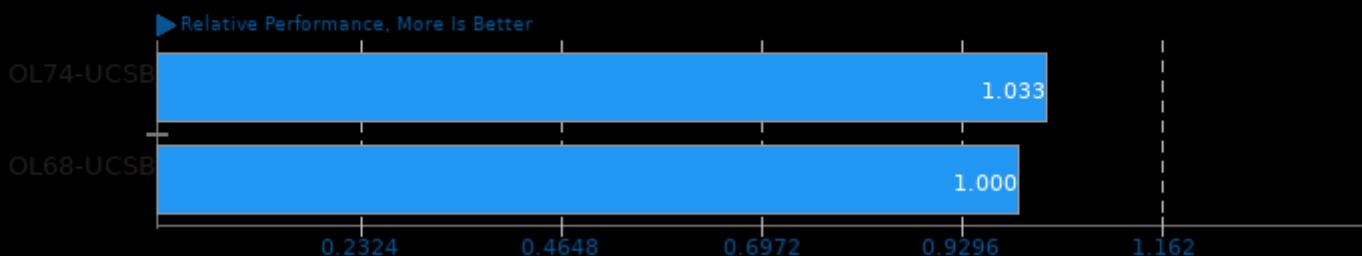
Result Composite - OL68-UCSB



Geometric mean based upon tests: pts/compress-7zip, pts/compress-gzip and pts/compress-pbzip2

## Geometric Mean Of Creator Workloads Tests

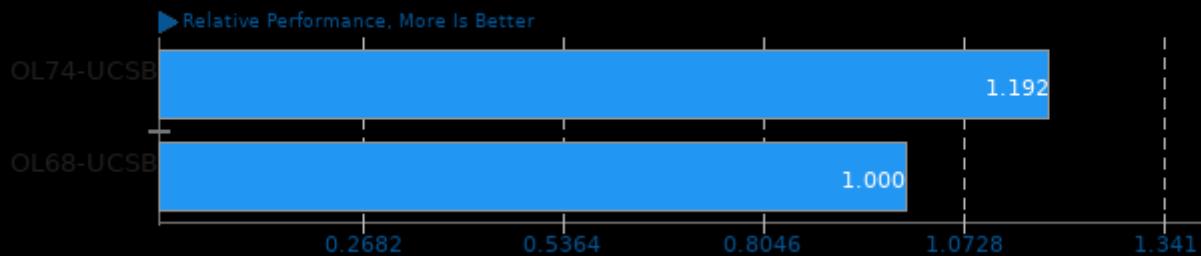
Result Composite - OL68-UCSB



Geometric mean based upon tests: pts/c-ray, pts/x264, pts/encode-mp3, pts/encode-flac, pts/encode-ape, pts/encode-wavpack, pts/graphics-magick, pts/draw and pts/espeak

## Geometric Mean Of Cryptography Tests

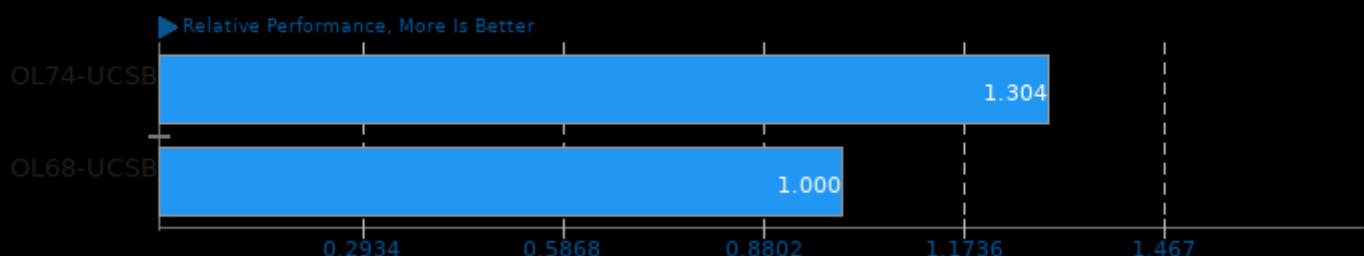
Result Composite - OL68-UCSB



Geometric mean based upon tests: pts/gnupg, pts/openssl, pts/gcrypt, pts/john-the-ripper and pts/bork

## Geometric Mean Of Disk Test Suite

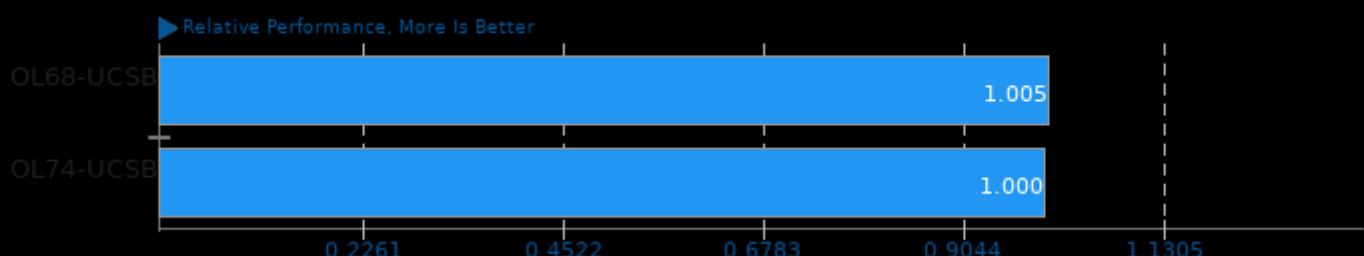
Result Composite - OL68-UCSB



Geometric mean based upon tests: pts/sqlite, pts/fs-mark, pts/compilebench, pts/dbench and pts/postmark

## Geometric Mean Of Encoding Tests

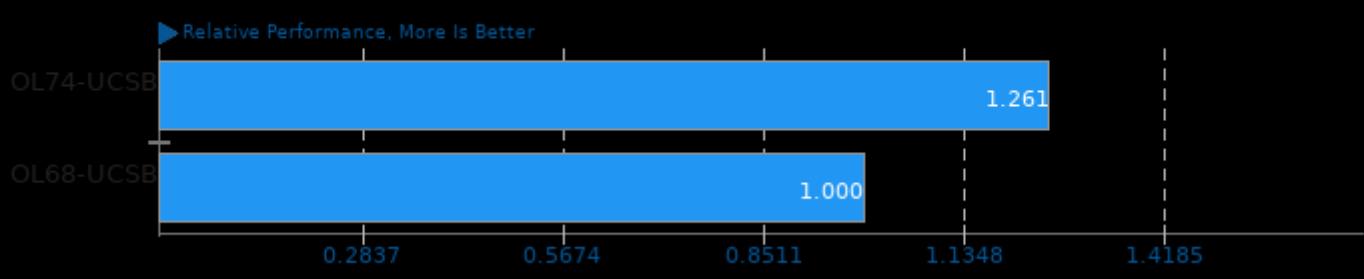
Result Composite - OL68-UCSB



Geometric mean based upon tests: pts/encode-mp3, pts/encode-flac, pts/encode-ape, pts/encode-wavpack and pts/x264

## Geometric Mean Of HPC - High Performance Computing Tests

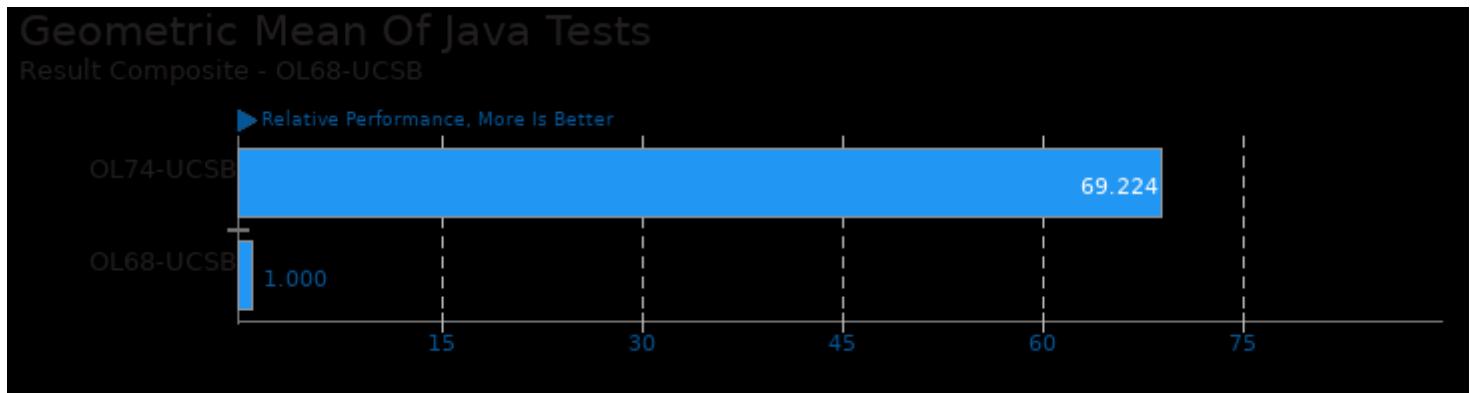
Result Composite - OL68-UCSB



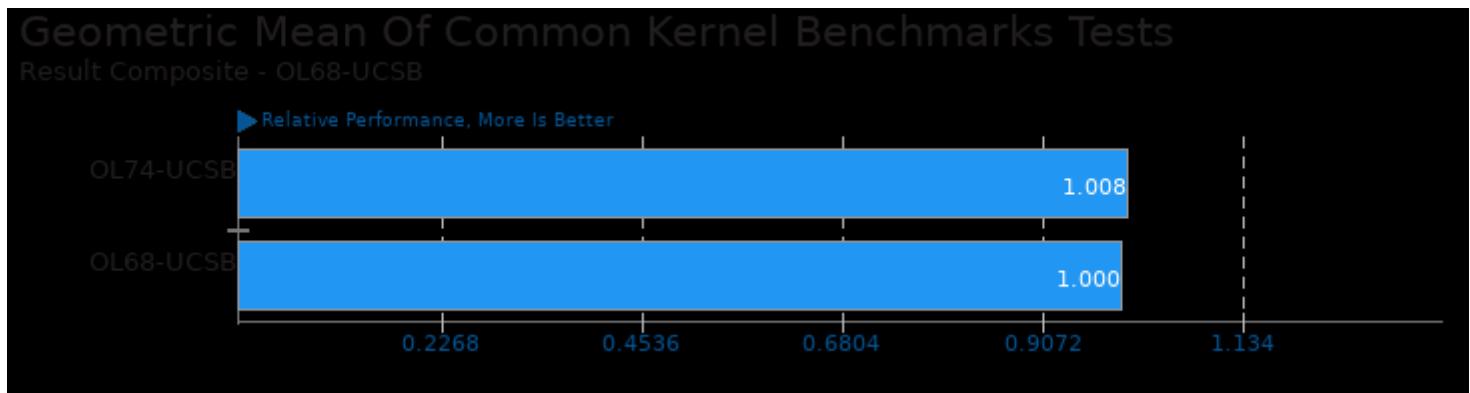
Geometric mean based upon tests: pts/himeno, pts/mrbayes and pts/hmmer



Geometric mean based upon tests: pts/graphics-magick and pts/dcraw



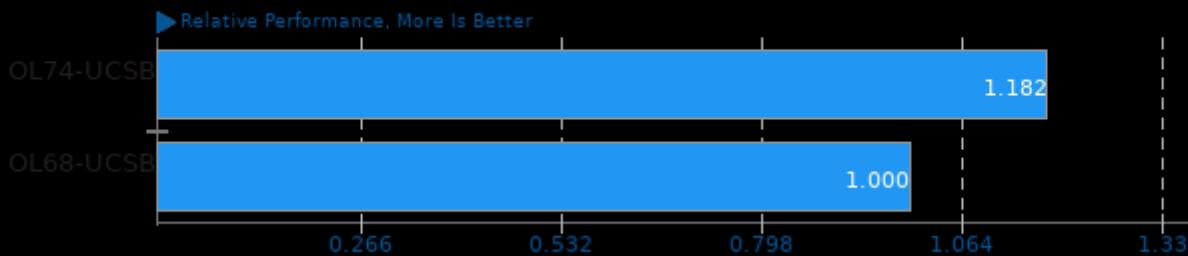
Geometric mean based upon tests: pts/bork and pts/java-scimark2



Geometric mean based upon tests: pts/apache, pts/postmark and pts/openssl

## Geometric Mean Of Memory Test Suite

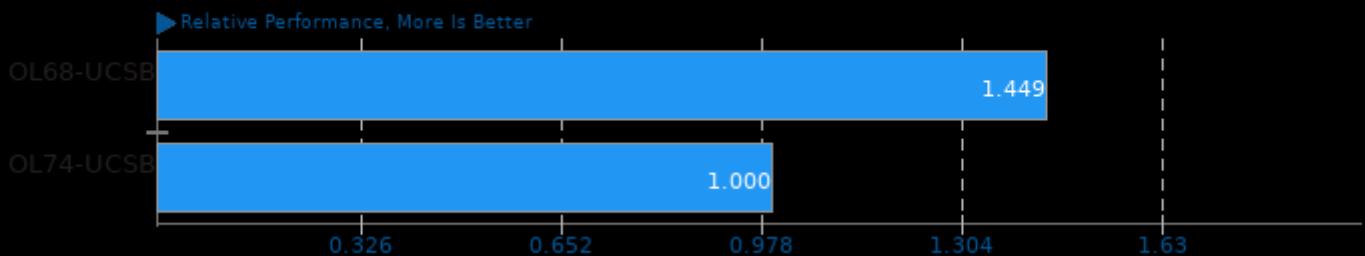
Result Composite - OL68-UCSB



Geometric mean based upon tests: pts/ramspeed, pts/stream and pts/cachebench

## Geometric Mean Of Multi-Core Tests

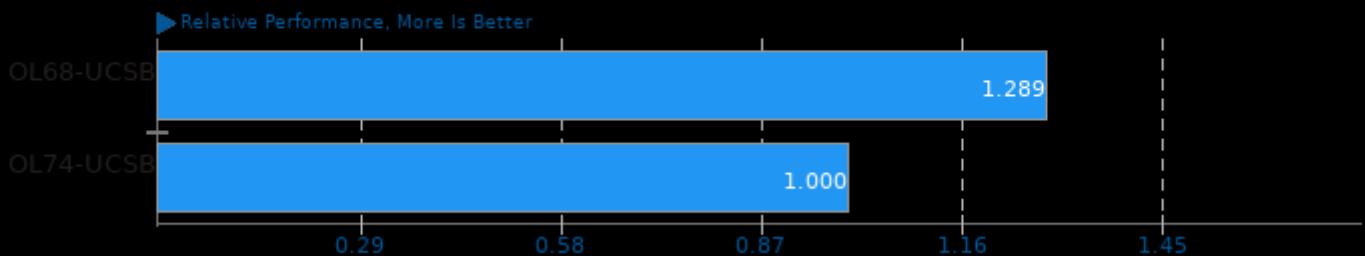
Result Composite - OL68-UCSB



Geometric mean based upon tests: pts/c-ray, pts/x264, pts/john-the-ripper, pts/graphics-magick, pts/compress-7zip, pts/compress-pbzip2, pts/build-apache, pts/build-php, pts/build-linux-kernel, pts/build-imagemagick and pts/build-mplayer

## Geometric Mean Of Programmer / Developer System Benchmarks Tests

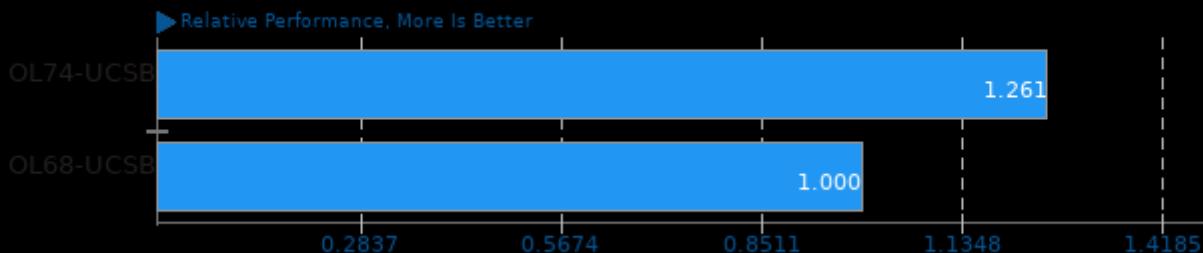
Result Composite - OL68-UCSB



Geometric mean based upon tests: pts/build-apache, pts/build-php, pts/build-linux-kernel, pts/build-imagemagick and pts/build-mplayer

### Geometric Mean Of Scientific Computing Tests

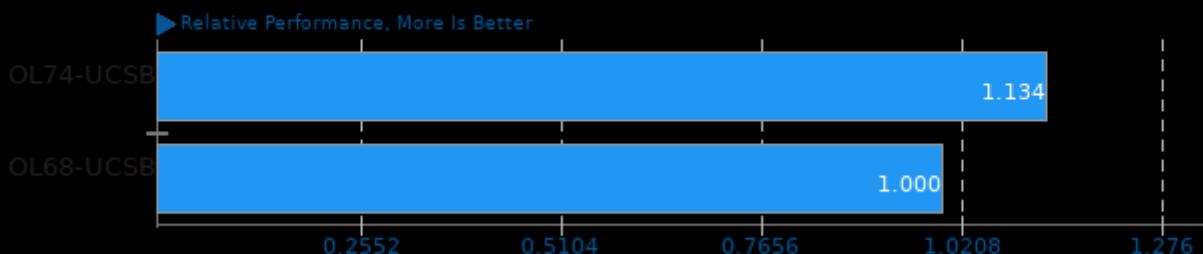
Result Composite - OL68-UCSB



Geometric mean based upon tests: pts/himeno, pts/mrbayes and pts/hmmer

### Geometric Mean Of Server Tests

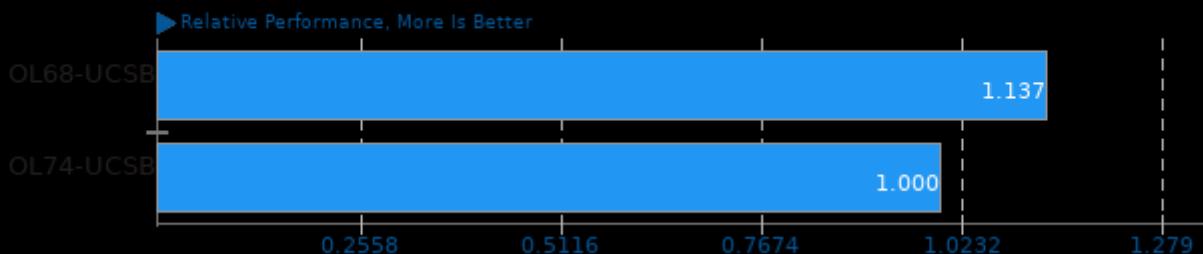
Result Composite - OL68-UCSB



Geometric mean based upon tests: pts/apache, pts/nginx, pts/phpbench, pts/openssl and pts/sqlite

### Geometric Mean Of Server CPU Tests

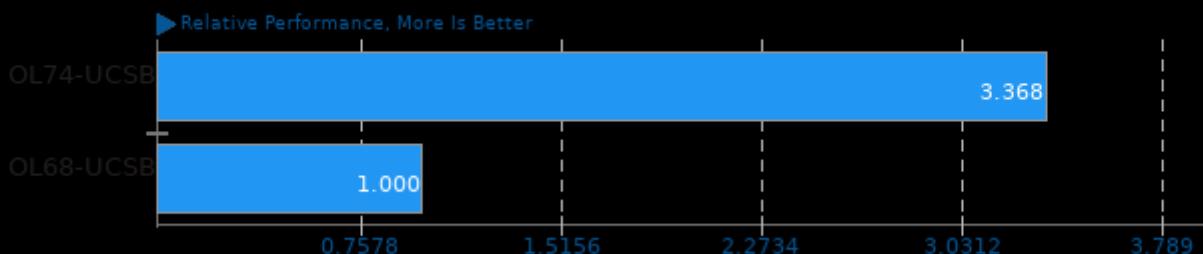
Result Composite - OL68-UCSB



Geometric mean based upon tests: pts/john-the-ripper, pts/x264, pts/himeno, pts/compress-7zip, pts/build-linux-kernel, pts/build-php, pts/c-ray, pts/openssl, pts/phpbench, pts/ramspeed and pts/stream

### Geometric Mean Of Single-Threaded Tests

Result Composite - OL68-UCSB



Geometric mean based upon tests: pts/java-scimark2, pts/bork, pts/fhourstones, pts/byte, pts/cachebench, pts/scimark2,

---

pts/compress-gzip, pts/dcraw, pts/encode-flac, pts/encode-mp3, pts/espeak, pts/gnupg, pts/sudokut, pts/phpbench and pts/nginx

*This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 21:48.*